Teacher Education
and
Problems of Indian Education

MA [Education]

First Year

MAEDN 404

RAJIV GANDHI UNIVERSITY
Arunachal Pradesh, INDIA - 791 112

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About the University

Rajiv Gandhi University (formerly Arunachal University) is a premier institution for higher education in the state of Arunachal Pradesh and has completed twenty-five years of its existence. Late Smt. Indira Gandhi, the then Prime Minister of India, laid the foundation stone of the university on 4th February, 1984 at Rono Hills, where the present campus is located.

Ever since its inception, the university has been trying to achieve excellence and fulfill the objectives as envisaged in the University Act. The university received academic recognition under Section 2(f) from the University Grants Commission on 28th March, 1985 and started functioning from 1st April, 1985. It got financial recognition under section 12-B of the UGC on 25th March, 1994. Since then Rajiv Gandhi University, (then Arunachal University) has carved a niche for itself in the educational scenario of the country following its selection as a University with potential for excellence by a high-level expert committee of the University Grants Commission from among universities in India.

The University was converted into a Central University with effect from 9th April, 2007 as per notification of the Ministry of Human Resource Development, Government of India.

The University is located atop Rono Hills on a picturesque tableland of 302 acres overlooking the river Dikrong. It is 6.5 km from the National Highway 52-A and 25 km from Itanagar, the State capital. The campus is linked with the National Highway by the Dikrong bridge.

The teaching and research programmes of the University are designed with a view to play a positive role in the socio-economic and cultural development of the State. The University offers Undergraduate, Post-graduate, M.Phil and Ph.D. programmes. The Department of Education also offers the B.Ed. programme.

There are fifteen colleges affiliated to the University. The University has been extending educational facilities to students from the neighbouring states, particularly Assam. The strength of students in different departments of the University and in affiliated colleges has been steadily increasing.

The faculty members have been actively engaged in research activities with financial support from UGC and other funding agencies. Since inception, a number of proposals on research projects have been sanctioned by various funding agencies to the University. Various departments have organized numerous seminars, workshops and conferences. Many faculty members have participated in national and international conferences and seminars held within the country and abroad. Eminent scholars and distinguished personalities have visited the University and delivered lectures on various disciplines.

The academic year 2000-2001 was a year of consolidation for the University. The switch over from the annual to the semester system took off smoothly and the performance of the students registered a marked improvement. Various syllabi designed by Boards of Post-graduate Studies (BPGS) have been implemented. VSAT facility installed by the ERNET India, New Delhi under the UGC-Infonet program, provides Internet access.

In spite of infrastructural constraints, the University has been maintaining its academic excellence. The University has strictly adhered to the academic calendar, conducted the examinations and declared the results on time. The students from the University have found placements not only in State and Central Government Services, but also in various institutions, industries and organizations. Many students have emerged successful in the National Eligibility Test (NET).

Since inception, the University has made significant progress in teaching, research, innovations in curriculum development and developing infrastructure.

About IDE

The formal system of higher education in our country is facing the problems of access, limitation of seats, lack of facilities and infrastructure. Academicians from various disciplines opine that it is learning which is more important and not the channel of education. The education through distance mode is an alternative mode of imparting instruction to overcome the problems of access, infrastructure and socio-economic barriers. This will meet the demand for qualitative higher education of millions of people who cannot get admission in the regular system and wish to pursue their education. It also helps interested employed and unemployed men and women to continue with their higher education. Distance education is a distinct approach to impart education to learners who remained away in the space and/or time from the teachers and teaching institutions on account of economic, social and other considerations. Our main aim is to provide higher education opportunities to those who are unable to join regular academic and vocational education programmes in the affiliated colleges of the University and make higher education reach to the doorsteps in rural and geographically remote areas of Arunachal Pradesh in particular and North-eastern part of India in general. In 2008, the Centre for Distance Education has been renamed as "Institute of Distance Education (IDE)."

Continuing the endeavor to expand the learning opportunities for distant learners, IDE has introduced Post Graduate Courses in 5 subjects (Education, English, Hindi, History and Political Science) from the Academic Session 2013-14.

The Institute of Distance Education is housed in the Physical Sciences Faculty Building (first floor) next to the University Library. The University campus is 6 kms from NERIST point on National Highway 52A. The University buses ply to NERIST point regularly.

Outstanding Features of Institute of Distance Education:

(i) At Par with Regular Mode

Eligibility requirements, curricular content, mode of examination and the award of degrees are on par with the colleges affiliated to the Rajiv Gandhi University and the Department(s) of the University.

(ii) Self-Instructional Study Material (SISM)

The students are provided SISM prepared by the Institute and approved by Distance Education Council (DEC), New Delhi. This will be provided at the time of admission at the IDE or its Study Centres. SISM is provided only in English except Hindi subject.

(iii) Contact and Counselling Programme (CCP)

The course curriculum of every programme involves counselling in the form of personal contact programme of duration of approximately 7-15 days. The CCP shall not be compulsory for BA. However for professional courses and MA the attendance in CCP will be mandatory.

(iv) Field Training and Project

For professional course(s) there shall be provision of field training and project writing in the concerned subject.

(v) Medium of Instruction and Examination

The medium of instruction and examination will be English for all the subjects except for those subjects where the learners will need to write in the respective languages.

(vi) Subject/Counselling Coordinators

For developing study material, the IDE appoints subject coordinators from within and outside the University. In order to run the PCCP effectively Counselling Coordinators are engaged from the Departments of the University, The Counselling-Coordinators do necessary coordination for involving resource persons in contact and counselling programme and assignment evaluation. The learners can also contact them for clarifying their difficulties in then respective subjects.

SYLLABI-BOOK MAPPING TABLE

Teacher Education and Problems of Indian Education

Syllabi	Mapping in Book
Unit 1: Development of Teacher Education in India: • Historical Development of Teacher Education in India and Recommendations of Various Commissions and Committees. • Meaning, Importance and Aims of Teacher Education Programme. • Structure of Teacher Education at Different Levels. • Models of Teacher Education.	**Unit 1:** Development of Teacher Education in India **(Pages 3–42)**
Unit 2: Pre-Service and In-Service Teacher Education Programmes: • Concepts and Importance of Pre-Service and in Service Teacher Education at Elementary and Secondary Levels. • Curriculum and Evaluation of Pre-Service Teacher Education at Different Levels. • New Trends of Teacher Education Suggested by NCTE, and NPE-1986. • Short Comings of and Suggestions for Teacher Education Programmes. • Distance Education and In-Service Teacher Education.	**Unit 2:** Pre-Service and In-Service Teacher Education Programmes **(Pages 43–87)**
Unit 3. Modification of Teaching Behaviour and Student-Teaching Programme: • Teaching Behaviour. • Students Teaching Programmes-Concept, Importance and Organizational Pattern. • Micro-Teaching, Flanders Interaction Analysis Category System (FIACS), Simulated Teaching. • Problems Related to Student-Teaching Practice and Internship Programme and their Solutions.	**Unit 3:** Modification of Teaching Behaviour and Student-Teaching Programme **(Pages 89–117)**
Unit 4.: Teaching Profession and Trends of Teacher Education: • Professional Ethics and Professional Development of Teachers. • Innovations in Teacher Education. • Role of NCTE/NCERT/SCERT and DIET in Teachers Education. • ICT and Teacher Education.	**Unit 4:** Teaching Profession and Trends of Teacher Education **(Pages 119–160)**

Unit 5: Problems of Primary and Secondary Education:
- Constitutional Provisions in Education and its Implication.
- Universalization of Primary education - OB, SSA as an Educational Programme.
- Religion Imbalances in Education.
- Qualitative Development of Primary and Secondary Education.

Unit 5: Problems of Primary and Secondary Educations **(Pages 161–194)**

Unit 6: Vocationalization of Education:
- Concept, Scope and Need of Vocational Education.
- Aims of Vocational Education at the +2 Stage.
- New Education Policy, 1986 and Innovations in Vocational Education.
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- Concept of Community College.

Unit 6: Vocationalization of Education **(Pages 195–229)**

Unit 7: Higher Education and Problems:
- Structure of Higher Education.
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INTRODUCTION

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Education is a backbone of a nation. It is the standard of education that determines the progress of a country and the society at large. For a sustainable growth and development provision of quality education at all levels—primary, secondary as well as higher education—including teacher education, is a must.

Teacher education is, of course, at the base off all educational system. The quality and nature of teacher training determines the nature and success of an educational system. So it is necessary for aspiring teachers to improve their professional qualifications. It does not matter whether they receive formal or informal training.

This book, *Teacher Education and Problems of Indian Education*, lays emphasis on the importance of teacher education, and shows how teaching has been accepted as a profession over the ages. It portrays how the role of a teacher has changed in the 21st century. This book also deals with how teachers can be prepared for teaching in various specialized areas. It also touches upon the different departments that have been set up by the government like the NCTE and DIET.

Teacher Education and Problems of Indian Education also enables the students to develop an understanding about the various issues and problems faced by the modern Indian education system. It discusses the constitutional provisions for education, policy perspectives and emerging trends in education in detail.

This book has been designed, keeping in mind, the self-instruction mode (SIM) format and follows a simple pattern, wherein each unit of the book begins with the *Introduction* followed by the *Unit Objectives* for the topic. The content is then presented in a simple and easy-to-understand manner, and is interspersed with *Check Your Progress* questions to reinforce the student's understanding of the topic. A list of *Questions and Exercises* is also provided at the end of each unit. The *Summary*, *Key Terms* and *Activity* further act as useful tools for students and are meant for effective recapitulation of the text.

This book is divided into seven units:

Unit 1: Covers the development of teacher education in India

Unit 2: Examines pre-service and in-service teacher education programmes

Unit 3: Analyses modification of teaching behaviour and student-teaching programme

Unit 4: Familiarizes with the teaching profession and trends of teacher education

Unit 5: Identifies the problems of primary and secondary education

Unit 6: Describes the vocalization of education

Unit 7: Discusses higher education and associated problems

UNIT DEVELOPMENT OF TEACHER EDUCATION IN INDIA

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Structure

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1.0 INTRODUCTION

Teacher education is crucial for any country since it is said that 'the society being shaped inside classrooms'. How is the society and its future being developed inside the classrooms? What is the role of classrooms in the twenty first century? If we want to identify the answers for the above said questions, a close analysis will bring us to the concepts of teacher education and training. The quality of education depends on the quality of teacher education. The twenty first century expects students to create their own situations, evaluate the surroundings, analyse the complicated situations around them and apply their learning and knowledge to different situations and resolve problems. To create such calibre and skill in the students, massive changes have to take place in the field of teacher education.

The National Curriculum Framework, 2005, places demands and expectations on the teacher, which need to be addressed by both initial and continuing teacher education. So, in this unit, our discussion will concentrate on the basic concepts of teacher education and development of teacher education in India.

In this unit, we will also discuss the historical development of teacher education in India, along with the recommendations of various commissions and committees established from time to time. The concept of teacher education programme and structure of teacher education at different levels has also found due coverage in this unit. Various models of teacher education have also been discussed here.

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1.1 UNIT OBJECTIVES

After going through this unit, you will be able to:

- Explain the need and scope of teacher education
- Recall the historical development of teacher education in India
- Learn the recommendations of various commissions and committees on teacher education
- Explain the structure of teacher education at different levels
- Describe the models of teacher education

1.2 CONCEPT OF TEACHER EDUCATION

Teacher basically is 'one who delivers an educational programme, gives instructions based on certain prescribed syllabus, guides students in achieving their objectives as desired by the aim of education, help in tackling problematic situations, develop curricular and extracurricular skills and help the students to develop an integrated personality to cope up with the changing demands of the society'.

Teacher education refers to the policies and procedures designed to equip prospective teachers with the knowledge, attitudes, behaviour and skills they require to perform their tasks effectively in the classroom, and wider community. NCTE, an apex body controlling teacher education programmes in the country, defined teacher education as 'A programme of education, research and training of persons to teach from pre-primary to higher education level'. According to Goods Dictionary of Education, teacher education means all the formal and non-formal activities and experiences that help to qualify a person to assume responsibilities of a member of the educational profession or to discharge his/her responsibilities more effectively.

According to UNESCO (2005), teacher education 'addresses environmental, social, and economic contexts to create locally relevant and culturally appropriate teacher education programmes for both pre-service and in-service teachers'.

Teacher education generally includes four elements— improving the general educational background of the trainee teachers; increasing their knowledge and understanding of the subjects they are to teach; pedagogy and understanding of children and learning; and the development of practical skills and competences. The balance between these four elements varies widely.

Also, Teacher Education Institutions have the potential to bring changes within educational systems that will shape the knowledge and skills of future generations. Teacher education institutions serve as key change agents in transforming education and society, so such a future is possible.

Teacher education institutions:

- Provide ample knowledge and educate new teachers
- Provide professional development for practicing in-service teachers by updating their knowledge and skills
- Create teacher education curriculum which suits national goal
- Initiate research works related to the area concerned

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- Contribute to textbooks
- Provide expert advice to local schools upon request
- Provide expert opinion to provincial and national ministries of education
- Educate and certify headmasters, principals, and other school administrators

Teacher education helps teachers to increase their competence and proficiency to meet the professional challenges and professional requirements. Different countries provide teacher education programmes at different level. For example, teacher education for primary teachers, secondary teachers or higher secondary teachers, teacher education programmes for physical education teachers, music teachers, art teachers, etc. Generally any teacher education programme includes the three different levels as given below.

- Initial teacher training/education (a pre-service course before entering the classroom as a fully responsible teacher)
- Induction (the process of providing training and support during the first few years of teaching or the first year in a particular school)
- Teacher development or continuing professional development (an in-service process for practising teachers)

Teacher education programmes generally includes the following functions:

- Acquiring, organizing, producing and using a wide range of materials for research-oriented teaching and learning
- Applying the theoretical bases of education to the practice of teaching
- Assessing and evaluating learning progress and personal development
- Communicating and interacting effectively with people in a variety of learning environments to provide meaningful learning experiences
- Meeting the requirements of students and providing feedback to parents and other professionals

Generally, teacher education encompasses the following components as shown in Fig. 1.1.

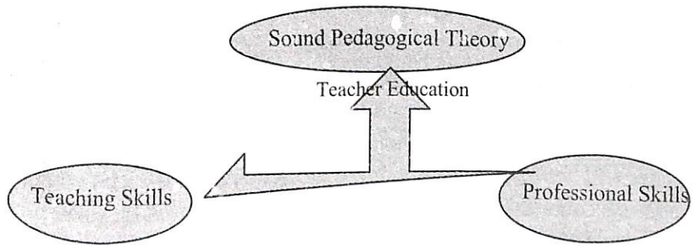


Fig. 1.1 Components of Teacher Education

What do these components mean? While a teacher is teaching he/she makes many tactics and strategies such as introducing the lesson, asking questions in between, giving reinforcements to gain students' attention and so on. It is the duty of the teacher students to internalize these skills which would help them to handle the teaching–learning process better. So, teacher education would include imparting training and practice in the techniques and strategies that would help teachers to plan, to impart instructions and conduct assessments effectively. Through training, teachers also learn effective classroom management skills, use of instructional materials and good communication skills.

The second component of teacher education is the sound base of various philosophical, psychological and sociological theories which have great impact in teaching–learning process. A teacher is expected to know the sociological theories behind teaching-learning, philosophical theories (for example, naturalist and pragmatist) various psychological theories like reinforcement theory, and theories of learning. Therefore, pedagogical theory is based on psychological, philosophical and sociological aspects that would help teachers to have a sound basis for using the teaching skills in the classroom.

Hence, professional skills include strategies, techniques and approaches that will help teachers to improve and grow in their profession and at the same time contribute in the growth of teaching profession. Soft skills, computer skill, counseling skills, management skills, and interpersonal skills are part of teacher education.

Teacher education is a combination of the three components mentioned above, which after better training help teacher educators to develop the right kind of skills, beliefs, caliber, attitude and other skills required to become a better teacher. Hence, teacher education can be treated as formula containing three terms i.e.,

Teacher Education = Teaching skills + Pedagogical theory + Professional skill

1.2.1 Nature of Teacher Education

We have studied the concept of teacher education. In teacher education the focus is on giving training to students in core components such as teaching skills, pedagogical theories and professional skills. Unlike any other professional programmes teacher education has its own procedures and nature. They are as follows:

1. Teacher education programmes are continuous in nature, which means it starts with orientation followed by practice session, and finally upgrading of the skills developed as part of the training programme. In India, teacher training programmes are conducted for one year and then service programmes are conducted while they are in service.
2. Teacher education is broad and comprehensive in nature. It includes pre-service, in-service and other extension activities such as community involvement programmes, adult education programmes and other non-formal education activities. The depth and objective of each programme varies and finally prepares a worthy teacher.
3. Teacher education is dynamic and ever-evolving. The role of teachers in the 10th century is entirely different from that of a teacher in 21st century in terms of style, method and procedure, and aims. Skills and capabilities of 10th century teacher will not be sufficient to meet the demands of the 21st century. Hence, teacher education programmes are dynamic in its objectives, methods, programmes and its style of execution.
4. Teacher education is both an art and science. Teacher education moulds prospective talented teachers through scientific mode of professional training programmes.
5. Teacher education has well designed curriculum, structure organization and transaction styles. These components are the crux of teacher education
6. Teacher education is based on the theory that teachers are made and not born. Today, teachers are made. Earlier, students who had passion for teaching took up the job of a teacher, but today any one with/without passion can get a teacher education degree and become a teacher.
7. Teacher education's curriculum has sound meaningful theoretical bases which suits the practical situations at a later stage. These theoretical bases are derived from various psychological, sociological and philosophical theories on education.
8. Teacher education is now divided into stage-specific programmes. This means that knowledge base is divided across various stages which could be developed effectively to prepare entrant teachers to perform their duties as expected.
9. Teacher education unlike in other systems has a three phase interrelated and interdependent components viz., inputs, processes and outputs. Input being the theoretical base, process being the training programmes and output being the development of worthy teachers useful for the society.

1.2.2 Objectives of Teacher Education

Teacher education programmes are carried out to provide wide range of objectives at various levels starting from pre-primary to higher secondary. Pre-primary teacher education focuses on pedagogical aspects and on how to deal with the psychological development of elementary students. The complexity of both these concepts increases and are dealt in teacher education programmes for higher secondary students. A dedicated teacher community has to be developed which would be responsible to the students and to the nation as a whole. These teachers must develop the skills of the students and prepare them tackle every situation, however complex. Following are the objectives of teacher education:

1. To develop sound knowledge in psychological, sociological and philosophical aspects of education at various levels.
2. To provide necessary support services to teaching-learning process as a whole.
3. To provide adequate opportunities to observe, engage with students and to communicate with children.
4. Provide opportunities for assimilation and articulation of new ideas, develop capacity for self-learning, increase the ability to think and be self-critical and be able to work in groups.
5. To provide opportunity for self-analysis and self-understanding, flexibility, creativity, innovation and motivation.
6. To provide opportunity to comprehend, understand and apply the knowledge in different situations.
7. To provide opportunities to develop professional skills in pedagogy, observation, documentation, analysis, drama, craft, story-telling and reflective inquiry.
8. To create better understanding of the student. Teacher training is a must as it enables the potential teacher to understand the student better. The knowledge of educational psychology helps the teachers in dealing with children scientifically.
9. Teacher training builds confidence in the potential teachers. A trained teacher can essentially face the class with confidence. He/she is not timid or shy and can tackle many odd situations and does not avoid problematic situations.
10. Teaches methodology of teaching. Through training, the future teacher becomes familiar with methodology of teaching. Student teachers gets essential knowledge of methods required for a particular subject to be able to teach with flair and in an innovative style.

11. Builds favourable attitude. It helps in building favourable attitude towards teaching profession. During the course of training, many doubts of the teacher trainee's stand removed. It results in creation of love and respect for teaching profession.
12. Familiarizes with the latest in education. Teacher training programmes familiarizes the future teachers with all that is latest in education. An attitude of research and experimentation is attempted to be created in them.
13. Makes the students familiar with school organization. During the course of teacher training, the teacher trainees are familiarized with the organization and administration of the schools. It is of immense use to them in later life.
14. Creates social insight. Teacher training is must as it is required to teach the teachers to live a community life. Training is essential to create social insight in them.
15. Improves the standard of the student teachers. A trained teacher can be a great help in improving the quality of education and also in checking wastage.
16. Training is a must to produce teachers who can teach with zeal and zest and can strengthen the democratic set up of the country. Training is required not only with the sole aim of making one a good teacher but also making him/her a good citizen.

1.2.3 Need of Teacher Education

Teacher education programmes depend on the constitutional framework and social requirements of the country. A country like India has developed teacher training programmes which meet the requirements at various levels i.e., pre-primary to higher secondary. Curriculum and syllabus of teacher education programmes varies as per the need and requirement at these levels.

The need for teacher education is felt due to the following reasons:

- The core concern of teacher training programmes is to develop sound knowledge in subject areas at various levels. It is noticed that content of various subject differs from pre-primary to higher secondary. So as to develop the subject knowledge, professional programmes are required. Internalizing subject knowledge help in organizing variety of learning experiences.
- Students are the core component of classroom teaching. Students' cognitive, social, physical, and emotional developmental stages must be well understood to conduct meaningful teaching–learning process. Teacher training programmes provide the necessary knowledge in these areas. This helps in academic achievement of students.
- Classroom atmosphere is a place where we meet students from varied background like caste, creed, sex, colour, religion, region, and so on. Teachers should develop the skill in handling diverse group of students. Each student is unique in learning. Various learning styles of the students should also be catered to meet the learning styles of the students of a particular class.
- Teachers should develop the ability in designing instructional plans to meet the students' needs, curricular goals and models, subject matter, and community. Sound pedagogical knowledge should be developed to promote students learning, which help students in critical thinking, problem solving skills and reflection.
- Classroom environment varies at various levels of education. To meet the necessary requirement of classroom, teachers should be prepared to tackle the situations in the classroom.

- Teachers should be able to promote among students qualities like social interaction, cooperation among others, reading habits and self-motivation.
- Teaching-learning process being a complex task, teachers should be well trained in adopting latest technological instruments, communication skills, non-verbal skills, and written skills, which enhances the learning of students.
- Assessment is an unavoidable component in any teaching-learning process. Student learning increases by using proper assessment techniques. Teachers should be aware of the varied assessment techniques. Assessment of teaching improves both quality of teaching and learning.
- Learning helps students in developing their personality, to be active member of the society and to meet challenges. Teacher education should be channelized to meet these requirements of the students.
- Transmission of culture of the country can happen through well trained teachers. Teacher education should provide with the necessary skill to transmit the culture of the country.
- It should meet the educational as well as the national goal of the country.
- To develop proper professional attitudes and calibre among teaching community.

1.2.4 Scope of Teacher Education

Teacher education in India has undergone a lot of changes. Teachers have to focus on the changing global scenario. Accordingly it is important that they have a global view of new trends, strategies and new practices which could fit into the national goals of education. Consequently, the emerging structures and designs of the curriculum shall lay greater emphasis on the ideas, practices and experiences that have emerged in India through the contributions of thinkers like Mahatma Gandhi, Vivekananda, Rabindranath Tagore, Zakir Hussain, Sri Aurobindo, Giju Bhai and many others. Teacher education should itself transform to meet these challenges and provoke us to remove the old traditional methods of teacher education at various levels. The scope of teacher education includes the following points:

- It prepares teachers in facilitating the physical, mental, moral, social, ethical, aesthetic and linguistic development of the child by acquainting them with the knowledge of child psychology.
- It cultivates the habit of excellent caring practices in teachers to look after future student generations of the country.
- It helps to practice and organize varied learning experience which promotes creativity, motivation, self-reflection in student community.
- To empower student-teachers towards creating learning readiness among young learners.
- To acquaint student teachers in developing different methods and skills in taking care of the special needs of the children.
- Communication skills are one of the important skills of a teacher in teaching–learning process. Teacher education programmes help them to acquire strategies of communication.
- To come up with innovative techniques to improve quality of teaching by conducting action researches on relevant areas.

- Help them establish mutual supportive linkages with society, teachers, institutions and other agencies which have indirect role in students' learning.
- Prepare them to become worthy member of the society and to develop the knack of socialization.
- To develop the skills of counselling and guidance.
- To equip them to acquire competencies relevant to stage specific pedagogy, curriculum development, its transaction and evaluation.
- Teacher education prepares teachers to master skills and techniques to handle students at various level namely pre-primary, primary, elementary, secondary, higher secondary, physical education and education of children with special needs.

The Scope can also be understand in the following ways:

- Teacher education at different levels of education
- Triangular basis of teacher education
- Aspects of teacher education

Teacher education at different levels of education: Student education and their requirements change with each level; this necessitates teacher education to be different, say in the pre-primary, primary, elementary, secondary, higher secondary and the tertiary stages. Also, education not only enhances the skills required for each level, it gives them professional edge, practical knowledge, and expertise in child management and counselling. This helps in preparing entrant teachers for their future.

Triangular basis of teacher education: Subjects like philosophy, sociology and psychology form the base for contents of teacher education as they provide better understanding and application. By studying philosophy, student teachers gather insight about the implications of various schools of philosophy — from the ancient to modern thoughts — and views of philosophical thinkers on education, curriculum and discipline. The sociological aspect helps in understanding the dynamics of the society in the education system. While the psychological aspect aids in understand the psychology of the students. Educations in these discipline simultaneously helps the student teacher to understand their own behavior and contribute to the teaching-learning process.

Aspects of teacher education: Teacher education is concerned with the aspects such as, who (teacher educator), whom (student teacher), what (content) and how (teaching strategy). Like all other forms of education, in teacher education too, the quality of the educator plays an important role. The quality of pedagogical inputs and their efficient utilization in preparing prospective teachers depend largely on the professional competence of teacher educators and the ways in which it is utilized for strengthening the teacher education programme. The primary objective of teacher education, thus, is to prepare efficient teachers and strengthen the teach-learning process.

1.2.5 Limitations of Teacher Education

There can be seen a huge discrepancy in the educational field between developing and developed countries of the world. Though the developing countries have made tre progress tremendous still the difference will limit the global competitiveness of the underdeveloped world. The underdeveloped countries are facing various obstacles in the field of teacher education; such as:

- Inadequate access to education. Some countries also face economic, cultural, and political obstacles specifically to women's access to education.

- Disproportionate student/teacher ratio in primary and secondary education in comparison to developed countries. The effect of this disparity can be seen in the rural areas the most.
- Teacher quality is not good, especially, in those countries that have limited access to education. Teachers in these countries are mostly untrained or under-qualified or teach subjects in which they are neither qualified nor trained for.
- Lack of attention given to teacher training or teacher education by the government in comparison to other educational courses though the importance of teachers is emphasized in many international reports.
- There is a shortage of good research in the field of teacher education that could help to improve teacher education.

Though the need to integrate training, education and professional development has been felt for lifelong learning for the teachers but the resources allocated are usually inadequate and opportunities few. On an average, countries spend a meager one per cent in teacher training and education from the total annual education expenditure (6 per cent for staff development in the field of industry and business). Priority and attention should be given to teacher training and education to facilitate development of human capital worldwide.

1.2.6 Teacher Training *versus* Teacher Education

The words 'teacher education' and 'teacher training' have been used interchangeably. Is there any change in the meaning of the words? What is the difference in the words? Questions of this type will be discussed in this section. Let us reflect on this concept and then move on to the development of teacher education programmes.

The term teacher training is being used traditionally since a long time for all teacher preparation programmes. Literally, training is an 'is a well organized activity with objective of imparting clearly set instructions or pre-decided activity to improve the receivers performance or make them to achieve certain level of knowledge or specified skill'. Training is the continuous activity provided to individuals/group to increase productivity and enhance performance of the people concerned. Training is learning of specified skills to perform certain specified tasks. For example, carpentry is specialized activity which requires trained skills to perform and succeed in carpentry works.

Training basically improves the performance of special skills and therefore different training methods exist viz:

- *Orientation training:* To impart basic knowledge of task selected
- *Safety training:* To understand methods in safety measures
- *Promotional training:* To internalize knowledge for higher posts
- *Refresher training:* To get knowledge in latest trend in the job
- *Job training:* To understand the special skills needed for a job
- *Remedial training:* To overcome the deficiencies needed for particular job
- *Internship training:* To get practical knowledge in the job selected.

From the different types of training it is understood that any profession or job requires special skills and techniques to perform at the desired level. To succeed in any kind of job, an employee or a person needs to be trained in the skills needed especially for that kind of job. In teacher training the traditional style was imparting knowledge in instructional method of teaching. The main component of any teaching–learning process is the way

of instructional styles followed. As we know ,in ancient India the style of education was concentrated on oral method, which implies teachers had to be proficient in oral method of teaching. Oral method of teaching requires the oral skill of explaining the subject content. In this regard, old teacher education programmes focused on imparting skills of oral instruction and hence teacher education programmes was traditionally known to be 'teacher training'.

Although people outside the education field may use teacher education and teacher training interchangeably, education theorists distinguish the terms clearly. In the context of teacher preparation, training corresponds to learning real-life classroom skills while education refers to more abstract knowledge about modes of learning and instruction. When referring to the process of preparing future teachers, education specialists find 'teacher education' more consistent with the idea of developing versatile, reflective practitioners with a wealth of professional knowledge.

- **Training:** In education theory, training refers to acquisition of concrete skills for meeting specific goals in a real-life applied situation. This often includes 'closed skills', like typing or juggling, that have absolute ceiling on mastery or where the only way to improve the skill is to do it faster or while multitasking. For teachers, training might include how to maintain a grade book or calculate reading fluency scores.
- **Education:** In contrast, education focuses on more abstract knowledge and open-ended concepts, like the ability to design factory equipment or write poetry. Open skills rely on abstract understanding and have no absolute ceiling on performance. Examples from teaching include how to design an original lesson plan or promote critical thinking. This distinction is subtle since abstract concepts can empower students to meet real-life goals, similar to training. Furthermore, training in concrete skills can foster understanding of an underlying concept, similar to education. Some theorists distinguish education from training based on intention. Education aims to improve the mind while training aims to improve performance. In many cases, education and training go hand in hand.

In inculcating skills, attitude, knowledge and different styles of behavioural pattern are inculcated in the people concerned. According to this, teacher training is needed to become an effective teacher. As we discussed teacher training concentrates on imparting training skills in oral instruction, which help teachers to carry out an effective teaching-learning atmosphere inside the classrooms. But the classroom scenario is experiencing a smooth and steady change.

Oral instruction is being replaced with other efficient instructional strategies like integration technological instruments and other innovative delivery systems. Meanwhile, the scope of teacher education has experienced a widened scope. The scope of teacher education influenced the method of training in teacher education programmes. Slowly the terminological term from teacher training has been replaced with 'Teacher Education'. At present the teacher preparation programmes are commonly known as 'Teacher Education' programmes.

Teacher education is a much more complex and comprehensive term which includes providing training and knowledge in many aspects such as theoretical concepts of teacher education, practical aspects of training, training of modern instructional strategies in teaching-learning process, giving variety of opportunities in student learning, understanding psychological theories, understanding modern principles of teaching-learning, use of technological instruments, participation in co-curricular activities,

understanding of recent trends and developments in education and so on. Compared with the traditional teacher training programmes teacher education has moved ahead and is more suitable for the present scenario.

The apex body of teacher education, NCTE defined teacher education as 'programmes of education, research on training of persons for equipping them to teach at pre-primary, primary, secondary and senior secondary stages in schools, and includes non-formal education, time education, adult education and correspondence education'. A close analysis of this definition and the developmental stages of teacher education programmes (explained in the succeeding sections) will help us to realize that teacher education has a broader aim such as training in instructional methods plus practical application of theoretical components, understanding instructional strategies for various stages from pre-primary to senior secondary, in-service programmes, training through distance mode of educations, correspondence style of education, part time education, knowledge on physical education, etc. Developing a firm understanding of these concepts will cultivate effective future teachers to accomplish the aim of education and in turn will meet the national goals of the country.

Teacher education as any other professional programme must be thought of in new dimension in its scope and aim. The twenty first century provides ample opportunities for development of all round personality even without education. Students get opportunity to reflect upon themselves, in various situations. They reflect upon themselves and act accordingly. What is the role of education then? Apart from training in teacher preparation, the broad scope of teacher education includes:

- Utilization of human resources to its maximum. Human resource means both teacher and student. Through education, the maximum output of either category is channelized.
- Development of human resources. In teacher education programmes the skill and caliber of student teachers is focused to bring out maximum efficiency in teaching–learning process.
- Development of skills of student-teachers and increase of productivity.
- Maintenance of quality and efficacy.
- Building healthy and proper work climate.
- Developing morale among the pupils concerned.

Check Your Progress

1. What is meant by teacher education?
2. What is the difference between teacher training and teacher education?
3. Write any two limitations of teacher education.

1.3 HISTORY OF TEACHER EDUCATION IN INDIA

As student of teacher education, you are supposed to develop firm understanding on the developmental stages of teacher education before and after Independence. As you know there was a gradual development in teacher education programmes from the Upanishad period to the 21st century. During the Upanishad period teachers enjoyed high privileges,

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but as time passed the dignity and power of teachers declined. In this section, we will study the developmental stages of teacher education under two heads i.e.,

(i) Teacher education in pre-Independence Period (2500 BC–AD 1947), and

(ii) Teacher education in post-Independence Period (AD 1947–AD 2013)

1.3.1 Recommendations of Commissions and Committees on Teacher Education in Pre-Independence Period

Teacher education in India starts with the Vedic Age and ends with the modern period. A detailed discussion on the nature of teacher and its development in various periods are described below.

Vedic Period

In the Vedic period religion played a prominent role in education. The aim of education in the Vedic period was to attain salvation (*Moksha*). During education a person was supposed to engage in *Karmopasana* i.e., work of worship and thus purify the inner senses and gain the Absolute (Brahma). The soul forgets the absolute due to ignorance and illiteracy and so it thinks itself as one who is neither born nor dies and suffers in miseries.

The literal meaning of 'Vedas' is knowledge. Hence, Vedas refer to various forms of knowledge. There were four different types of Vedas viz: Rig Veda, Yajur Veda, Sama Veda and Atharva Veda. These four Vedas represent different bodies of knowledge. Students of Vedic period were supposed to internalize these Vedas from teachers, who were called '*Guru*' during the Vedic period. The knowledge was transferred to students by the gurus' mainly through verbal medium and students were supposed to repeat it. So the main method of teaching was verbally done in Vedic period. The students internalized different concepts either through mediation and realization. Once this process was completed, students internalized different bodies of knowledge and they reached the stage of realization.

Chief characteristics of Vedic education are:

- Gurukul
- Ideal of guru
- Duties of *Shishyas* (students)
- Relation between Guru and Shishyas
- Education
- Women education
- Physical education

Teachers of Vedic age were men of high calibre in terms of knowledge and spiritual progress. Gurus maintained high reputation in the society. They always paid attention in transmitting knowledge to the shishyas in gurukuls (place were classes were conducted). Gurus considered their shishyas as their sons and shishyas treated Gurus as their father. Gurus helped in the all round personality development of their shishyas. Gurus also tried to impart education to women and also imparted training in physical education, art and craft, etc. Gurus helped in accomplishing the needs of all his students.

Teachers occupied a pivotal position in the Vedic system of education. The teacher was a parent surrogate (Parent Substitute), a facilitator of learning, exemplar and inspirer

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confidant, a friend and philosopher, moral educator, reformer, evaluator, character and personality developer, importer of knowledge and wisdom and above all a guru—a religious and spiritual guide. The relationship between the teachers and pupil was regarded as filial in character. Teacher was the spiritual father of his pupil. In addition to imparting intellectual knowledge, gurus were also morally responsible for their shishyas. He was to always keep a guard over the conduct of his shishyas. Gurus were expected to instruct their shishyas how to sleep and what food eat and not eat. During the Vedic period learning was transmitted orally from one generation to another. Great importance was attached to the proper accent and pronunciation in the Vedic recitation & these could be correctly learnt only from the lips of a properly qualified teacher. The spiritual solution depended almost entirely upon the proper guidance of a competent teacher.

Upanishad period

Upanishad period is between 1400 BC–600 BC, from the end of Rig Veda period to the beginning of Buddhism and Jainisam. In Upanishad period after the spread of Vedic culture, the sacrificial rituals dominated and the Brahmin priests had the highest position in society. Accordingly different ritual duties came into existence along with theoretical knowledge. Also the priests were divided into different categories like *Hotri, Udgata, Adhwarya* and Brahmin. As in the Vedic period, education was for attaining the Absolute (Moksha). Practical knowledge in subjects such as physical science, handicrafts, arithmetic, astronomy, etc where also imparted. The aim of education was to:

- enable realization or true knowledge and achieve Absolute
- meditate and think

In accomplishing the aim of education, gurus played a major role. Let us discuss the nature and duties of a teacher during the Upanishad period. The teacher during this period enjoyed a special status and was given a lot of importance. They were held in high esteem and a job of a teacher was considered a high class job. Teachers were known to be 'gurus', and were embodiment of good qualities, sound knowledge, and abode of spirituality. Since gurus were enjoyed special status, the selection of guru was rigorous and followed a strict process. These gurus were appointed to enlighten and to wipe off darkness from the society.

During education students were made to sit at the feet of the guru, and the gurus recited the lesson to the students. Upanishads describes the *Para Vidya* (Physic knowledge) and this knowledge was considered to be above all knowledge since it enables the unity of soul and absolute. The study of the Upanishad helped students to reach self-realization. The education was limited to the upper castes of the society. As in Vedic period women were permitted to also study. The three methods of teaching in Upanishad period were

- *Sharvan* (learning)
- *Manan* (Mediation)
- *Nidisdhyasan* (Realization and Experience)

According to Rig Veda, was selected and then educated or trained. A was expected to have passed the recognized curriculum and fulfilled all the duties of a Brahmachari. Teachers were supposed to seek knowledge for realization. They were highly respected. In due course the scholarly class came to be known as Brahmans and teaching became a hereditary profession for them.

During this period the relationship between the teacher and disciple became very intimate. The word Upanishads connotes 'sit close'. Teachers had the freedom to choose their disciple and once the disciples were chosen it became the moral duty of the teachers to take care of their disciples. Knowledge during this time was orally transmitted and explanation was the most important way of teaching. The disciples were expected to emulate their teachers this learning was passed from one generation to another. Good teachers devised innovative methods of teaching to make the lessons interesting and meaningful. Listening to the spoken words, comprehension of meaning, reasoning leading to generalization, confirmation by a friend or a teacher and application were the five steps to realize the meaning of a religious truth practiced in ancient India.

Brahminical period

During Vedic education students were supposed to perform 'Upanayan' at the age of four to nine, thereafter they were sent to Gurukuls for brahminical education. Brahminical period is notable for learning brahminical education, whose chief characteristics were

- Religious elements
- Character building
- Development of personality
- Self-reliance
- Self-control
- Beginning of education at appropriate stage
- All-round development
- Social ideals

The students were sent to gurukuls like in Vedic period and students sat with gurus to gain knowledge. Education was provided to develop character and an all-round development of the students. The whole responsibility of boarding and lodging of the student was given to the Gurus. 'Individual system of education' was followed in gurukuls where the students studied different subjects and in addition had to perform duties like grazing cows, fetching wood from forest, begging for alms, etc. The instruction was mainly oral, through which students learnt *ithihas* (history) and Puranas in addition to Vedas and Vedanga. The motto of education was 'simple living and high thinking'.

Buddhist period

During Buddhist period no educational institutions were present, instead religious centres like monasteries and *viharas* were the places where education was imparted. Gurukul system in Vedic period was replaced with 'Sangh'. Like Upanayan ceremony, students performed 'Pravrjya' before entering a Sangh. After the completion of ten years a student had to stay back as a monk (Bikshus) in the Sangh for the rest of their life. Buddhist period was marked by two types of education—primary (included reading, writing and arithmetic) and higher education (included philosophy, Ayurveda, military training, etc.).Students were given full freedom to select their courses of study. Some of the subjects during Buddhist period included teachings of Budha vinaya, dharma, etc.

The teachers in the Sangh were required to have spent at least 10 years as a monk and to be compassionate and generous. Both the student and teachers were responsible of the monastery but the teacher had the sole responsibility of education,

food and clothes of their students. The teachers had to look after and treat their students in case of sickness.

The teachers were required to teach, write books, propagate religion, hold discussion and debates. The teachers were responsible for physical, mental, spiritual and moral development of the students. The teacher was regarded as spiritual father or intellectual father of the student.

Medieval period (AD 1200–1700)

Invasion of the Muslims paved the way for Muslim education in India. Even though the Muslim education came into existence, some parts of the country still had the brahminical system of education. The Muslim rulers of the medieval period had shown more interest in political affairs than spread of education.

The Muslim rulers started education by opening educational centres called '*maktabas*' (schools) and '*madrasahs*' (colleges). Maktabas were centres of primary education, which provided knowledge in basic concepts like alphabets, reading, writing and simple arithmetic, religious instruction, etc. The Madrasahs catered to the needs of higher education which taught grammar, rhetoric, logic, theology, metaphysics, literature, jurisprudence and sciences. The education started with a ceremony called *Bismillah*, imparted by the teacher '*moulavi*'. After the completion of education in Maktaba, students enrolled in Madrasahs for higher education, where lectures on higher education were given by eminent teachers/lectures. Many teachers were appointed in these madrasahs by the state to impart education to the students. The rulers of Tughlak dynasty provided financial assistance for the running of madrasahs.

Muhammad Ghori took interest in opening mosques and colleges at Ajmer to train teachers, precepts of Islam and teachings of Mohammeden law. Muslim ruler Firoz Shah had shown interest to provide financial assistance to these educational centres. Similarly, Akbar opened many madrasahs during his period for higher education.

Similar as ancient period, the method of teaching both in Maktabas and Madrasahs were oral. The Moulvies enjoyed high respect and esteem during Muslim period. They were entrusted with the duty of teaching students. They were respected by the society and students. Past references show that no specially designed teacher training techniques existed in the medieval period. Arrangements like food and lodging were provided to the teachers of medieval period. So as to reduce the burden of work of teachers, students of higher classes were entrusted to teach the students of lower classes. Students were provided ample freedom to develop themselves during this period. So much care and expenditure were provided to the growth of education in the medieval period.

Modern period (AD 1700– 1947)

The education system of modern period starts with the entrance of Christian missionaries to the country. The Christians came to India to establish trade relations with the country. Later on they became the rulers of the country and started the modern education system in India. The credit of education of modern India lies with the Christian missionaries.

So before the arrival of British, Christian European missionaries and Danish missionaries started the basic work to provide teacher training courses in the country. The Danish missionaries started a school (called the normal school) at Tranquebar to train teachers in 1716. The teachers passing out from this school were appointed as teachers in primary schools. Danish missionaries started another school in Serampore in

west Bengal in 1793. Both these institutions took interest in providing training programmes to teachers. These institutions followed monitorial system (or the pupil–teacher method of training) to design the teacher training programmes which were later accepted as the adoption method to appoint presidencies under British rule. This system was known to be 'Bell-Lancaster System' named after Andrew Bell, Superintendent of Schools, established by the British Government. His thoughts and ideas were implemented in teacher education programmes.

Later on educational societies came into existence at major places like Bombay, Madras and Calcutta and one teacher training institution was also set. The annual report of presidencies says the agencies like Calcutta School Society (Calcutta Presidency), Madras School Society (Madras presidency) and Native Education Society (Bombay Presidency) played remarkable role to train teachers. The Native Education Society of Bombay formed in 1815 provided training to 24 teachers and were sent to different parts of the country as 'organizers' to improve the quality of teaching at elementary level. Similarly, Calcutta School Society formed in 1849, did a remarkable contribution to train teachers of elementary level. This was appreciated by East India Company, by providing a grant of 500 rupees per month to encourage the contributions of Calcutta School Society. Efforts were taken by Calcutta School society to train women teachers of the province. Later, more number of training centers were set up. Similarly, the then Governor of Madras, Sir Thomas Munro, sanctioned a grant to Madras School Society to train teachers under his province. This job was successfully completed by the Madras School Society and they could succeed in imparting teacher training programmes for more number of teachers.

During the early periods of British rule, enormous number of formal schools came into existence and the need for teacher training was drastically felt. Lord Macaulay's Minute of 1815 on judicial administration of the presidency of Fort William recommended the need of teacher training, which is considered as the first document to recognize the need for teacher training in the British period. As a result many schools were set up different parts of the country like in Surat, Pune and Calcutta. To train teachers, a number of teacher training centers were also set up in places like Meerut, Madras and Agra and by 1824 twenty six teacher training centers were opened at different corners of the province. From 1815 to 1854 the demand of teacher training considerably increased and it was reflected in the policy making process of different provinces.

In 1826, the then Governor of Madras, Sir Thomas Munro had initiated steps to establish teacher training schools in every collectorate (district headquarters of the government) known as principal schools. By this suggestion he expected that there will be continuous training of teachers and the shortage of teachers can be solved to a large extent. He also expected that there would be one principal school for 300 tehsils under his Presidency. Similar steps were adopted by different rulers.

The secretary of Bombay in 1845 opened a normal class in Elphistone institution. This was opened for 40 primary teachers which included 15 Marathi, 15 Gujarati and 10 Kanarese. Training for three years was provided to these groups. The Poona Sanskrit College and Poona English Schools were merged in 1851 to develop Poona College to provide training to teachers. Training in teaching methods, psychological strategies and other pedagogical methods were conducted at this college. At the same time the English School at Surat opened a normal class to train Gujarati teachers. The main aim of these institutions was to train teachers at various levels and to equip them as future teachers useful for the state.

Wood's Despatch, 1854

Wood's Despatch is a major landmark in the history of education in the country and hence also called 'Magna Carta of English education in India'. This document was published in 1854 and recommended a good number of suggestions in the improvement of education of the country as well as the prevailing teacher training programmes. Woods Despatch has laid foundations for the establishment of University system in India and opened Department of Public Instruction in the provinces of Punjab, Bengal, Madras, Bombay and NorthWest province.

For the first time, Wood's Despatch emphasized the importance of teacher training and the need for improving the quality of teaching. Not only the need for teacher training, it has given due consideration to the facilities provided to the teacher including salary structure and facilities for teacher training. Woods Despatch recommended the opening of teacher training institutions at each Presidency so as to make teaching job attractive to the public. It recommended grant in aid in the form of scholarship and the salary to be increased for those who attended the training programme. Woods Despatch framed the outline for selecting teachers, training of teachers, place of training, placement after training, etc. It emphasized the need for modification in the monitorial system of training, the stipend provided to the teacher trainees and employment of teacher trainees after the training period.

In suggesting a change in the education of teachers, the Wood's Despatch referred to the system prevalent in England.

Lord Stanley's Despatch, 1859

The recommendation of Wood's Despatch was followed and strengthened by another Despatch known as Lord Stanley's Despatch of 1859. Many policymakers and rulers of the country failed in practicing some of the recommendations of Woods Despatch and Lord Stanley expressed his concern over this and came up new recommendations. During this period the grant in the form of scholarship given to teacher trainees was considerably increased. More teacher education training institutions came into existence during the period from 1881 to 1882.Similary the number of normal schools increased to 106, of which 15 were exclusively reserved for the women of the country. A total of 3,886 teachers got trained from these institutions. An amount of ' One lakh was kept aside to meet the expenditure of teacher training programmes which was a considerable amount at that time.

Anyone having primary education was given admission to teacher training programmes. The rules and procedure of teacher education was not rigid, so as to attract more number of students teachers. There were no admission criteria for women for admission to teacher training, to help attract more women to the field of teaching profession. The methods and procedures carried out during the process of teacher training were so simple that it motivated teacher trainees to continue the course and complete it successfully. The students were provided financial assistance in the form of stipend. The initial period of teacher training followed Monitorial system (Pupil-Teacher) then later it replaced with 'System of Apprenticeship', where students were placed under the custody of an experienced teacher for a particular duration of time. After completion of apprenticeship they were placed in District Training Colleges to get training for a short duration and to get the certificate of 'Trained teacher' which certified the students that they were qualified to teach in primary schools.

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In the initial stages teacher training was arranged for teachers at elementary/ primary level. Later it was extended to middle and secondary level. The Government School, Madras started in 1856 and Central Training School started in 1877. In 1886 the first training college to train secondary teachers was established in Madras followed by the Nagpur Training School in 1889.

The Indian Education Commission (1882–83)

The commission known as Indian Education Commission or Hunter Commission was appointed by Lord Rippon and Sir William Hunter to study the education system prevailing in the country submitted their report in 1882. The commission emphasized the need to open more normal schools to train teachers. They suggested opening at least one normal school under a Divisional Inspector. The pattern of curriculum followed by the institutions was different from each other. The commission had given freedom to provinces to select their own syllabus and curriculum that suited their situation and need.

Apart from pedagogical theory, practical classes were organized as part of teacher training. Physical sciences and their relation to medicine, agriculture, book keeping, etc. were some of the subjects taught apart from theoretical subjects. The commission suggested opening training centers separately for elementary and secondary school teachers. They also emphasized that the subjects to be taught for secondary school teachers should be rich in content than the courses for elementary teacher training. They suggested that Teacher training at secondary level should conduct practice teaching to make the students aware about practical situations of real teaching.

The recommendations of Hunter Commission expanded the scope of teacher training institutions in modern India and as a result teacher training colleges were set up at Allahabad, Lahore, Madars, Kurseong and Rajamundry. Out of these colleges, the colleges at Madras and Rajamundry were created by upgrading the normal schools. The college at Madras was set up exclusively for teacher training programmes of secondary school teachers. By the end of the 19th century some essential things in teacher training had been established. Pedagogical courses had replaced general education, examinations and certificates in teacher training had been instituted and practical aspects in planning and teaching were emphasized.

At the start of twentieth century more and more teacher training schools opened in the country. The admission criteria, duration of the course varied from place to place. For example teacher training course at Jabalpur College was for two years but in other places it was one year. Teacher training programme at elementary level had two year duration in Uttar Pradesh while four years in Assam. In Madras and Bengal training centers were set up exclusively for training teachers of elementary and secondary level. College at Madras and Bengal concentrated on content cum professional course pattern of teacher training. The normal school started converting to training centers for teacher courses. The ownership of teacher centers were distributed even to private parties and hence the end of nineteenth century is marked by the emergence of teacher training organizations under private sector.

The start of twentieth century is marked by the remarkable contribution of the then Viceroy, Lord Curzon, who took keen interest in the development of education and teacher education in the country. He appointed a commission to enquire about the working pattern of the universities of the country, standard of education provided by the universities and so on. As a result the commission came up with Universities Bill in 1903 and suggested

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possible solution to improve the quality of teaching at University level. In 1904, Government resolution on educational policy was published.

The educational policies of Lord Curzon emphasized the need of teacher training in the country. It recommended to complete the training of teachers in the 'art of teaching', a prerequisite to improve the quality of teaching. The commission suggested setting up of practicing schools near the training colleges for conducting practice teaching as part of the training to develop behavioural skills in practical situations. It believed that the theory and practical component of teacher training courses should be properly linked to bridge the gap between theory and practical situations of real classroom atmosphere. It also suggested to provide one year teaching training programme for graduates and two year training for undergraduate leading to university degree in teacher training.

The recommendations of Lord Curzon showed the way to open more schools and teacher training institutions and practicing school were attached to these training centers. By 1907 universities started awarding teaching degrees except Bombay University and UP. Bengal awarded L.T degree and Punjab awarded B.T degree in Teaching In 1913, Government of India published another resolution with major suggestion as 'no teacher will be allowed to teach without a certificate in teaching', which again emphasized the need for teacher training in the country. The Resolution suggested that teachers should have passed the middle vernacular examination and undergone a year's training. It suggested periodical repetition and improvement of courses for teachers. As a result of this recommendation more training colleges were set up but it failed to implement some of the recommendation due to the onset of the First World War in 1914.

Calcutta University Commission, 1917

At the end of World War in 1917, the Calcutta University Commission was set up to enquire the quality of teaching in Calcutta University, under the leadership of Sir Michael Sadler, hence this commission came to be known as the Sadler Commission or Calcutta University Commission. Even though the committee was appointed to review the working of university, it suggested remarkable recommendation on teacher education too. It recommended opening of a Department of Education in each university with a Professor as the Head of the Department. It recommended the introduction of Education as an optional subject at the intermediate, graduation and postgraduation level. Sadler Commission recommended attaching an experimental school in addition to the practical schools, to provide opportunities to experiment various teaching methods, teaching skills, school administration, leadership qualities, etc. Practicing schools exclusively set opportunities for practice teaching.

Sadler Commission recommendations opened new universities in different parts of the country, like in, Mysore, Patna, Banaras, Dacca, Aligarh, and Hyderabad and some of these universities started with the establishment of Teacher Education Departments. Similarly the number of teacher training colleges also increased in the country.

Hartog Committee, 1929

During this period the freedom struggle movement was going through incidents like Jallianwaala Bagh Massacre, Khilafat Movement, etc. hence the education system didn't get much attention. The political situation and societal atmosphere was instrumental in the appointment of a commission headed by Sir Philip Hartog, hence called Hartog Committee of 1929. This Committee was especially appointed to review the education system under Indian Ministry.

The commission expressed its deep concern over the poor quality of primary education and the substandard quality of teacher training of primary teachers in the country. It was found that among the existing primary teachers, only 28 per cent had their middle school education and 44 per cent were untrained teachers. The commission suggested the following measure to improve the quality of teachers at the primary level:

- Quality and standard of teacher training should be increased
- Duration of teacher training course should be more
- Adequate teaching faculty should be appointed in teacher training colleges
- In-service courses, refresher courses and conferences must be arranged for working teachers for professional growth
- Service conditions must be improved to attract and retain teachers in the teaching field

These recommendations brought new dimensional change in the teacher training and quality of teaching in schools. The need of professional course was emphasized by the Committee to improve the teaching–learning process in schools. In rural areas teachers having rural inclination should only be appointed was another comment of the commission.

The level of education was a detrimental factor in duration of the course of teacher training course. Accordingly, preprimary and primary teacher training was of two-year duration, three years for middle school training and two years for non-graduates in high school training course. The recommendations of Hartog Committee were adopted by the Central Advisory Board of education (CABE) in 1943.

The impact of Hartog Committee helped 13 out of 18 existing universities to open teacher education departments by 1932 and in the history a new degree named B.Ed. was started by Andhra University and M.Ed. degree was started by Bombay University for the first time in 1936. Similarly, the Spence Training College at Jabalpur started preliminary research activities at B.T. level. Hence recommendation really provided a new direction in the teacher training sector of the country.

Abbott-Wood Report, 1937

During the Second World War period, the country was facing many political challenges; Abbott-Wood report was published at this time, which had indirect effect on the prevailing teacher education system of the country. The structure, procedure and the whole system of teacher education was studied in detail. It found that working conditions of teachers were miserable especially for the teachers from rural areas. To develop the quality and standard of teaching, refresher courses and conferences were recommended for working teachers and in training colleges.

Report also recommended to start Vocational Teachers College. At the same time Basic Education was started by Mahatma Gandhi in1937, leading to the training of teachers for basic schools. In 1938, a Basic Training College was set-up at Allahabad and the Vidyamandir Training School was started at Wardha in 1938. Gandhiji's Wardha Scheme was child centered education and it provided opportunity to students to earn while learning. The new system of education has indirect effect on the training of teachers. Teachers had to internalize the teaching methods and procedures to teach students under Wardha Scheme of Education. The success of this education rests on the shoulder of teachers who trained the students under Wardha Scheme.

For the successful implementation of Wardha Scheme two types of training curricula were introduced—short-term and long-term. Long-term training extended for a long period of three years but short-term period was for a short span of one year. During the training period teachers were expected to stay in hostels attached to the training institutes since both were residential programmes. Later the training system spread to other parts of the country.

The percentage of trained teachers improved from 56.8 per cent in 1937 to 61.3 per cent in 1942. Still there was much to be done to improve the qualitative aspect. In 1941, there were 612 normal schools out of which 376 were for men and 236 for women. There were 25 training colleges which were inadequate and could not meet the demand. Vidya Bhawan teacher's College in Rajasthan and Tilak College of Education in Poona were started in 1941. Bombay was the first to start a doctorate degree in education the same year.

In 1941, the Vidya Bhawan teacher's College was started in Rajasthan and the Tilak College of Education in Poona. Bombay took the lead in starting a doctorate degree in education the same year.

Sergent Report, 1944

As a post war expansion of education of Second World War, a new educational scheme called Sargent Scheme was submitted to the Government of India under the leadership of Sir John Sargent. Hence this report is also known as Post War Development Plan and was accepted by the CABE (*Central Advisory Board of Education)* in its meeting held in 1943. The report mentioned the education developmental structure and practices starting from pre-primary to university education. The scheme also made significant contribution to the field of teacher education by contributing the following ideals:

- There will be two types of teacher training institutions. One for those who have completed Secondary School Leaving Certificate, for a duration of two years and other for degree holders, the duration of which will be two years.
- Besides training in professional skills, teacher trainees would receive training in extra-curricular activities too.
- Teacher training colleges should organize refresher courses, practical classes, training workshops and other professional conferences in addition to regular activities of the college.
- Experimental and practicing schools should be set up to conduct research on various topics related to pedagogy.
- Teacher training should be free from fees, and stipend should be provided to teacher trainees. Teacher training colleges should also provide residential facilities to teacher candidates.
- Teacher training should be seen as residential programmes since residential programme help students to empower teacher skills fully.
- The eligibility criteria for M.Ed. degree programme would be trained graduate with three years of teaching experience.
- The Professor, School Headmasters and Inspecting Officers, can be transferred from one place to other.
- Special teacher training programmes should be arranged for training of women to overcome the shortage of women teachers.

Sergent Report also recommended that boys and girls after High School can be inducted into the teaching profession. Training programmes should include practical training, refresher courses and research facilities. It suggested a two-year course for pre-primary and Junior Basic schools (after high school) and a three-year course for these near basic schools. The graduates were to then go for one year training.

The Report suggested that the first year should be devoted to general and professional subjects along with school visits, discussions and other experiences to create interest in the trainees. It also proposed to revise the pay scale to attract better candidates.

1.3.2 Recommendations of Commissions and Committees on Teacher Education in Post-Independence Period

After Independence, the Indian Government has put effort to spread education, which provided wide access to all sections of the society irrespective of caste, creed, religion, language and region. The quality of education improved after independence in 1947. The expansion of education indirectly affected the training programmes for teachers in the country. The Government considered Teacher Education as one of the core component which had direct roles in the nation building. The expansion of schools demanded the need of qualified teachers to meet the new demands of education. The Indian Government came up with new committees and commission to revamp the prevailing teacher education system of the country.

The commissions put forward innovating policies and steps to strengthen the existing teacher education system. After Independence as there was a great demand for teachers in the country, the commissions made teacher education accessible to large number of people. Similarly, the demand for In-service programmes was also highlighted to improve the efficiency and efficacy of working teachers. In this section we will study different commissions and their contribution to growth of teacher education in the country.

The first commission appointed to review the prevailing education system was set up under the chairmanship of great educationist, Dr .S. Radhakrishnan, which is popularly known as The University Education Commission.

University Education Commission (1948–49)

The University Education Commission was set up under the chairmanship of Dr. S. Radhakrishnan to study education system of the country and the commission submitted its report in 1949. This document contributed significantly in improving the quality of education, in particular teacher education system for the next few decades. Commission recommended to increase the duration of school education from 11 to 12 years and suggested degree courses after completion of schooling. Two year degree was replaced with three year course. General education was introduced with college programmes and recommendations were given to improve the working conditions of teachers across schools and, colleges and universities. There were to be three cadres of teachers in universities viz: Lecturer, Reader and Professor. Another suggestion was to introduce continuous and comprehensive evaluation system in the country as part of evaluation.

The Commission in detail studied teacher education procedure and stressed the need for reorganization of teacher training departments and training colleges. Some of the recommendations made by the commission are as follows:

- There should be balance between theory and practical component in teacher training programmes. Flexibility should be maintained in preparation of teacher education curriculum. Theory papers should be connected to real life situation.
- Teacher education courses should be modified such that more time should be allocated for evaluation of student performance.
- After theory courses students given opportunity for practice teaching and training schools should be identified for the purpose.
- Students should be provided opportunities to involve actively in the daily activities of the school.
- Staffs of the training colleges should be appointed from those who have experience of teaching.
- The curriculum and training course of teacher education should be adaptable and compatible to local circumstances.
- Admission to Master Education can be possible only after successful completion of some years of teaching experience.
- The commission was disappointed with the procedure and duration of practice teaching sessions of the programmes. It recommended keeping at least twelve weeks exclusively for practice teaching in one teaching teacher education programmes. It also suggested measures to overcome the difficulties caused by rising the duration of teaching practice sessions.
- It stressed the importance of research in the field of Education. It strongly recommended implementing of research orientations and practices in teacher education to improve teaching quality.
- Recommended to conduct refresher course, seminars, workshops and other academic activities for working teacher during the vacation period. This must be organised by the universities, to help upgrade subject knowledge of teachers as well.
- The 'certified attendance at a University refresher course' once in four/five years to be made compulsory for promotion of teachers in teacher education departments.

Recommendations presented by University Education Commission were widely accepted and Universities started rewinding teacher education programmes by including more courses, gave due consideration to teaching practice sessions, curriculum revision and so on. Central Institute of Education, Delhi University introduced Psychology wing and they were given the responsibility to design related components of teacher training programmes like psychology tests, identifying and promoting research interest, etc. Till the time of University Education Commission the terminology related to teacher preparation was 'Teacher training' but soon after the second conference of Indian Association of Training Colleges, held at Mysore the terminology changed to 'Teacher education'. Now popularly teacher preparation programmes are commonly known as Teacher Education Programmes.

Secondary Education Commission (1952–53)

After the University Education Commission, under the leadership of Dr. A. Lakshmanaswami Mudaliar, the then Vice Chancellor of university of Madras, a new commission was set up in 1952, to recommend suggestions for the reform of the education system in the country. It was appointed to review secondary education system, but as a

part it studied the teacher education system too and came with innovative recommendation to improve the quality of teacher education. Commission in its report expressed deep concern for the sub-standard and low quality teacher training programmes of the country and recommended to increase the duration of the programmes to two years. But due to political reasons the authorities failed to implement some of the suggestion, hence they decided to continue the existing structure of teacher education with minor changes. The duration of the course remained one year but ample opportunity was provided for effective teaching practice sessions in the curriculum. To supplement the training programmes, innovative teaching methods, procedure in evaluation/assessment, new techniques for co-curricular activities, specialized techniques to teach children with special need, etc., were introduced.

The commission stressed on the need for practice teaching as a part of teacher education programmes. It introduced the concept of Demonstration School/Model schools to get training for teacher candidates under practical situation. These schools were to be at a reasonable distance from the Training Colleges. The commission suggested that practice teaching should not be limited to demonstration lesson, observation lesson, criticism lesson or practice teaching but also construction and administration of achievement tests, practical classes on physical education, and training sessions on co-curricular activities also must be arranged.

The commission clearly emphasized the need of various components of practical session in addition to theory courses. The Commission also emphasized the need for specialized training programmes for children with special needs. Apart from that, general principles of mental hygiene were implemented as essential component of teacher education programmes to inculcate proper behavioural skills in teachers and students as well.

The commission stressed the need of variety of curricular activities and innovative methods of teaching in teacher training programmes. Training in extracurricular activities, training in controlling library, training in physical education, concepts related to health and care of children, school leadership character building, importance of scout and guides, junior red cross ,formation of students clubs, citizenship training, conducting debates, seminars, quizzes and social service were some of the programmes recommended by the commission as part of teacher training.

The commission also recommended conducting of in-service training for working teachers to update pedagogical and content knowledge. Commission suggested to distribute stipend to all teacher candidates and to set up residential training schools. In order to overcome the shortage of women teachers in the country part time training courses were to be arranged for women candidates. For admission to Master Degree in Education students should have at least three years of teaching experience.

The commission suggested two types of training institutions for teacher training:

(i) **Two year teacher training programme:** Conducted for candidates having School Leaving Certificate or Higher Secondary Leaving Certificate. The programme should be arranged under a separate apex body under the Government.

(ii) **One year teacher training programme:** For candidates who are graduates. It should be under any universities of the country. The degree or diploma certificate has to be awarded to the students after completion of the one year course by any University.

Many of the recommendation were accepted and implemented by the state but failed to implement some of the recommendation in satisfactory manner. The Government in

1954 appointed another team of international experts with collaboration with Ford Foundation to study education in detail and recommended the following measures to improve quality of graduate teacher education programmes:

- The teacher education should be designed in such a manner that it should prepare the students to take up assignment as teachers.
- Realistic methods of teaching should be implemented in teacher education institutes.
- Practice teaching should be arranged in Block wise manner and proper implementation strategy has to be adopted.
- Laboratory schools should be set up to experiment innovative method of teaching and curriculum construction.
- Extracurricular activities should be arranged and made an integral component of practice teaching.

In 1956, the Government appointed an expert committee with Dr. E.A Pires as Head to design a new syllabus for secondary teachers training. The committee, later known as Pires Committee, published the draft of recommendation, which were later accepted at the Conference of the Principals of training colleges in 1957, are given below:

- Weightage for both theory and practical courses should be made equal.
- The theory papers of teacher education to be reduced to the following four papers:
  (a) Principles of Education and School Organisation
  (b) Educational Psychology and Health Education
  (c) Methods of Teaching of two school subjects
  (d) Current Problems in Indian education

The Second Five-Year Plan was launched in 1955–56, and it was contemplated that 68 per cent of teachers would be trained by 1960. An amount of 17 crore rupees was apportioned for increasing training facilities. In 1957, the All India Council for Secondary Education and All India Council for Elementary education were formed, to recommend suggestions for improvement of teacher education at respective levels. Both councils provided necessary extension services to teacher education programmes in various areas.

During the 1960s, more efforts were put forward by different committees to review and recommend innovative strategies to improve the quality of teacher education in the country. The major was the Review Committee formed by the University Grants Commission in 1960, under the chairmanship of N.K. Sidhantaah. The All India Council for elementary Education also appointed a study group in 1961 under the chairmanship of Roy Singh. Both the review committees presented its views on structure and procedure of Teacher Education in the country and contributed valuable suggestions to improve the system. The study group's work concentrated on elementary teacher education while the Review Committee commented on the objectives, curriculum and transitional strategies of teacher education. The study group finding the quality of elementary teacher education poor recommended in-service training to the untrained teachers working in the country. It also recommended to provide extension services to untrained teachers on massive scale to improve quality of elementary teachers. The major recommendations of these committees are given below:

- The criterion for admission to M.Ed. degree programmes was fixed as second class master's degree plus first class in B.Ed. degree both in theory and practical paper. Those having at least second class in Bachelors/Masters were given direct

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admission to two year integrated M.Ed. degree course, to attract gifted candidates for teaching profession.

- Students had to complete one specialization with acquaintance in methodology of research.
- Individual dissertations was replaced with group projects at M.Ed. level.
- Those who aspired to conduct research studies in education were to be scrutinized by a screening committee appointed for the same.
- Encouragement to research scholars on studies which required immediate attention in educational field.
- Doctoral degree holders are only permitted to supervise research scholars.

Again in the same year (1961), a study group under the leadership of Sri. B.M. Jha was appointed by the Planning Commission to suggest measures on improvement of teacher education. The committee emphasized the need to replace old age traditional system of teacher education with modern, innovative styles of teacher education to create capable teachers useful in nation building. They were of the opinion that sound teachers, male or female can be moulded only through proper integration of theoretical knowledge with practical component of teacher education curriculum.

The major concern on the wide gap between theory and practical component was noted by the committee hence they suggested conducting about 30 lessons (15 each in two subjects) during the course of teaching practice. This system is followed still in some states of the country as a continuation observing lesson, criticism lesson, and demonstration lesson also has to be carried out before the teaching practice starts. In addition proper experimentation in various extracurricular activities was to be conducted to gain more insight in various components of teacher education. Commission appreciated the contributions of Kurukshetra University and four regional Colleges of Education in the field of teacher education, on experimentation of various components of teacher education. The Commission also recommended giving high priority to teacher education in the Twelfth Five-Year Plan.

Another landmark during the 1960s was the establishment of National Council of Educational Research and Training (NCERT), with headquarters at New Delhi and opening of Regional Colleges of Education at Bhopal, Bhubaneswar, Mysore and Ajmer by NCERT. NCERT was intended to provide training to school teachers, conduct research, publish necessary books and other related material and co-ordinate various activities of school and Regional Colleges of education. Later NCERT came up with designing text books for different classes. Meanwhile Regional Colleges offered different types of degrees in Teacher Education and in turn set standard for teacher education in the country. They offered innovative four year integrated B.A., B.Ed./B.Sc., B.Ed./B.Tech and other normal B.Ed. programmes.

Education Commission (1964–66)

In the history of education, another commission was appointed under the chairmanship of Dr. S. Kothari (hence popularly known as Kothari Commission) to review the education system in 1964. The commission submitted its report in 1966—a comprehensive report on different aspects of education. The Commission gave valuable suggestions on different sectors of education viz primary, secondary, higher secondary, vocational, technical and teacher education. The Commission devoted a separate sheet for the recommendations on teacher education at all levels of teacher education, from elementary teacher education

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to higher secondary. It expressed its deep concern for poor quality of teacher education and recommended a sound programme of professional education to teachers. Commission found that the quality of teacher education is very poor in some institutes and had nothing to do with the ground reality. It suggested the following strategies to improve teacher education in the country:

- Removing mismatch of teacher education programmes with school life realities.
- Bringing teacher education closer to university education. Teacher education programmes should be raised to the standard of collegiate education.
- Adopt methods to improve quality of both training procedure and training institutions.
- Internship programme to carry out practical knowledge in real classroom situations which would help build healthy relationship between working teachers, classroom climates, activities of schools, and so on.
- Expand the scope and access of training facilities.
- Implement in-service training programmes for professional growth.
- Creation of agencies both at national and state level to maintain the standard of education.

Isolation of teacher education was one of the great recommendations of Kothari Commission. It stated that education should be isolated from universities and treated as social science or a separate discipline. This subject can be introduced as an elective subject both at undergraduate or postgraduate degree level. The courses at undergraduate level would include papers like philosophy, psychology and sociological foundations of education, comparative education, contribution of great educationists and a paper on recent trends and practices of educational problems.

For postgraduate level M.A. in Education should be introduced of two year duration. Commission was of the opinion that training schools should assist the neighbourhood schools in day to day activities like planning timetable, help in using improved teaching methods, etc. This may be facilitated by opening an Extension Department at all training level institutions.

The commission also pointed out the following measures to improve professionalism and quality of teacher education:

- Linking theoretical knowledge/subject knowledge to practical activities of the school.
- In order to overcome the burden due to linkage of the fundamental subject knowledge with school curriculum, number of working days may be increased from 180–190 days to 230 days.
- Integrated courses may be developed and practiced in universities having strong education departments or schools of education.
- No separate institute should be opened to experiment integrated courses.
- Curriculum should be reframed so as to build professional qualities of students at maximum possible level. It should include the cultural aspects of the country too.
- Proper books must be written to cater to the needs of teacher student community for reference during teacher education period.
- Research on relevant educational programmes to be carried out at all levels of teacher education. Focus should be given to research on teaching of English and Indian languages.

To improve the quality of teaching methods and instruction, the Commission recommended the following:

- Traditional methods of teaching should be replaced with novel methods of teaching. Teaching methods can adopt strategies like self-reflection, self-study, independent thinking methods, audio-visual equipment, case studies, project works seminars, etc.
- Teacher education should be well integrated to develop qualities like concern for society, sensitivity towards human behaviours, positive attitude toward teaching profession, etc.
- Reform in evaluation system must be introduced. Internal assessment should be made an integral component of evaluation. Teachers should take care to maintain cumulative records in consultation with the students.
- Teaching practice should be conducted in two stages and are supposed to conduct continuous practice teaching of at least eight weeks in a school identified by them. They should participate in whole activities of the school; school assembly, physical education classes, club formation, art festivals, library work, workshops and other co-curricular activities.
- As part of professional development, special professional training programmes should be arranged for school headmasters and teacher educators.
- The duration of the programme may be extended to two years for students who have completed secondary school certificate and one year for graduate students.
- The postgraduate course in teacher education must be flexible to adapt changes in the society.
- Curriculum of teacher education should be flexible and should be modified to incorporate the latest happening in the field of education, to meet the realities of the practical activities of the classrooms. Political, social, economical and technological developments must be incorporated in revising the curriculum.
- In-service programmes may be arranged at all levels from primary to higher secondary to develop the professional qualities by various organizations, universities, teacher training colleges, etc. Teachers to attend at least two/three month's in-service programmes once in five year. For secondary teachers, school summer institutes should be developed and proper follow up strategies should be planned to monitor the in-service programmes.

As per the recommendations of Kothari Commission, Universities like Kanpur, Kurukshetra and Aligarh started new Master Degree courses in education. To provide in-service courses summer-school-cum-correspondence courses were initiated by regional colleges of education. Steps were taken by the regional colleges of education to provide training programmes to the untrained teachers of the country. During this period, different state governments took keen interest to open State Boards of Teacher Education to impart training to teachers at different level and to develop linkage between various teacher education colleges at university and college level.

The impact of recommendations of Kothari Commission was to raise the standard and quality of teacher education in the country. The number of Teacher Education institutions increased to 273 in 1956 in place of 50 in 1950. Similarly the number of elementary teacher education increased to 1548 in 1965–66 from 184 in 1950s.

The Fourth Five-Year plan emphasized the need to rethink and spend a good amount to improve the quality of teacher education by training women teachers, scheduled tribe teachers, mathematics and science teachers, etc. In between a review committee was appointed in 1968 to look into the functioning of NCERT under the chairmanship of Dr. B.D. Nagachudhari. The Committee suggested reinstating the integrated teacher education courses from Regional Colleges of Education to Universities.

Another landmark in the field of Teacher Education was the establishment of National Council for Teacher Education (NCTE), in 1973, an apex non-statutory body exclusively for teacher education. This body was entrusted to report to the Government in matters relating to teacher education in the country and to look after the implementation of strategies of teacher education designed in Five Year Plans. The NCTE was located at NCERT campus and it designed the first framework, Teacher Education Curriculum in 1978, which covered the whole aspect of teacher education and gave remarkable suggestions regarding pedagogy, content, procedure, methods, practice teaching, and curriculum. Due to non-statutory status, NCTE authorities failed to implement some of the suggestions.

National Commission on Teachers (1983)

National Commission on Teachers (1983) under the leadership of Prof. D.P. Chattopadhyay suggested the following measures to strengthen teacher education:

- The duration of teacher education should be extended to two years. The number of working days will be 220 days in each year.
- After secondary school, a four year/five year (preferred) teacher education certificate will be introduced.
- For XII qualified candidates, the course will be of two year duration in elementary teacher education programme and the possibility of four year integrated teacher education course for X class qualified may be explored.
- Selection test should be conducted to select students for teacher education programmes. The test will be combination of rating scale, objective questions, group discussion and personal interview. In addition, the physique, general awareness, attitude towards life of the candidate would also be considered during the selection process.
- Training is a joint responsibility of teacher education institutes and teaching practice schools will make sure to improve the quality of training.
- Duration of practice teaching will be four weeks in the third year and three weeks in the fourth year. Students were also expected to take part in all activities conducted by the schools.
- Curriculum of teacher education programmes for elementary and secondary teachers will consist of theory components like professional preparation, general education and practical component like practice teaching.
- To measure teacher student qualities like attitude towards work, affection for students, involvement in activities, etc. proper evaluation criteria should be developed by the teacher education institutions.
- Teacher educators who are expert in the use of educational technology may be identified and posted in each education colleges.

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- Opportunities may be provided for self-assessment, discussion of lessons, self-evaluation, etc.

National Policy on Education (1986)

The number of school expanded drastically in 1980s which increased the demand for teachers on a large scale. But the quality and efficiency of the teacher education became the serious concern of the country. It failed to implement some of the remarkable recommendation made by the pervious commissions set for rewinding the education system. The curricula were not revised, most of the institutions' infrastructural facilities were poor, and the quality of teachers was not up to the mark. In this regard the Government of India introduced a new policy, the National Policy on Education in 1986 to reframe the educational system.

The policy expressed its serious concern on the status of teachers, teacher education and teachers as 'the status of teacher reflects the socio-cultural ethos of the society: it is said no people can rise above the level of its teachers. The Government and the community should endeavour to create conditions which will help, motivate and inspire teachers on constructive and creative lines'. The policy recommended complete restructuring of teacher education in the country in terms of its pre, present and post training procedure. New programmes and continuing education was suggested to improve the quality of teachers. One of the remarkable contributions was to start District Institutes of Education (DIET) across the country to wipe out sub-standard teacher education. DIETs were created to provide quality teacher education training to elementary teachers. As part of professional development, it was also entrusted to organise in-service programmes for the teacher community and those who worked in non-formal and adult education sector. The policy also recommended the upgrading of Secondary Teacher Training Colleges to College of Teacher Education (CTE) which will help and assist the work of State Educational Research and Training (SCERT). The commission also recommended National Council for Teacher Education (NCTE) to provide all resources to relook into the teacher education programmes and to accredit teacher training institutions. NCTE was also to initiate networking arrangement between university teacher education departments and rest of the teacher training institutions.

As sequel to the National Policy on Education, Programme of Action was prepared to restructure teacher education programmes on comprehensive manner. The Programme of Action had the following components:

- Establishing DIETs
- 250 teacher training colleges to be updated to Colleges of Teacher Education (CTE). Among them 50 as Institutes of Advanced Studies (IASE)
- Adopt measures to strengthen the SCERTs
- Arrangement of orientation courses to school teachers
- Setting up of Departments of Teacher education in universities and strengthening them

Subsequent to NPE, a Centrally Sponsored Scheme of Teacher Education was established by the Government in 1987. The objective of the scheme was to provide necessary professional development programmes for school teacher in the country in areas like methods of teaching, pedagogical skills and competence development. Again under the Programme of Mass Orientation to School Teachers, in-service training programme was conducted for 17.2 lakh school teachers in 1986–87.

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To review the progress of National Policy on Education and POA, the Government constituted a committee under the chairmanship of Acharya Ramamurthy. The committee was of the opinion that the NPE and its sequel POA were strong enough to reframe the teacher education programmes and its recommendation should be implemented and translated into action. The Committee also expressed its concern for the non-implementation of many of the recommendations of the POA.

Programme of Action (1992)

The National Policy on Education (1992) gave importance to the functioning of Teacher Education institutions. Based on the suggestions of NPE and POA a lot of money is being spent on infrastructure and organization of various in-service programmes. By the year 1998–99 there were 45 DIETs, 76 CTEs and 341 ASEs but has had not much impact on the quality of teacher education. Out of 2,426 applications from the training institutions, only 408 were granted recognition by NCTE and 1294 were accorded provisional recognition during the year 1998–99. Out of 1,349 applications for opening institutions, only 277 were allowed and duly recognized. During this period provisional recognition was accorded to 1,035 institutions.

The major suggestions of Programme of Action were as follows:

- Stressed the need for integration of theory and practice of teacher education programmes
- By the end of Eighth Five Year Plan all the districts will be covered by DIETs and 250 IASE/CTEs will be set up in the country.
- Suggested to confer autonomous status to SCERT, NCTE and to set up State Boards of Teacher Education.
- Launch of Special Orientation Programme for school teachers for professional development, as a continuation to Centrally Sponsored Scheme.
- Recommended to strengthen Department of Teacher Education in universities and to provide incentive for good performance to teachers and disincentives for non-performers. The NCERT was entrusted to frame such norms for school teachers.
- Entrusted NIEPA and NCERT to develop induction and continuing programmes for DIET, SCERT and CTE faculties.

As per recommendations of NPE and POA 1992, a wide number of teacher education institutions have opened which include 461 DIETS, 85 CTES and 371 IASE. Fund was allotted in the Tenth Five-Year Plan to arrange in-service programmes for 425 DITEs, teacher training colleges increased from 804 to 1334 in the year 2000. In Tenth Five-Year Plan in-service programmes was conducted to train 16.21 lakh teachers in the country. The in-service programmes were arranged under the scheme of 'Special Orientation Programme' for Primary Teachers (SOPT). In the year 1993, statutory status was given to NCTE, as sequel of POA, 1192. Later, NCTE framed rules and regulation for maintaining the standard of teacher education including distance education teacher education programmes. NCTE developed 'Curriculum Framework of Quality Teacher Education' in 1998 and then in 2009.

The first decade of the 21st century had the privilege of the liberalization policy introduced in early nineties. This opened up the education sector to the private players and there was Public Private Partnership (PPP) Encouragement is given to foreign

universities to open their branches in this country. National Knowledge Commission has been set up which recommends to achieve Gross Enrolment Ratio of 15 per cent by 2015 in higher education. After Sarva Siksha Abhiyan, efforts are being made to universalize secondary education through Rashtriya Madhyamik Shiksha Abhiya (RMSA). The Eleventh Five-Year Plan is, therefore, called education plan as it gives more emphasis to education, especially higher education.

Check Your Progress

4. What are the two main features of teacher education in the Upanishad period?
5. Mention any three suggestions of Sergent Report, 1944, with reference to teacher education.
6. State any two suggestions of POA of 1992.
7. What is the role of NCTE?
8. Why is the Eleventh Five-Year Plan addressed as the 'education plan'?

1.4 STRUCTURE OF TEACHER EDUCATION

Teacher education is an important component of the Indian education system. It has various stages that help to prepare teachers for teaching in schools. National Council for Teacher Education (NCTE) is the national regulatory body of teacher education in India. NCTE looks after all the teacher education institutes of the country. Without its affiliation no institute can run a teacher education programme. Formal teacher preparation programme starts in India after completion of 10+2 degree i.e., 10 years of schooling (Class 1 to X) and two years of Higher Secondary Education. One can take admission in a teacher education programme such as: Diploma in Elementary Education (DELED) or Diploma in Education (DED), which is a two-year programme designed to educate the teacher in content and pedagogy.

Teachers who complete two years of DELED or DED after Higher Secondary become eligible to teach elementary classes in school education i.e., from Class-I to Class-VIII. Teachers who aspire to teach secondary school students i.e. from Class-IX to Class-XII needs a Bachelor Degree in Education (B.Ed.) which one can do after completion of three years of graduation (B.A./B.Sc./B.Com.) from a recognized University. Again those teachers who wants to become educational administrators in schools such as principal or to teach the teacher trainees in teacher education institutes needs a Master Degree in Education (M.Ed.) which one can do after successful completion of Bachelor of Education (B.Ed.) programme.

Many higher degrees in education are available in India such as M.Phil. in Education, Ph.D. in Education, but these higher programmes are not under NCTE jurisdiction, rather the affiliating University to that college permits to run such programmes. Teacher education programme such as DELED/D.Ed., B.Ed., M,Ed. In India runs in two modes like; face-to-face and distance education. Conventional universities launch face-to-face teacher education programme where as distance education institutes such as the Open Universities like Indira Gandhi National Open University (IGNOU) and various State Open Universities launch teacher education in distance mode. It may be face-to-face or distance, for running teacher education programme, it is compulsory to

take permission for operating the programme from NCTE. Besides the formal teacher education programme, some informal teacher education programmes are available in India which educates the teachers to teach the Nursery students like—Lower Kindergarten (LKG) and Higher Kindergarten (HKG).

Let us read the Figure. 1.2 which presents the structure of teacher education in India.

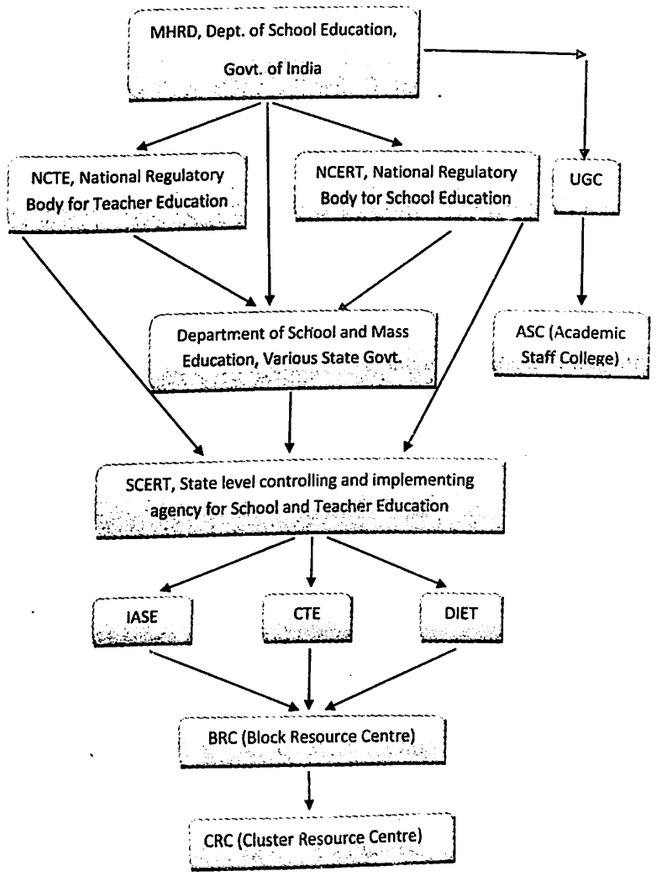


Fig. 1.2 Structure of Teacher Education in India

Figure 1.2 discusses structure of teacher education in India. When we analyse the figure, we observe that teacher education is the responsibility of the Central Government of India to regulate the norm and standard for institute affiliation, teacher eligibility, infrastructure requirement and to develop the curriculum for various teacher education programmes. The hierarchy says that for developing the norm and standard for Teacher Education and School Education, both NCTE and NCERT work as coordinating agency under MHRD, Government of India. The State level implementing agency is the Department of School and Mass Education of Various State Governments. Department of School and Mass Education of various State Government carry on the work and decisions of MHRD, NCTE, and NCERT through the agency of State Council of Educational Research and Training (SCERT).

SCERT can also directly implement the projects of teacher and school education intimated from NCERT and NCTE. It is worthwhile to note that SCERT also implements

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various other projects in schools and teacher education initiated by the State Government. Teacher education institutes affiliated to SCERT are Institute of Advance Studies in Education (IASE), College of Teacher Education (CTE), and District Institute of Educational Training (DIET). The said institutes run various teacher education programmes according to their functionary jurisdiction and scope.

Again for implementing teacher education programme in ground level both Block Resource Centre (BRC) and Cluster Resource Centre (CRC) are responsible. University Grants Commission (UGC) which comes under MHRD, Government of India is a regulatory body for Higher Education in India. It also works for teacher education within its capacity through Academic Staff Colleges (ASC). It conducts different refresher courses in education and general orientation programme for teacher educators who are appointed in IASE, CTE, and the University Department of Education. Most of the Indian Universities have Academic Staff College in their campus.

Pre-service teacher education stands for the programme which is designed to prepare teachers before going in for service. Different programs are designed for different levels of school education i.e., pre-primary, elementary and secondary education. The teacher education programmes for these levels of school education are known as:

- Pre-Primary Teacher Education
- Elementary Teacher Education
- Secondary Teacher Education

(a) Pre-primary teacher education

Pre-Primary teacher education refers to teacher education programme which is designed to prepare teachers for the primary classes, Nursery, Kinder Garden etc. The duration of this course is one year. In India, the Central Government as well as the state governments are yet to accept the responsibilities of preparing teachers for these classes. As such most of the nursery teacher training institutions are run by non-governmental bodies. However, now the Centre is preparing teachers for nursery classes.

The minimum qualification for these courses is 10+2. One of the department of NCERT guides nursery teacher training institutions in the development of appropriate syllabi for different classes and transactional approaches which the teachers should adopt in dealing with kids. This programme develops certain specific abilities, skills, and attitudes among prospective teachers to deal with children of early childhood stage.

(b) Elementary teacher education

Elementary teacher education including primary teacher education is designed to prepare teachers from class I–VII. In some states, however, these teachers are required to teach primary classes only i.e., class I–V. The duration of the courses is of two years. In some state like Andhra Pradesh and Manipur, the duration of programme is one year. Elementary teacher training institutes are located in different states offer the course. District Institute of Teacher Training (DIETs) have been set up by MHRD are offering elementary teacher training courses. Besides these DIETs, private DIETs are also offering courses under the direct control of the concerned SCERT in their respective states. Recently Delhi University has taken initiative to start an innovative programme in the field of elementary teacher education. This Bachelor in Elementary Education (B.El.Ed programme) is also preparing teachers of elementary level. This integrated programme is of four-year duration which prepares teacher with a university degree. Many private

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universities like Amity University (Noida), is also preparing teachers. More recently the affiliated colleges of Delhi University will also start B.El.Ed programme in the colleges from the year 2013 onward.

(c) Secondary teacher education

Secondary teacher education programme is organized by Teacher Education Colleges affiliated to different universities and recognized by NCTE. The duration of this course is one year. However if the course is of innovative nature, the duration is of 1 and half years to two years. In some state universities, departments of teacher education also offer B.Ed. Programmes. Some B.Ed. programs are also known as B.Ed in special education. These programmes are recognized by Rehabilitation Council of India (RCI). The passes out students are eligible to select as special educators. Jamia Millia Islamia is also offering course in B.Ed. in Special Education. The minimum qualification to for B.Ed programme is 50 per cent marks in their graduation. Some universities conduct written tests followed by interviews. However, some universities prepare only merits.

Integrated teacher education

Integrated teacher education programmes have been established to have assorted setting. The integrated teacher education programmes are run by the regional institutes of education for a number of years. These have self-recognition and officially approved. There is a need to conduct research on these integrated programmes offered by the various institutions. There is also a need to mentor and monitor the innovative teacher education programme in all the regions.

Pre-service programmes at secondary stage

1. Existing B.Ed. programmes should be reviewed to facilitate the choice between a four-year integrated model after +2 or a two-year model after graduation, based on state requirements and available institutional capacity.
2. As an interim measure, current models of teacher education such as the B.Ed. are required to redesign their courses as well as the program structure to include the specific features and structural mechanisms proposed in the new framework in terms of curricular areas and transaction processes.
3. A review of the existing B.Ed. programs is to be done and the process of redesign of the curriculum in the light of the proposed process model be completed in the next 1–2 years.

1.5 MODELS OF TEACHER EDUCATION

There are three models of teacher education — (i) Crafts model (ii) Applied science model (iii) Reflective model.

(i) Craft model is the first professional education method. In this form the trainee teacher works with the classroom or expert teacher, who demonstrates each action, and learn by imitating the techniques adopted by the trainer. It is a form of gurukul education or apprenticeship method. In this format it is important that the trainee is observant, follows instructions and practices. The model emphasises on the practicle aspect of teaching. It includes knowledge of the context, and learners and material, but then this knowledge is absolutely context-bound as what the

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novice learns is effective only in the context of observation. Also, this model is closely related to the art-and-craft concept of demonstration. A big drawback of this model is that a teacher may transfer an obsolete method of teach to the student.

(ii) The applied science model is a traditional format, which is still the most prevatent one. The basis of this model is thesis of knowledge transfer from a language-educator to the trainee. The type of knowledge to be imparted is identified from extensive research. These findings are used to develop theories of learning, general pedagogical knowledge, which are then applied to practice of a particular field, pedagogical content knowledge. This model is considered a training for the trainees, which means the student teachers are provided with technical know-how and exercises. Once again, it is a top-down model that tends to overgeneralise teaching principles and the foundational research behind them.

(iii) The reflective model has become a dominant paradigm in language teacher education research and programmes worldwide. This model is based on the concept that the trainer teacher gains professional competence by reflecting on their own experiences and practices. This is to say that they recall their teaching experience which is evaluated and applied for future planning and action.

ACTIVITY

1. Research on the Internet and make a note of some other teaching models that have not been discussed in this unit.
2. Elaborate on a day-to-day example illustrating the use of Enquiry Training Model in teaching.

DID YOU KNOW

A computer-based teaching model was developed by Lawrence M. Stolurow and Danial Davis in 1965.

1.6 SUMMARY

In this unit, you have learnt that:

- Teaching is a complex process and therefore teachers should be trained from time to time.
- Teacher education refers to the policies and procedures designed to equip prospective teachers with the knowledge, attitudes, behaviour and skills they require to perform their tasks effectively in the classroom, and wider community.
- Teacher Education helps teachers to increase their competence and proficiency to meet the professional challenges and professional requirements.
- Teacher education programme is continuous in nature which means that it starts with orientation followed by practice session, and finally upgarding of the skills developed as part of the training programme.

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- Teacher education moulds prospective talented teachers through scientific mode of professional training programmes.
- Pre-primary teacher education focuses on pedagogical aspects and on how to deal with the psychological development of elementary students.
- Teacher training builds confidence in the potential teachers. A trained teacher can essentially face the class with confidence.
- Teachers should develop the ability in designing instructional plans to meet the students' needs, curricular goals and models, subject matter, and community. Sound pedagogical knowledge should be developed to promote students learning, which help students in critical thinking, problem solving skills and reflection.
- In the context of teacher preparation, training corresponds to learning real-life classroom skills while education refers to more abstract knowledge about modes of learning and instruction.
- In Vedic period, religion played a prominent role in education. The aim of education in Vedic period was to attain salvation (Moksha).
- In Upanishad period after the spread of Vedic culture, the sacrificial rituals dominated and the Brahmin priests had the highest position in society.
- During Buddhist period no educational institutions were present, instead religious centres like monasteries and *viharas* were the places where education was imparted.
- The Muslim rulers started education by opening educational centres called '*Maktabas*' (schools) and '*Madrasahs*' (colleges).
- Wood's Despatch is a major landmark in the history of education in the country, and hence also called 'Magna Carta of English education in India'. The recommendation of Wood's Despatch was followed and strengthened by another Despatch known as Lord Stanley's Despatch of 1859.
- The recommendations of Hunter Commission expanded the scope of teacher training institutions in modern India and as a result teacher training colleges were set up at Allahabad, Lahore, Madars, Kurseong and Rajamundry.
- The recommendations of Lord Curzon showed the way to open more schools and teacher training institutions and practicing school were attached to these training centres.
- The impact of Hartog Committee helped 13 out of 18 existing universities to open teacher education departments by 1932, and in the history a new degree named B.Ed. was started by Andhra University and M.Ed. degree was started by Bombay University in 1936.
- Gandhi's Wardha Scheme was child centred education and it provided opportunity to students to earn while learning.
- Soon after Independence in 1948, University Education Commission was set up under the chairmanship of Dr. S. Radhakrishnan to study education system of the country and the commission submitted its report in 1949.
- The Second Five-Year Plan was launched in 1955–56 and it was contemplated that 68 per cent of teachers would be trained by 1960.
- The teacher education programmes for these levels of school education are known as: (i) Pre-Primary Teacher Education, (ii) Elementary Teacher Education, and (iii) Secondary Teacher Education.

- As per recommendations of NPE and POA 1992, a wide number of teacher education institutions have opened which include 461 DIETS, 85 CTES, and 371 IASE.
- The Inquiry Training Model was built by J. Richard Such man for developing scientific inquiry training skills in the students.

1.7 KEY TERMS

- **Curriculum:** The courses offered by educational institutions
- **Entering behaviour:** Implies the initial behaviour of the student before the beginning of instruction
- **Model of teaching:** A blueprint designed in advance for providing necessary structure and direction to the teacher for realizing the stipulated objectives
- **Pre-service course:** Course before becoming a fully responsible teacher
- **Syntax:** Includes the sequence of steps involved in the organization of the complete programme of teaching

1.8 ANSWERS TO 'CHECK YOUR PROGRESS'

1. Teacher education refers to the policies and procedures designed to equip prospective teachers with the knowledge, attitudes, behaviour and skills they require to perform their tasks effectively in the classroom, and wider community.
2. Teacher training concentrates on imparting skills in oral instruction, which help teachers to carry out an effective teaching-learning atmosphere inside the classrooms. Teacher education is a much more complex and comprehensive term which includes providing training and knowledge in various aspects.
3. There are various obstacles in the field of teacher education. Two of them are:
   - Inadequate access to education. Some countries also face economic, cultural, and political obstacles specifically to women's access to education.
   - Disproportionate student/teacher ratio in primary and secondary education in comparison to developed countries. The effect of this disparity can be seen in the rural areas the most.
4. In the Upanishad period, the sacrificial rituals dominated and the Brahmin priests had the highest position in society. Different ritual duties came into existence along with theoretical knowledge. Gurus played a major role. The teacher during this period enjoyed a special status and was given a lot of importance. During this period the relationship between the teacher and disciple became very intimate.
5. The three suggestions of Sergent Report, 1944, were as follows:
   - Besides training in professional skills, teacher trainees would receive training in extra-curricular activities too.
   - Teacher training colleges should organize refresher courses, practical classes, training workshops and other professional conferences in addition to regular activities of the college
   - Experimental and practicing schools should be set up to conduct research on various topics related to pedagogy.
6. Two suggestions of Programme of Action were: (i) stressed the need for integration of theory and practice of teacher education programmes, and (ii) by the end of Eighth Five-Year Plan all the districts will be covered by DIETs and 250 IASE/ CTEs will be set up in the country.
7. National Council for Teacher Education (NCTE) helps to achieve a planned and coordinated development of teacher education and helps to regulate and maintain norms and standards in teacher education system.
8. The Eleventh Five-Year Plan is called the "education plan" as it gives more emphasis to education, especially higher education.

1.9 QUESTIONS AND EXERCISES

Short-Answer Questions

1. Write a short note on National Policy on Education.
2. What are the objectives of teacher education?
3. What is the difference between 'teacher training' and 'teacher education'?
4. Classify Modern Teaching Models.
5. State the fundamental elements of a Teaching Model.
6. Why do we need a teaching model?

Long-Answer Questions

1. Discuss the concept of teacher education.
2. Give a detailed account on the recommendations of various committees and commissions of the teacher education in post-Independence era.
3. Give a critical evaluation on the teacher education in India.
4. Explain the structure of teacher education at various levels.
5. Explain the term 'model of teaching'. State its chief character-istics and significance in the task of teaching.

1.10 FURTHER READING

A. Biswas and S. Agarwal. (1971). *India Educational Documents Since Independence*. New Delhi: The Academic Publishers.

Day, Christopher. (1999). *Developing Teacher: The Challenges of Lifelong Learning*. London: Falmer Press.

Government of India. (1949). *Report of the University Commission (1948–49)*. New Delhi: Government of India.

Government of India. (1966). *Education and National Development: Report of the Indian Education Commission (1964–66)* .New Delhi: Government of India.

Hewson, W.R. (1990). *Handbook of Research on Teacher Education*. New York.

Kundu, C.L. (1988). *Indian Yearbook on Teacher Education*. New Delhi: Sterling Publishers.

NOTES

MHRD. (1986). *National Policy on Education*. New Delhi: Government of India.

Ministry of Education. (1966). *Education and National Development: Report of the Indian Education Commission (1964–66)*. New Delhi: Government of India.

National Council for Teacher Education. (1998). *Curriculum Framework for Quality Teacher Education*. New Delhi: NCTE.

Rao, D.B. (1998). *Teacher Education in India*. New Delhi: Discovery Publishing House.

Srivastava, R.C. and K. Bose. (1978). *Theory and Practice of Teacher Education in India*. Allahabad: Chugh Publication.

UNIT 2 PRE-SERVICE AND IN-SERVICE TEACHER EDUCATION PROGRAMMES

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2.0 INTRODUCTION

Teacher education is a collection of rules and measures that intend to prepare potential teachers with the know-how, outlook, behaviors and ability required to carry out their responsibilities in an effective manner in the classroom, school and broader areas of activity.

India has a large number of teachers and needs many more. All processes of teacher recruitment, training, motivation, incentives, retention and feedback therefore have to be planned on a large scale. Further the ultimate goal of in-service teacher development should be to ensure that optimal learning takes place in the classrooms.

- To enhance the institutional capacity available at present for ensuring the adequate supply of trained teachers for all levels of school education.
- To utilize all possible kinds of institutions, including university departments of education and teacher training institutions in the private sector, for in-service training of the existing cadre at all levels, in addition to State institutions, including CTEs;
- To recognize teacher education (for all levels of school education, from pre-school to senior secondary) as a sector of higher education and to facilitate co-operation and collaboration between institutes of teacher training and colleges of general education or universities with a view to enabling interaction between different departments of a local college (or university) (e.g. sciences, languages, social sciences) and the institute of teacher training.
- To envision a comprehensive model of teacher education, utilizing the Chattopadhayay Commission Report and updating its perspective, and ensuring that progress towards a new, comprehensive model is paralleled by necessary modifications in policies of teacher recruitment, deployment and service conditions, including emoluments;
- To prepare a curriculum policy and framework for teacher education which is consistent with the vision of the NCF, 2005,and to translate it into imaginative syllabi and textbooks for pre-service courses and sets of in-service training material suited to diverse conditions and needs; and
- To bring about synergy between institutional structures operating at different levels, e.g. NCERT and NCTE at national level, SCERTs and boards of education at State level, DIETs and undergraduate colleges at the district level and so on.

Pre-service teacher education is the process of educating and training students who are aspiring to be teachers before they actually get into the profession of teaching. The main focus in these types of education systems is the practical situation in which the pre-service teacher is positioned within a school set-up (either basic, or senior) and is tagged along with an experienced teacher. The pre-service teachers will be given opportunities where they can develop skills with the help of lesson plans, instructive lessons and classroom administration. Ever pre-service programme does not have the same pattern and certification of one may not be valid in another country.

The term 'in-service teacher education programme' implies any programme that is for teachers who are already employed in schools. This programme is precisely aimed at updating and refreshing their knowledge and technical skills, for training and building on their efficiency. In-service teacher education can be considered as an extension of pre-service teacher education. Actually speaking, it is only possible to comprehend the significance of in-service education when it is regarded relatively. Since teachers are creative individuals, they need to revisit their attributes and upgrade their technical skills periodically. Such additional refresher training even helps school teachers who have been outstanding B.Ed. students.

This unit will give you an indepth view of pre-service and in-service programmes, the new trends emerging in teacher education and their short comings. You will also learn about distance education and strategies for professional development.

2.1 UNIT OBJECTIVES

After going through the unit, you will be able to:

- Interpret the types and features of teacher education programmes in India
- Paraphrase the process and policies of curriculum development for teacher education programmes
- Explain the role of NCTE, NPE 1986, POA 1992, NCF 2005 and NCFTE 2009 for the development and innovations in the teacher education programmes
- Discuss the need and importance in teacher education programmes
- List the shortcomings in the structure, curriculum and evaluation system of teacher education programmes
- Report innovative means and measures of modernizing the teacher education programmes in India

2.2 CONCEPT AND IMPORTANCE OF PRE-SERVICE AND IN-SERVICE EDUCATION AT ELEMENTARY AND SECONDARY LEVELS

Teacher education is the key to educational development in any country. The history of teacher education in India is as old as its education system. But at that time it was quite informal and inconsistent every where. The formal system of teacher education in India started in 17th century. The East India Company and British governments took care to modernize and expend the system of teacher education at lot. After independence also the efforts to upgrade and modernize teacher education continued. NCTE started functioning in 1973, though it got statutory status in August, 1995.

There are two types of teacher education programmes in India, but nomenclature of diploma and degrees vary a lot. NCTE has been quite active in determining their objectives, content, methodology, technology and evaluation scheme to sustain the relevance and importance of teacher education programmes since its inception. Even then, there are several shortcomings in these programmes for which several suggestions are given in this unit.

It is well recognized that the quality and amount of learner achievement are determined first and foremost by teacher's competency, sensitivity and teacher's motivation. The National Council for Teacher Education has defined teacher education as – a programme of education, research and training of persons to teach from pre-primary to higher education level. Teacher education is a programme that is related to the development of teacher proficiency and competence that would enable and empower the teacher to meet the requirements of the profession and face the challenges therein.

According to *Goods Dictionary of Education Teacher* education means all the formal and informal activities and experiences that help to qualify a person to assume responsibilities of a member of the educational profession or to discharge his responsibilities more effectively. In 1906-1956, the programme of teacher education was called teacher training. It prepared teachers as mechanics or technicians. It had narrower goals with its focus being only on skill training. The viewpoint of teacher education was, therefore, very narrow and its scope was limited. As W.H. Kilpatric put it, Training is given to animals and circus performers, while education is to human beings. Teacher education encompasses teaching skills, sound pedagogical theory and professional skills. Teacher Education = Teaching Skills + Pedagogical theory + Professional skills.

Teaching skills would include providing training and practice in the different techniques, approaches and strategies that would help the teachers to plan and impart instruction, provide appropriate reinforcement and conduct effective assessment. It includes effective classroom management skills, preparation and use of instructional materials and communication skills. **Pedagogical theory** includes the philosophical, sociological and psychological considerations that would enable the teachers to have a sound basis for practicing the teaching skills in the classroom. The theory is stage specific and is based on the needs and requirements that are characteristic of that stage. **Professional skills** include the techniques, strategies and approaches that would help teachers to grow in the profession and also work towards the growth of the profession. It includes soft skills, counseling skills, interpersonal skills, computer skills, information retrieving and management skills and above all lifelong learning skills. An amalgamation of teaching skills, pedagogical theory and professional skills would serve to create the right knowledge, attitude and skills in teachers, thus promoting holistic development.

Teacher education at different levels

Teacher education refers to the teachers engaged at all levels of education, namely Pre-primary, Primary, Elementary, Secondary, Higher Secondary and the Tertiary. The needs and necessities of students and education vary at each level. Therefore, level and stage-specific teacher training is necessary. Teacher education also helps in the expansion of teaching skills in teachers of professional institutions. The teachers in professional institutions have only the imaginary and practical knowledge of their particular subjects but they require specialized teacher training inputs to deal with students entering their professions. Teacher education also reaches special education and physical education. Consequently where there are teachers, there would be teacher education. The knowledge foundation is adequately specialized and diversified across stages, in order to develop successful processes of preparing new teachers for the functions which a teacher is expected to perform at each stage.

Pre-service teacher education

Pre-service teacher education stands for the programme which is designed to prepare teachers before going in for service. Different programmes are designed for different levels of school education i. e. pre-primary, elementary and secondary education. The teacher education programmes for these levels of school education are known as

1. Pre-Primary Teacher Education
2. Elementary Teacher Education
3. Secondary Teacher Education

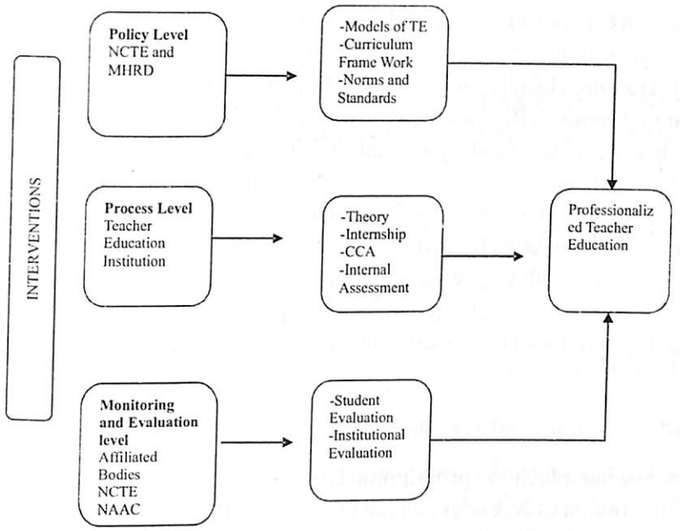


Fig. 2.1 Professional Pre-Service Teacher Education

1. Pre-primary teacher education

Pre-Primary teacher education refers to teacher education programme which is designed to prepare teachers for the primary classes, Nursery, Kinder Garden etc. The duration of this course is one year. In India, center as well as state governments is yet to accept the responsibilities of preparing teachers for these classes. As such most of the nursery teacher training institutions are run by non governmental bodies. However, in Delhi state as well as center is preparing teachers for nursery classes.



Fig. 2.2 Activity of Pre-Primary Teacher Education

The minimum qualification for these courses is 10+2. One of the department of NCERT guides nursery teacher training institutions in the development of appropriate syllabi for different classes and transactional approaches which the teachers should adopt in dealing with kids. This programme develops certain specific abilities, skills, and attitudes among prospective teachers to deal with children of early childhood stage.

2. Elementary teacher education

Elementary teacher education, including primary teacher education, is designed to prepare teachers from classes I-VII. In some states, however, these teachers are required to teach primary classes only i.e. I-V. The duration of the courses is of two years. In some

state like Andhra Pradesh and Manipur the duration of programme is one year. Elementary teacher training institutes are located in different states offer the course. District Institute of Teacher Training (DIETs) have been set up by MHRD are offering elementary teacher training courses. Besides these DIETs, private DIETs are also offering courses under the direct control of the concerned SCERT in their respective states. Recently Delhi University has taken initiative to start an innovative programme in the field of elementary teacher education. This Bachelor in Elementary Education (B. El. Ed.) programme is also preparing teachers of elementary level. This integrated programme is of four year duration which prepares teacher with a university degree. Many private universities like Amity University, Noida is also preparing teachers. More recently the affiliated colleges of Delhi University will also start B. El. Ed programme in the colleges from the year 2013 onward.

3. Secondary teacher education

Secondary teacher education programme is organized by Teacher Education Colleges affiliated to different universities and recognized by NCTE. The duration of this course is one year. However if the course is of innovative nature, the duration is of 1 and half years to two years. In some state universities departments of teacher education also offer B.Ed. Programmes. Some B.Ed. programmes are also known as B.Ed in special education. These programmes are recognized by Rehabilitation Council of India (RCI). The passes out students are eligible to select as special educators. Jamia Millia Islamia is also offering course in B.Ed. in Special Education. The minimum qualification to for B. Ed programme is 50% marks in their graduation. Some universities conduct written tests followed by interviews. However, some universities prepare only merits.

Concept of in-service teacher education

In-service education may be defined as continuing education of teachers and other educators which commences after initial professional education is over and which leads to the improvement of professional competence of educators all throughout their careers. Hence, there is a need of some sort of provision which may make the teacher up-to-date with respect to the knowledge of his subject of teaching, methods and techniques, innovative ideas in each sphere of his academic life. For the sake of this reason, the idea of in-service education has been emerged.

Definition of in-service training

1. M.B. Buch, 'In-service education is thus a programme of activities aiming at the continuing growth of teachers and educational personnel in-service'. It is the sponsoring and pursuing of activities which bring new insight, growth, understanding and co-operative practices to the members of teaching profession and arouses them to action to improve them in every possible manner. It includes all activities and experiences participated in by the educational personnel in education during their services. These activities are planned and organized by various agencies to help the educators to improve as persons and to mature as professionals.
2. Henderson (1978) defines the INSET, 'For the good teacher, every fact of his knowledge, skills, personality and interests are of potential professional value. Hence, every experience he undergoes during his career, however, irrelevant it may appear, may be described as in-service training, may therefore, in the most general sense, be taken to include everything that happens to a teacher from the day he retires which contributes directly or indirectly to the way in which he executes his professional duties,'

It is clear from the above mentioned definitions that the INSET is primarily meant for regular serving teachers. It includes such new courses whose fruitfulness and validity have been tested. It subjects the serving teachers to such activities which may enhance their professional knowledge, interest and attitude – so that they are able to maximize their pupil's learning and, in turn, derive maximum inner satisfaction and sense of achievement.

2.2.1 Objectives of Teacher Education

Teacher education has to become much responsive to the rising demands from the school system. For this, it has to prepare teachers for:

- Encouraging, supportive and humane facilitator in teaching learning situations who enables learners (students) to discover their talents, to realize their physical and intellectual potentialities to the fullest, to develop character and desirable social and human values to function as accountable citizens.
- A dynamic member of the group who makes conscious effort to contribute the process of renewal of school curriculum to maintain its relevance to the changing societal needs and personal needs of learners, keeping in view the experiences gained in the past and the concerns and imperatives that have emerged in the light of changing national development goals and educational priorities.
- These expectations advocate that teacher operates in a larger perspective and its dynamics as well as concerns impose upon his/her functioning. That is to say, teacher has to be reactive and responsive to the social contexts of education, the various disparities in the background of learners as well as in the macro national and global contexts, national concerns for achieving the goals of equity, parity, and social justice as also excellence. To be able to realize such expectations, Teacher education has to comprise such features as would enable the student teachers to:
  - o Care for children, and who love to be with them
  - o Understand children in social, cultural and political contexts
  - o Consider learning as a search for meaning out of individual experience
  - o Understand the way learning takes place, feasible ways of creating conducive conditions for learning, differences among students in respect of the kind, pace and styles of learning
  - o View knowledge generation as a continuously evolving process of reflective learning
  - o Be receptive and constantly learning
  - o View knowledge not as an external reality embedded in textbooks, but as constructed in the shared context of teaching-learning and personal experience.
  - o Appreciate the potential of productive work and hands-on experience as a pedagogic medium both inside and outside the classroom
  - o Analyze the curricular framework, policy implications and texts
  - o Have a sound knowledge base and basic proficiency in language

The objectives of teacher education would therefore be to,

- Make available opportunities to observe and engage with children, communicate with and relate to children

- Provide opportunities for self-learning, reflection, assimilation and articulation of new ideas; developing capacities for self directed learning and the ability to think, be self-critical and to work in groups
- Provide opportunities for understanding self and others (including one's beliefs, assumptions and emotions); developing the ability for self analysis, self-evaluation, adaptability, flexibility, creativity and innovation
- Provide opportunities to enhance understanding, knowledge and examine disciplinary knowledge and social realities, relate subject matter with the social milieu and develop critical thinking
- Provide opportunities to develop professional skills in pedagogy, observation, documentation, analysis, drama, craft, story-telling and reflective inquiry

2.3 CURRICULUM AND EVALUATION OF PRE-SERVICE TEACHER EDUCATION

The pre-service teacher education system Indian is chiefly divided into two categories viz Elementary Level Teacher Education programmes and Secondary Level Teacher Education programmes. The programmes in the first category are basically diploma programmes and are named after their area of specialization. These are Nursery Teacher's Training (NTT), Early Childhood Care and Education (ECCE), Diploma in Elementary Teacher Training (DETT) and Bachelor of Elementary Education (B El Ed). Out of these NTT, ECCE, DETT and are two year programmes whereas B El Ed is a four year degree Programme. Nursery Teacher's Training (NTT) and Early Childhood Care and Education (ECCE) are specialized courses for teaching at pre-primary level. Diploma in Elementary Teacher Training (DETT) and Bachelor of Elementary Education (B El Ed) programmes are though different in duration and status (DETT is a Diploma programme but B El Ed is a degree program) but both of these are meant for teaching till elementary standard.

2.3.1 Meaning and Definition of Curriculum

Curriculum is the sum total of all the activities in an academic Programme. In other words curriculum is the totality of learning experiences provided to students so that they can attain knowledge, experience and skills through a variety of learning activities in the classroom and school. The curriculum involves planned interaction of pupils with instructional content, materials, resources and processes for evaluating the attainment of educational objectives. In this sense, it may be said that while education is a process; curriculum is the means to this process. Curriculum means two things; first, the range of courses from which students choose what subject matters to study and second, a specific learning Programme. While education deals with how and when; curriculum deals with what. Defining the term curriculum John Kerr says that it is the sum of the learning which is planned and guided by the school, whether it is carried on in groups or individually, inside or outside the school. Another definition by Kerney and Cook says that 'It is a complex of more or less planned or controlled conditions under which students learn to behave and to behave in their various ways. In it, new behavior may be acquired, present behavior may be modified, maintained or eliminated; and desirable behavior may become both persistent and viable.'

2.3.2 Curriculum Planning and Curriculum Development

The process of curriculum planning and curriculum development has gone tremendous changes due to philosophical, technological and pedagogical changes in the school plant. There are various bodies at different levels to plan and develop curriculum for different types of curriculum. The responsibility of preparing curriculum for teacher education programmes lies with the National Council for Teacher Education (NCTE). The NCTE came into the arena of curriculum framing for teacher education in the year 1978. A committee of experts prepared several guidelines for curriculum framework. These steps were later approved by the University Grants Commission's panel on teacher education. The modalities of curriculum framing as per this exercise are as follows:

- Relevance of the curriculum to the personal and social needs of children and society,
- Flexibility within the framework of acceptable national goals and values,
- Flexibility for mobility,
- Flexibility for relevance,
- Flexibility for continuing education,
- Task oriented teacher education,
- Practice teaching internship,
- Interdisciplinary and integrated approaches in teacher education
- Education as a discipline,
- The semester system, Evaluation and
- Experiments, Innovations and Research for Development.

Highlighting the need of a well planned and quality centered curriculum of teacher education; the Kothari Commission (1964-66) mentioned that 'essence of a programme of teacher education is quality and in its absence; teacher education becomes not only a financial waste but source of overall deterioration in educational standards.' In this background, the commission suggested various means of quality teacher education curriculum framing. The teacher education framework of 1978 was widely impressed with the suggestions of the Kothari Commission.

Redesigning current teacher education programmes

NCFTE 2009 has suggested the following with regard to pre-service teacher education:

1. A four-year integrated program of elementary teacher education in select state universities and all central universities, in particular via IASE and select DIETs, could be undertaken in the initial phase.
2. XI Plan funding under the innovative education schemes should be canalized as a priority by the UGC to universities and select DIETs to institute four year Integrated Elementary Teacher Education Programmes.
3. As an interim measure, current teacher models of Elementary Teacher Education offered by the DIETs such as the DT.Ed. are required to redesign their curses as well as the program structure to include the specific features and structural mechanisms proposed in the new framework in terms of curricular areas and transaction processes.

4. A review of the existing D.Ed. programmes is commissioned and the process of redesign of the curriculum in the light of the proposed process model be completed in the next one-two years.

The National Curricular Framework for Teacher Education, 2009, has recommended that teacher education courses be reorganized. Thus, D.Ed. would be a two-year diploma after 10+2 and B.Ed. one-year degree after graduation. This would provide enough time and opportunity for self study, appearance and association, meet with teachers, school, classroom and pedagogic hustle and bustle and careful theoretical study. Any compromise on the duration of the initial education of teachers, for whatever reason, adversely affects the quality of teacher and teaching in schools.

The NCFTE, 2009, recommends that current models of teacher education at all levels of school education be slowly changed by models of teacher education that merge general education with professional development along with an demanding internship with schools. These integrated models should be designed using the specific features outlined in the curricular areas and transaction process. As an interim measure, current models of teacher education such as B.Ed. and D.Ed. are required to reframe their courses as well as the programme structure to include the specific features and structural mechanisms proposed in the new framework in terms of curricular areas and transaction processes.

Three areas—Area A, Area B and Area C—have been identified in the flow chart (Figure. 2.3) as to cover both theory and practice.

Area-A: Foundations of education

Foundations of education provide the teacher trainees with an array of opportunities to study and experience schooling over the academic year. Candidates prepare for the classroom by building a knowledge base that is deepened through observation and personal experience.

Area-B: Curriculum and pedagogy

The curriculum studies courses would necessarily include units of study that provide for a critical study of school curriculum materials, syllabi, textbooks in the light of theoretical frameworks and empirical research.

The pedagogic studies courses would necessarily include units of study that provide for a critical study of content, an examination of learners' thinking and learning and pedagogic processes in the light of theoretical frameworks and empirical research.

Each of the above theory courses is to be complemented with practicum courses.

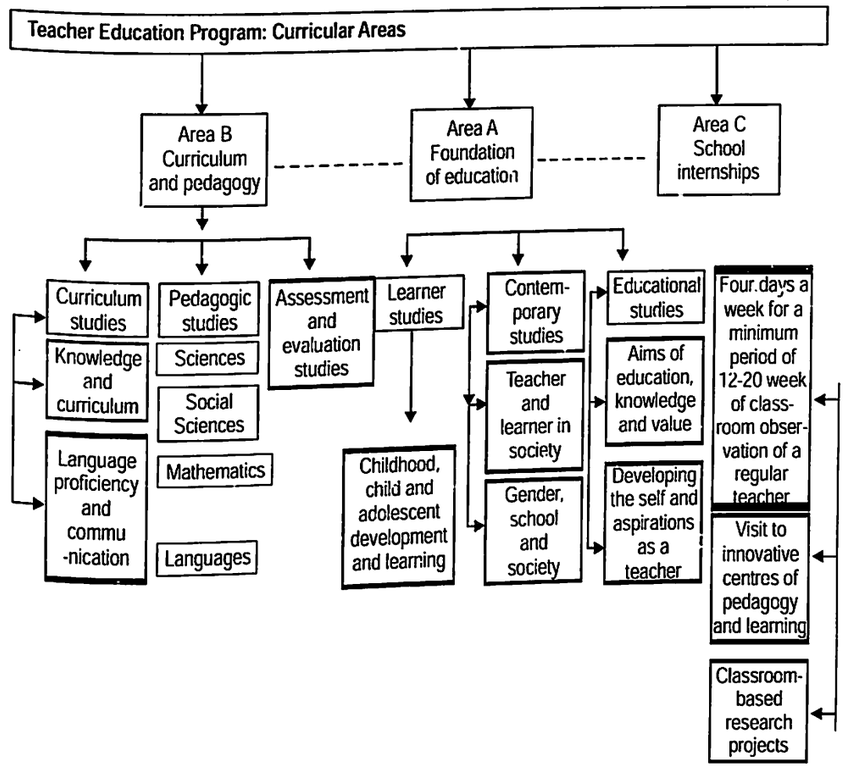


Fig. 2.3 Teacher Education—Curricular Area

Sources: NCFTE, 2009

Area-C: School internship

This school internship should include the following:

1. Visits to innovative centers of pedagogy and learning, wherever feasible.
2. Classroom-based research project.
3. School internship of four days a week for a minimum period of six-ten weeks, including an initial phase of observing a regular classroom.
4. Developing and maintaining resources in the internship schools.
5. Developing unit plans and maintaining deep journals.

The practice of teaching during school internship would include not more than four-unit plans per subject. Planning of the units would include a critical engagement with content from multiple sources including the school textbook, organization and presentation of from multiple sources including the school textbook, organization and presentation of subject matter, formulating questions, specifically to: (a) assess knowledge base and understanding of students; (b) further the process of knowledge construction and meaning-making in the classroom; and (c) assess students' learning to improve pedagogic practice and further enhance learning.

NOTES

Table 2.1 Teacher Education Curricular Areas –A Schema

Curricular Areas	Major Components	Curricular Aspects	Curricular Provision
Area-A: Foundations of Education	**Learner Studies** *Childhood, Child and Adolescent Development* **Contemporary Studies** *Teacher and Learner in Society Gender, School and Society* **Educational Studies** *Aims of Education, Knowledge and Values Developing the Self and Aspirations as a Teacher*	**Drawing upon psychology, sociology, linguistics and education.** *Constructs of childhood, adolescence; socialization; language; cognition, thinking and learning; school and physical health; self, identity; inclusive education* **Drawing upon sociology, history, philosophy, psychology, political science and economics.** *Issues and concerns of contemporary Indian society; human and child rights; classroom as social context Identity development; understanding curriculum and texts from a gender lens; debates about professionalism and feminization of the teaching profession* **Drawing upon educational theory, philosophy, history and sociology.** Basics of teaching-learning; theoretical constructs, educational thinkers; vision of education in India, issues and concerns; school culture and school as a learning organization; peace education Self and identity; interpersonal relations, adult-child gaps; personal and social constructs; schools as sites of contestation and social change.	**2-3 theory courses** with in-built field-based units of study; **Practicum** courses, workshops, seminars, group and individual assignments **1-2 theory courses** with in-built field-based units of study, projects, seminars, group and individual assignments **1 theory course** with inbuilt field-based units of study; group and individual assignments, seminar presentation **1-2 theory courses** with in-built field-based units of study; assignments, group presentations, term papers **1 course** workshop-based with a brief on theory; workshops on issues of gender; identity; social and personal conflict; childhood; relationships
Area-B: Curriculum and Pedagogy	**Curriculum Studies** *Knowledge and Curriculum* *Language Proficiency and Communication* **Pedagogic Studies** *Language Mathematics Social Sciences Sciences* **Assessment and Evaluation Studies** *Perspective and Practice of Learner Assessment*	**Focus on key concepts of the basic disciplines of language, mathematics, social sciences and sciences; sociology of knowledge and curriculum** Engagement with subject content and school curriculum, textbooks; philosophical and ideological basis of curriculum; design and selection of knowledge; Knowledge as construction; disciplinary knowledge. Language proficiency and communication skills; metalinguistic awareness; skills of speaking, listening, reading and writing in varying contexts; content area literacy **Drawing upon pedagogical theory, constructivist and socio-constructivist perspectives** Nature of discipline and knowledge; understanding school curriculum; critical engagement with principles of teaching; epistemological issues **Draw upon critical reading of psychometric approaches; sociological frames of analysis and constructive approaches** Critical reading of evaluation perspective and practice; place of assessment for learning; qualitative and quantitative measures; hands-on experience clinical interviews, observation formats and interpretation of qualitative data.	**4-6 theory courses** with inbuilt field-based units of study; investigative projects; recording and analysis of observations. **1 course** designed as workshops with hands-on activity in the use of language for communication **4-6 optional theory courses** offering areas of specialization; **practicum courses** comprising of curriculum and text analysis and creation of alternative learning materials. **1 theory course** with complementary practicum; analysis of question types and assessment formats; group and individual assignments.

NOTES

Admission policies and procedures for student teachers

At the graduate level, qualifying marks should be 50% and an entrance exam (CET). The applicant must have studied at least two school subjects at the graduation level. It would be ideal to add subject mastery at the B.Ed. level provided the duration of the B.Ed. course is increased. An integrated B.A. B.Ed. / B.Sc. / B.Ed. / B.Com. B.Ed. of the duration of four years after higher secondary is a good way to do this.

2.3.3 Curriculum of Pre-service Teacher Education at Elementary Level

Curriculum Framework for Quality Teacher Education, prepared by a committee of National Council for Teacher Education in 1998 has elaborated upon the curriculum, contents and evaluation systems for all the levels of teacher education. It has a well emancipated curriculum for elementary teacher education. The documents states that a number of Elementary Teacher Education Institutions (ETEIs) are putting meticulous efforts in preparing teachers for primary and upper primary classes in the country. These institutions are providing basically two types of teacher education programmes first for primary classes and second for elementary classes. The primary standard teacher education programmes are diploma courses such as Junior Basic Training (JBT) and Diploma in Education (D Ed). The programmes of elementary teacher education are diploma as well as degree courses. These programmes are known as Diploma in Early Teacher Training (DETT) and Bachelor in Elementary Teacher Education (B El Ed). Though the curricula of these programmes is varied but is entwined around a basic structure provided by National Curriculum Framework for Teacher Education.

Objectives of pre-service teacher education at Elementary level:

The specific objectives of pre-service elementary teacher education include:

- Development of understanding of the psychological and sociological foundations relevant to the primary stage
- Management of appropriate resources for organizing learning experiences of children
- Acquainting student teachers with methods and techniques of caring for children with special needs
- Enabling student teachers to acquire necessary skills so as to develop curiosity, imagination and creativity
- Development of capacity to understand and analyze the social and emotional problems, and
- Enable student teachers to organize games, sports, physical activities and other co-curricular activities.

In order to translate the mentioned objectives in practice the curriculum of pre-service elementary teacher education is divided into three types of components. These are Theory, Practice Teaching and Practical work. These components have following subjects and constituents:

Theory

The theory component includes Education in Emerging Indian Society, History of Primary Education in India, Psychology of Teaching and Learning with special reference to children of age group 6-11 years, Assessment, Evaluation and remedial teaching, Health and Physical Education, School Management, Education of Children with Special Needs, Guidance and Counseling and Action Research.

Practice teaching

In order to provide student teachers an insight into the practical aspects of the theory of education, they are assigned to prepare a Pedagogical Analysis of Primary School Subjects. Apart from this they are supposed to practice their skills in teaching through Practice Teaching in Schools. Along with these the student teachers are also supposed to observe lesson of their peers.

Practical work

The practical skills in teaching include School Experience inclusive of Internship during the school internship. Another important component of practical work in Work Education which provides them an experience in the practical aspects of school functioning. The student teachers of all sorts of teacher education programmes undergo School-Community Interaction through working with some registered non-governmental organization. The curriculum also involves Action Research Studies and Organization of relevant Educational Activities during the course of program

2.3.4 Curriculum of Pre-service Teacher Education at Secondary Level

The curriculum for secondary level pre-service teacher education more popularly known as Bachelor of Education or B.Ed. is more intensive and comprehensive. At present the B. Ed. is one year programme which starts after graduation. The passed outs of this programme are eligible for teaching till secondary stage.

Objectives of pre-service teacher education at Secondary level:

The specific objectives of B Ed programme can be enlisted as:

- Enable the prospective teachers to understand the nature, purpose and philosophy of secondary education,
- Development of an understanding of the psychology of pupils,
- Acquire stage specific competencies to pedagogy, curriculum development, its transaction and evaluation;
- Enable student teachers to make pedagogical analysis of the subjects they are to teach at the secondary stage,
- Development of guidance and counseling skills,
- Enable student teachers to foster creative thinking among students for reconstruction of knowledge.
- Enable student teachers to utilize community resources as educational inputs,
- Development of communication skills and use the modern information technology,
- Acquaint student teachers with the process of research in education including action research and pedagogical analysis.

Like the curriculum of elementary teacher education the curriculum of secondary level pre-service teacher education also is divided into three components viz. Theoretical subjects, Pedagogical Practices and Practical Work. The theoretical subjects are

subdivided into three categories of Core, Elective and Pedagogy courses. The Pedagogical Practices section contains three components viz. Micro teaching, simulated teaching and Practice Teaching. Micro teaching takes place in two steps of Teach and Re-teach sessions. The number of sessions depends upon the number of skills being practiced in a particular TEI. There is no fixed number of simulated teaching sessions as well. This usually falls between 5 and 10 in various universities.

Under the Practice Teaching activity student-teachers take 15 to 20 classes in each of the two pedagogies in practicing schools. The Practical work in teacher education is of two types viz. – i) Sessional Work - record of co-scholastic activities taking place during the whole session; ii) School Based Projects - Lesson Plan Book, Peer Observation Booklet, Case Study File, Achievement Test Record, Action Research, School Record Analysis etc. The number of activities conducted under practical work is not standardized.

2.3.5 Need and Importance of Evaluation in Teacher Education

Evaluation is an act or process that assigns 'value' to a measure. Verbally, evaluation means 'to find the value of or to judge the worth of'. In the process of evaluation; we are make a judgment as to the suitability desirability or value of a thing. In education, evaluation refers to the assessment of student's progress towards stated objectives, the efficiency of our teaching as well as the effectiveness of the curriculum. Apart from classroom examination, evaluation also deals with the evaluation of cognitive, affective and psychomotor domains of the students. 'Evaluation is the assignment of symbols to phenomenon in order to characterize the worth or value of the phenomenon usually with reference of some social, cultural and scientific standards.' (J. M. Bradfield). In the words of Hanna, Evaluation is the process of gathering and interpreting evidences on change in the behavior of al students as they progress through school.

A comprehensive, objective and transparent system of evaluation in teacher education has been emphasized by a number of Committees and Commissions in the past. Several plans and strategies have been recommended to reduce the usual emphasis on external examination and to encourage internal assessment pervading all activities and assignment involved in teacher education curriculum. But unfortunately, the mission of ensuring a justified evaluation scheme in teacher education still remains a challenge to its stakeholders.

NCTE feels that evaluation is a weak link in many in-service training programmes. In most of the cases in-service programmes are evaluated on an *ad hoc* basis. Each in-service teacher education programme should have monitoring as an integral component so that effectiveness of a programme can be properly assessed and appraised. Programme evaluation should assess whether the required inputs were provided to the programme on time, the logistics properly looked after and coordinated, the reading materials provided to participants etc. Another aspect of programme evaluation should be to assess the gains of each participant. The other subtle aspect is the impact evaluation to assess the impact of the programme at the grass root level and in the field situation.

2.3.6 Evaluation of Pre-Service Teacher Education at Elementary Level

Evaluation of teacher education at elementary level has been a critical question since long. It is expedient to employ the formative evaluation for obtaining continuous feedback, motivating students and guiding their efforts. There is need to replace external examinations by internal continuous and comprehensive examination system. External

system of evaluation needs to be carefully planned; testing tools should be validated and made more reliable. In different situations evaluation of theoretical component may be based on essay questions, short answer type questions, objective type questions, objective-based questions, oral examinations and participation in group activities.

Similarly, the evaluation of practice teaching also needs innovations to make it more judicious and objective. Gradual transition to continuous and comprehensive internal evaluation of practice teaching and assigning grades instead of marks would be a professionally sound step. Evaluation of practical work should be divided into more components to make it democratic and student centered.

2.3.7 Evaluation of Pre-Service Teacher Education at Secondary Level

Evaluation of the Teacher Education Programme at secondary level also is by and large traditional and intuitive in nature. It can be easily understood though the following chart:

Table 2.2 Existing Evaluation Scheme in T.E

S. No.	Component of Evaluation	Scheme of Evaluation
1.	Theory Papers	25-40% internal marks are assigned. But the mode of evaluation for this component is not standardized. Usually presentations, assignments files, Portfolios and Class-tests are used to evaluate this component. The final examination for theory papers contains 2-3 Essay type questions, 4-5 Short answer questions and several Objective type questions. Evaluation of first two types of question remains subjective and autocratic.
2.	Pedagogical Practices	• **Micro Teaching**: Usually 100 Marks are assigned to this component. There is no specific criterion for the evaluation and marks are distributed quite casually. • **Simulated Teaching**: Generally 5 such plans are executed in Training Colleges. No Specific marks are reserved for ST as it is taken as a part of Practice Teaching • **Practice Teaching**: This activity involves preparation of 15-20 lesson plans and their execution in the practicing schools. No specific marking is assigned to the individual skills or plans. Evaluation is not done on the spot. Comments and suggestions are given on the plans but these are not given worth at the time of final evaluation.
3.	Practical Work	• **Sessional Work**: Art & Craft, Sports, Computer practical, Community Service, Tours & Excursions are the major activities included in this head. Student-teachers are expected to prepare and present the record of all these activities. There is no open policy of evaluation for such files and records. • **School Based Projects**: Lesson Planning, Peer Observation, Case Study, Achievement Test Record, Action Research, School Record Analysis, Psychological Testing are the common records to be maintained by the student-teachers. But they hardly know their evaluation plan and weightage assigned to each of these accounts.

2.3.8 Need and Importance of Innovations in Teacher Education

Innovation generally means doing the same things in a new way. In other words innovation is application of alternative solutions to solve the traditional problems. In education, innovation means to bring holistic changes of educational system and management eventually leading to the use of new content, methodology, technology and evaluation strategy. The purpose of innovation in education is to manage the school plant in more efficient, transparent, logical and democratic way.

With changing time and circumstances we can not rely upon the obsolete content, methodology and ideologies to prepare our students to meet the varied challenges of the future. Therefore we need to be innovative as well as creative in dealing with students inside and outside the classroom. Time is constantly changing and the only way to keep up with it is to keep growing and evolving and this is also applicable to teachers.

Check Your Progress

1. What are the two types of pre-service teacher education programmes in India?
2. Define curriculum. What are the components of a curriculum?
3. What is the need and importance of a good curriculum as per the Kothari Commission?
4. Mention the three components of a curriculum of teacher education program?
5. Write some of the basic courses of teacher education curriculum.
6. State the importance of Evaluation in Teacher Education Programme.
7. What is the Need and importance of innovations in Teacher Education?

2.4 ADMISSION POLICIES AND PROCEDURES FOR STUDENT TEACHERS

The two key players in teacher education are the student teachers and teacher educators. The selection of both is very important for making successful teachers, who are responsible for the education of millions across the country.

2.4.1 Admission Policies and Procedures Based on Student Teachers

At the graduate level, qualifying marks should be 50 per cent along with an entrance exam (CET). The applicant must have studied at least two school subjects at the graduation level. It would be ideal to add subject mastery at the B.Ed. level provided the duration of the B.Ed. course is increased. An integrated B.A. B.Ed./ B.Sc. B.Ed. / B.Com. B.Ed. of the duration of four years after higher secondary is a good way to do this.

The Common Entrance Test (CET) does not really test the candidate's attitude towards training or aptitude for teaching. Group discussions and interviews, essay writing would enable to understand the aptitude and attitude of the applicant as well as communication skills.

2.4.2 Recruitment of Teacher Educators

- **Recruitment of Teacher Educators:** Qualifications specified for teaching positions as per NCTE regulations are as follows:

  Principal/Head (in multi-faculty institution):

  - Academic as well as professional qualification will be as specified for the post of Assistant professor;
  - Ph.D. in Education
  - Teaching experience of ten years out of which at least five years of teaching experience in a Secondary Teacher Educational Institution.
  - A minimum score as stipulated in the Academic Performance Indicator (API). Performance Based Appraisal System (PBAS) developed by UGC in these Regulations shall be a compulsory requirement

Assistant Professor

Foundation Courses

- Master's Degree in Science/Humanities/commerce with 50 per cent marks
- M. Ed. with minimum 55 per cent marks or its equivalent grade
- Any other stipulation specified by UGC in the general norms including a pass in NET/SLET/SET prescribed in these regulations shall be compulsory
- A minimum score as stipulated in the Academic Performance Indicator (API). Performance Based Appraisal System (PBAS) developed by UGC in these Regulations shall be a compulsory requirement.

  OR

- M.A. Education with 55 per cent marks or its equivalent grade
- B.Ed. with minimum 55 per cent marks
- Any other stipulation specified by UGC in the general norms including a pass in NET/SLET/SET prescribed in these regulations shall be compulsory
- A minimum score as stipulated in the Academic Performance Indicator (API). Performance Based Appraisal System (PBAS) developed by UGC in these Regulations shall be a compulsory requirement.

Methodology Courses

- Master's degree in subject with at least 50 per cent marks
- M. Ed. with minimum 55 per cent marks or its equivalent grade and
- Any other stipulation specified by UGC in the general norms including a pass in NET/SLET/SET prescribed in these regulations shall be compulsory
- A minimum score as stipulated in the Academic Performance Indicator (API). Performance Based Appraisal System (PBAS) developed by UGC in these Regulations shall be a compulsory requirement.

Having obtained 55 per cent at M.Ed. level and 50 per cent at Master's level or 55 per cent at M.A. in Education and B.Ed. and qualified the NET/SET/SLET exam, teacher educators get eligible to apply at a College of Education. After that an interview is conducted. Successful candidates get appointed. Some institutions appoint teacher educators who don't have NET/SET qualification and therefore pay less salary.

Qualifications for M. Ed. Course Educators

Professor/Head

- Master's Degree in Arts/Humanities/Sciences/Commerce and Masters in Education with at least 55 per cent marks or M. A. in Education and B. Ed each with at least 55 per cent marks
- Ph. D. in Education
- At least 10 years of experience in teaching in the Department of Education in any University or College of Education, out of which at least 5 years experience at M. Ed. level and published work in the area of specialization.
- A minimum score as stipulated in the Academic Performance Indicator (API). Performance Based Appraisal System (PBAS) developed by UGC in these Regulations shall be a compulsory requirement.

Associate Professor

- Master's Degree in Arts/Humanities/Sciences/Commerce and Masters in Education each with at least 55 per cent marks or its equivalent grade or M. A. in Education and B. Ed each with a minimum of 55 per cent marks.
- Ph. D. in Education
- Minimum 5 years teaching experience in the Department of Education of any University or College of Education, out of which at least 3 years at M. Ed. level and published work in the area of specialization.
- A minimum score as stipulated in the Academic Performance Indicator (API). Performance Based Appraisal System (PBAS) developed by UGC in these Regulations shall be a compulsory requirement.

Assistant Professor

- Master's Degree in Arts/Humanities/Sciences/Commerce and Masters in Education each with at least 55 per cent marks or its equivalent grade or M. A. in Education and B. Ed each with a minimum of 55 per cent marks.
- Any other stipulation prescribed by the UGC in the general norms including a pass in NET/SLET/SET shall be compulsory
- A minimum score as stipulated in the Academic Performance Indicator (API). Performance Based Appraisal System (PBAS) developed by UGC in these Regulations shall be a compulsory requisite

Once again having obtained 55 per cent at M. Ed level and 50 per cent at Master's level or M.A. Education with 55 per cent marks and B.Ed. and qualified the NET/SET exam teacher educators get eligible to apply at the University Department of Education. After that an interview is conducted and successful candidates get appointed. However, there are a lot of problems and issues in the system of teacher education. A detailed study of them and a serious thought of experimenting with the suggested solutions may help to bring a reform in the system.

2.5 NEW TRENDS IN TEACHER EDUCATION

This section provides an overview of the trends and developments currently taking place and emerging in the world. The change brought by technological, economic, and cultural forces in the early twenty first century was very fast. These changes were mostly pronounced in the developed world. But their effect was also apparent in the developing world. Societies across the world were rapidly changing in fundamental ways, especially with regard to the availability and easy way to access to digital information and communication technologies. But, teacher's and their predominant classroom practices rather remained traditional in this era of rapid change. It was content focused, teacher directed and didactic instruction focused on content delivery and reproducing the same remained the rule of the pedagogy.

Educational curriculums at all levels were very narrowly defined for students in many developing country in the era of the information technology. Formal education experiences such as, high test scores were viewed primarily as instrumental of achieving career goals. The quality of both educator and the teachers whose responsibility were to engage students in pedagogical experiences were singularly defined by higher grades and "policy driven perspective" to measure student's achievement. Higher grades and good marks in exams were the only criteria to judge student's competencies.

Preparing students for their complex and increasingly technological futures were probably never been thought in any teaching methodology or policy. That's why education institutions were still continued to prepare students for a future in which their teachers and administrators were familiar and well conversant.

Teachers entering the educational workforce consistently reported minimal preparatory experiences without technological integrated lessons or formal digital literacy development in educational setting. Since teachers tend to teach as they were taught, the instructional workforces were reasonably not prepared to meet the increasingly digital demands of the twenty first century knowledge landscape. Such workforces were not able to meet the digital skill expectations of prospective employers and students as well.

Digital literacy embodies the abilities to appropriately access, synthesize, and utilize both analog and digital information sources to achieve a defined teaching purpose. Digital literacy includes the abilities to communicate and collaborate effectively through modern technological aids and methodologies suitable for upcoming generation. Digital literacy should be understood as requisite set of skills extending beyond a traditional teacher's pedagogical skills. Digital literacy cannot be fully acquired in isolation while preparing traditional written reports, but be obtained through a transformative process of authentic and contextual utilization through modern teaching aid (Sachs, J., 1997). Experience is the most powerful teacher, and has no substitute when it comes in developing and refining the skills of digital literacy or any other type of literacy among mentors and teachers.

Technology usage is where a teacher and learner is equipped with a portable, wireless electronic device capable of accessing internet content and enabling a wide range of digital collaboration methods across different place is the future of education. Younger generations raised in this ocean of digital information are familiar with the intricacies of digital world. At the same time they find life a bit unfamiliar and new without digital information and technological aid.

Today students are no longer the target audience what educational system was designed to teach. Internet instant messaging, video games, video conferencing and networking formed a substantial part of the native language of digital natives or net networking formed a substantial part of the native language of digital natives or net generation. Traditional education system barely engaged the minds and aptitude of digital natives in the twenty-first century classrooms. Therefore, a key questions need to be addressed by teacher's education program such as how teachers learn and refine knowledge, skills and proficiency to teach such digital literate audience.

National Council for Teacher Education (NCTE) is functioning in the field of developing and rationalizing teacher education since 1973. The teacher education programmes have reached new heights under its able guidance. The NCTE has taken steps from time-to-time in order to standardize the institutions, enhance their reliability, ensure objectivity of evaluation and accreditation of teacher education institutions. NCTE has also been active in updating the course content, learning materials, transactional methodology and educational technology in the light of the new policy thrusts so that the teacher education could be able to match the needs and requirements of new learning environment in schools of the new millennium. An emphasis is being laid upon integration of education and culture, work experience, physical education and sports, the study of Indian culture and the problems of the unity and integration of India.

2.5.1 New Trends in Teacher Education Suggested by NPE, 1986

The National Policy on Education - 1986 gave its recommendations on 23 various aspects of education including several innovative aspects such as evaluation process, research and development. Some of these recommendations are path breaking as they started innovative strategies to deal with the long lasting issues in this field. These steps overhauled the content, curriculum, methodology and evaluation processes of teacher education to make it updated and all capable.

One of the major recommendations of NPE, 1986 was the establishment of District Institutes of Education and Training (DIETs) in order to re-organize pre-service and in-service programmes for elementary school teachers. Emergence of DIET was an initiative which not only helped in enhancing the quality of teacher education but also phasing out the substandard institutions mushrooming in unorganized way. As s result, as many as 306 District institutes of Education and Training were sanctioned by March 1992. With this, the POA, 1992 recommended to upgrade the deserving institutes of education as Institutes of Advanced Study in Education. Consequently, 12 Institutes of Advanced Study in Education were sanctioned. These were very fruitful initiatives suggested in the National Policy of Education, 1986.

2.5.2 Recommendations of Commissions and Committees for Pre-Service Programmes

The recommendations of different commission and committees for pre-service programmes of teacher education are given in Table 2.3.

Table 2.3 Recommendations for Pre-Service Programmes

Name of Committee/Board/ Commission	Year	Major recommendations regarding teacher education
Hartog Committee	1929	• Primary teacher training • Lengthening the duration of training courses. • Provision of adequate staff for training institutions.
Central Advisory Board of Education	1943	• Duration of training programmes for teachers. • Two years for pre-primary and junior basic. • Three years for middle school. • Two years for non-graduates in high schools. • One year for graduates in high school.
Sergent Committee	1944	• Need to strengthen practice teaching.
Memorandum on the further action taken by the Provincial Governments on the Post-war Educational Development Report	194-47	• Emergency secondary grade training course of one year to bridge the gap between supply and demand.
First Five Year plan	1950s	• Paradigm shift of teacher education as a process of total development of the individual personality.
Second Conference of All India Training Colleges	1951	• Realization that teacher education had a broader canvas.
Secondary Education Commission Report	1953	• Professionalism in teacher education. • Reorientation of syllabus and evaluation techniques. • Need to integrate subject content and transactional strategies.
University Grants Commission report of the review Committee on Education	1956	• Shift in stress from secondary to primary teacher education. • No untrained teacher to be recruited. • Setting up of correspondence courses for B.Ed. at Regional Colleges of Education (194-5).
Education commission Report	1964 – 66	• For those who have passed the school leaving certificate or higher secondary leaving certificate, the period of training is to be two years. • For graduates, the training to be one academic year.
		• Training colleges to conduct research in pedagogy • Only trained graduates with three years experience to be admitted to M.Ed. courses.
NCERT	1975	• Publication of curriculum framework for school education.
NCERT	1978	• Publication of curriculum framework for teacher education.
Chattopadhyaya Committee	1983 – 85	• The minimum length of training for a secondary teacher should be five years following the completion of Class XII. • Reiterated the need "...to enable general and professional education to be pursued concurrently". • Need for an integrated four-year programme.
National Policy on Education	1986	• Reiterate that teacher education is a continuous process and pre-service and in-service components are inseparable.
The Acharya Ramamurti Committee – Review of the NPE 1986	1990	• Need for an internship model as it is based on the primary value of actual field experience in a realistic situation, on the development of teaching skills by practice over a period of time.
The Yashpal Committee Report Learning without Burden	1993	• The content of the programme should be restructured to ensure its relevance to the changing needs of school education. • The emphasis should be on enabling the trainees to acquire the ability for self-learning and independent thinking.
NCTE	1995	• Approved norms and standards for teacher training institutions at the pre-school, elementary and secondary level.
NCFTE	2009 – 10	• Guidelines for all aspects of teacher education with the focus on preparing humane teachers.

2.6 SHORTCOMINGS AND SUGGESTIONS FOR TEACHER EDUCATION PROGRAMMES

Teacher Education like other forms of education is ever growing fields in all aspects of content, curriculum, technology and scheme of evaluation. The education scenario in schools is changing globally and India as an emerging country can not afford to ignore the task of upgrading her system of education. Any change, development and innovation in school is possible only when the teachers; the guiding force of pupils are prepared for this. Therefore, the task of upgrading teacher education is a must.

Preparing teacher education programme to take the lead role in the movement of modernizing education is a big challenge. In spite of appreciable and path breaking recommendations of various committees and commissions the gait and face of teacher education are almost the same as these used to be decades ago. The reasons of this lethargy are not new but traditional ones due to which the saying like 'teacher is the most unchanging agent of change' emerged. The fires task of bringing any change in an existing system is to identify its weakness and remedy to remove it. A brief description of the two areas would be helpful to make the system updated.

2.6.1 Shortcomings in the Existing Teacher Education Programme

1. **Insufficient Duration:** the duration of teacher education programmes is mostly of one year barring the two or four year primary as well as elementary teacher education programmes. Though, the amount of content, number of activities, internal assessment components and projects as well as presentations has gone up many times. This shortcoming makes the process of teacher education from 'learn-think-innovate and apply' to merely 'Bhago –Bhago' or hash bash system.
2. **Excessive Content Load:** the content or syllabus of teacher education is increasing leaps and bounds with the time. Schools of philosophy, psychological thoughts and principles, technological inputs, number of issues and concerns pertaining to Indian education are being added up with every policy. Along with projects, portfolios, presentations, reports etcetera as components of internal evaluation make the teacher education programme quite heavy and burdensome.
3. **Absence of ICT and Internationalization:** In terms of ICT and internationalization, the programmes of teacher education seem to be lagging much behind the school education systems. Schools have quite advance components related to ICT, e-books, e-lesson plans, interactive smart boards an so on. Most of these components are becoming necessary for the advanced and acknowledged schools. But the same equipments, systems and processes are still absent from the teacher education programmes. Similarly the school system has crossed a long way in getting accreditation from the international bodies of school education, internationalized their syllabus and curriculum and evaluation pattern. But teacher education is yet to take steps in this direction.
4. **Shortage of Quality Teacher Educators:** The quality of teacher education depends largely upon the quality of teacher educators. The process of updating master degree programme (M. Ed.) in education is an ignored area since long. Hence, there is a need to reframe its objectives, content and learning outcomes to make it an effective media of producing quality teacher educators.
5. **Lack of Quality Teacher Education Institutions:** Barring India and some Asian countries, the onus of establishing and managing teacher education is directly borne by the government. But in our country, the job of providing teacher education is shared with private sector under the system of self-finance college of teacher education. It is a matter of great shame and disappointment that most of the teacher education institutions in private sector are proving to be degree distribution centers or money making mechanisms. They don't have required infrastructure and human resource to take care of teacher education programmes and maintain the demanded quality in them.

2.6.2 Suggestions for Teacher Education Programmes

A comprehensive and competent policy initiative is must to update and renovate the content, curriculum, technology, methodology and evaluation process of teacher education programmes. Numerous conferences, seminars, commissions and committees in public and private sector have looked into the issues related to qualitative improvement in teacher education. Some of them are discussed hereunder:

1. Enhancing duration of Teacher Education Programmes is foremost among the lists of the suggestion given to improve its quality. Extending just one year will help making the components of the programmes to be followed in required sense and integrity.

2. Strengthening syllabus and curriculum through frequent revision of content is another thrust area. The syllabi of teacher education need to be looked keenly to remove certain outdated and irrelevant content items from it.
3. Application of Continuous and Comprehensive Evaluation System in Teacher Education Programmes is getting urgent as the same system is already prevalent in schools and is getting popularity.
4. Increasing the duration of School Internship is being demanded since long as the current duration is excessively less for student-teachers to get acquainted with the school system and academic processes being followed thereat.
5. Subject Specific Teacher Education Programmes are being demanded by schools now a day. The teacher coming to schools are prepared to handle two subjects but often they don't have mastery in any of them. Therefore, schools want the specialized teachers who could work as masters of their subject.
6. Compulsory accreditation for teacher education institutions is suggested to ensure pursuance of necessary norms and standards set by the recognizing body viz. NCTE and affiliating institution viz. the university.
7. Making the teacher education ICT friendly and adding components suitable to international standards is the need of hour to ensure the relevance and worth of teacher education programmes. Until this measure is implemented the teachers prepared in the existing teacher education institutions will keep feeling themselves as aliens in the schools.
8. NCTE has advised that steps should be taken to ensure a better liaisoning between schools and teacher education institutions. Teacher education institutions must be aware about the needs and requirements of schools and should try to meet them on preferential basis.
9. To ensure quality teacher educators in teacher education institutions, it is necessary that proper and quick attention be paid upon the improvement of the quality of teacher educators. Innovative measures are also required to provide more opportunities for career development to teacher educators.
10. An intensive drive is must to be started to make the components of teacher education more and more practical, qualitatively updated, objective and standardized.

These matters are the outcomes of intensive deliberations and discussions at various platforms and have been found to be most necessary for the up-gradation of teacher education programmes.

2.6.3 Future Prospective of Teacher Education in India: A Critical Analysis

The Prime Minister has repeatedly emphasized that ensuring quality school education to all is one of the most important priorities of the government, and the National Knowledge Commission has also recognized the crucial significance of this as the foundation upon which any further advances are based.

Documents of India Vision 2020 by J.S. Rajput and NKC Recommendation on School Education 2007 have highlighted the future of school and teacher education in our country. You must have realized that the present time is very crucial in the context of school and teacher education in our country as most developments have taken place in

maintaining quality and quantity in education. For this Right to Education Act 2009, use of Continuous and Comprehensive Evaluation strategies in school and higher education, implementation of new curriculum in school and teacher education framed according to National Curriculum Framework 2005 for School Education and National Curriculum Framework for Teacher Education 2009 are the milestone to maintain effective transaction of school and teacher education. Primary responsibility for school education is borne by the state government, but you must have observed that both the State and Central Government works together for the greater interest of Universalization of Elementary Education. There is wide diversity across the States in terms of progress towards achieving Universal Elementary Education, and also diversity within states with respect to the quality of school education. Nevertheless, we believe that positive changes in systems of schooling will ensure universal access to elementary education, wider access to secondary education as well as better quality and greater relevance of all schooling, will require active involvement of the central government as well state governments. Such involvement is necessary not only in the matter of providing resources but also in promoting organizational and other quality parameter changes.

Emphasizing teacher education, National Knowledge Commission 2007, stated that teachers are the single most important element of the school system, and the country is already facing a severe shortage of qualified and motivated school teachers at different levels. It is urgent to restore the dignity of school teaching as a profession and provide more incentives for qualified and committed teachers. Non-teaching official duties such as electoral activities should not be allowed to interfere with the teaching process. Forums that allow and encourage teachers to exchange ideas, information and experiences, including a web-based portal, should be developed. At the same time, there should be transparent systems for ensuring accountability of school teachers. As far as possible, teachers should be recruited to particular schools. The training of teachers is a major area of concern at present, since both pre-service and in-service training of school teachers is extremely inadequate and also poorly managed in most states. Pre-service training needs to be improved and regulated in both public and private institutions, while systems for in-service training require expansion and major reform that allows for greater flexibility.

Realizing the facts mentioned above you must have understood that the future of teacher education is a challenging task before us. The lower and the higher end in teacher education are linked with a close chronology. To maintain quality in lower level i.e. in school education, the higher level i.e. teacher education needs to be improved drastically. Our teacher education needs to be well managed and assure quality so that we can be managed to create good teachers in the school level who can take the responsibility and leadership of the country. Let us discuss some of the other future prospects of teacher education which needs to be take care of in near future.

- All types of values need to be developed among the teachers and the teacher educators through our teacher education programmes.
- Special and inclusive education should be a compulsory teaching subject in Teacher Education programme.
- Rigorous practices in content-cum-methods needs to be conducted in teacher education programmes.
- Establishment of teacher education institutes remains a constant problem in teacher education. Only that institute needs to be permitted who fulfils all the criteria to run an institute.

- There must be a nationwide survey to know the specific requirement of teacher education institutes region wise. To do it, enrolment of students, scope of teacher education, population parameters and requirement of future teachers needs to be taken care of.
- Maintaining national and international integration is also another important ingredient in teacher education programme of any country. That's why there is the need to orient the future teachers in important national matters.
- In India, there are still thousands of vacancies for teachers in schools; for filling these posts, we need quantitative improvement of teachers but at the same time, optimum care needs to be taken to maintain the quality of teachers.
- There is the urgent need of special orientation of teachers for implementation of Right to Education Act 2009, Continuous Comprehensive Evaluation (CCE), special and inclusive education. Teachers should be oriented from the very beginning of teacher education.
- Ground root level teacher education institutes such as DIETs, BRCs, and the CRCs need to be empowered so that they are able to face all types of challenges in teacher education.
- Moreover, national reconstruction and international participation needs to be encouraged through teacher education programme in the coming future.

2.7 DISTANCE EDUCATION AND IN-SERVICE TEACHER EDUCATION

In 1982; the International Council for Correspondence Education changed its name to the International Council for Distance Education to reflect the developments in the field. With the rapid growth of new technologies and the evolution of systems for delivering information, distance education, with its ideals of providing equality of access to education, became a reality. Today, there are distance education courses offered by dozens of public and private organizations and institutions to school districts, universities, the military and large corporations.

Table 2.4 Indian Universities Offering B.Ed. Correspondence Courses

Sl.No.	Name of the institution	Year of establishment
1.	Directorate of Distance Education, Annamalai University	1979
2.	SNDT Women's University (B.Ed. and M.Ed.)	1951
3.	International Centre for Distance Education & Open Learning, HP University, Shimla	1971
4.	Directorate of Distance Education, Madurai Kamraj University, Madurai	1966
5.	School of Distance Education, University of Calicut	1981
6.	Department of Correspondence Studies, Punjab University Chandigarh	1971
7.	Directorate of Correspondence Courses, Kurukshetra University, Kurukshetra (B. Ed. and M. Ed.)	1976
8.	Bharathidasan University, Tiruchirapalli	1992

9.	Directorate of Distance Education, Maulana Azad National Urdu University, Hyderabad	1998
10.	Director of Correspondence courses and Distance Education, Bangalore	1962
11.	School of Distance Education, Mahatma Gandhi University, Kottayam, Kerala (B.Ed.)	1983
12.	Department of Distance Educatiion, University of Kashmir (B. Ed. and M. Ed.)	1976
13.	Institute of Distance Education, Dr. Harishing Gour Vishwavidyalay, Sagar, M.P.	1997-98
14.	Central Institute of English & foreign Language, Hyderabad (certificate courses)	1972
15.	Mahatma Gandhi Chitrakoot Gramodaya Viswavidyalaya, Satna, M.P.	1991
16.	Directorate of Distance Education, Tripura University, Tripura	1987
17.	Institute of Distance Education, University of Kerala (PGDEPMA – Post Graduate Diploma in Educational Planning, Management and Administration)	1976
18.	School of Distance Learning & Continuing Education, Kakatiya University (B. Ed. and M. Ed.)	1988
19.	Yashwantrao Chavan Maharashtra Open University	1989
20.	Mukta Vidya Kendra, Tilak Maharashtra Vidyapeeth	2005
21.	Directorate of Distance Eduction, Sri Venkateswara University	1972
22.	Directorate of Distance Education, University of Jammu, B.Ed. 1977 M.Ed.	1997
23.	Karnataka State Open University M.Ed	1996
24.	School of Distance Eduction, Andhra University Additional Methodology (B.Ed. & M.A Education)	1972
25.	NEHU Shillong (B.Ed. Special education)	
26.	Alagappa University – Directorate of Distance Education	1992
27.	Manonmaniam Sundaranar University – Directorate of Distance and continuing Education	2006

2.7.1 Preparing Professional Teachers through Distance Mode

For about 40 years, teacher education has been delivered through distance mode. For distance-delivered teacher education the most significant policy-related impacts have come from policies relating to trained teachers and access to education for all. Taking into consideration the diversified target groups, the distance education programmes provide training and upgrade the skills of teachers. With the introduction of 'No Child Left Behind' policy, the demands for teachers are increasing; thereby the need for professional preparation has been in constant demand for quality professionals in various sectors of profession. The type of students opting for teacher education programme has changed from the young, full-time teachers to the old, part-time students. In this aspect, ODL has achieved in satisfying students who seek to maintain a balance between their desire to get a higher degree and meet the family commitments. In most of the developing countries teaching is considered as a profession and for attaining this profession, acquiring a degree is essential.

Distance-delivered teacher education programmes must first prepare trainees to become a successful distance teacher educator. The term successful means there should be less attrition and drop-outs among distance teacher educators. For preparing teachers through distance mode the following measures can be taken.

- **Assess learner's readiness to participate in distance course:** Before entry into a distance teacher education programme, it is necessary to assess students' motivation, self-directed, technology knowledge and time management skills. These attributes of distance learners can be developed through online learning.
- **Offer a face-to-face orientation:** This phase provides opportunities for learners to clarify their doubts about the delivery of programme, practicals and evaluative mechanism. Such orientations have proved to be an effective strategy for completion of course by the learners.
- **Offer orientation in the distance mode in which trainees will participate:** Orientation can be held both synchronously and asynchronously using video, audio, chat and web –based platforms. Such opportunities will provide teachers to classify their doubts where they need help
- **Organize learners into cohorts or a community:** Peer learning is possible through a number of online programmes such as web collaborative tools. Through these programmes, distance learners are able to share their ideas and get motivated to be online distance learners.
- **Help teachers develop self-study:** As distance education is free from time-bound and space-bound, there is a tendency among learners to extend their studies.
- **Educate potential learners and instructors about the spirit of distance learning:** The trainees must be educated that online learning requires high degree of individual and collaborative involvement. Without this type of collaboration, the teacher education programme will not be a success.
- **Offer blended learning opportunities:** Some aspects of teacher education programmes need closer interaction between teachers and students. For example in the case of micro-teaching. To apply new strategies in the classroom requires the presence of an actual tutor. For these reasons tutoring and mentoring have greater chance in distance teacher education programme.

Feiman-Nissmer (1990) surveyed five conceptual orientations for teacher education. They are the following:

1. The academic orientation
2. The practical orientation
3. Technological orientation
4. Personal orientation
5. Social orientation

1. **The academic orientation:** This orientation emphasizes on transmitting knowledge and developing understanding. It emphasizes the subject-matter background of the teacher, and teaches how to think, inquire and structure the content.
2. **The practical orientation:** This orientation focuses on the skills of teaching. It gives practical training in the classroom. It is commonly associated with various forms of apprenticeship systems of teacher education.

3. **The technological orientation:** This orientation aims at training teachers to attain competency in teaching. For this technologies are used to review their own teaching skills.
4. **The personal orientation:** This orientation focuses on the teacher as a learner, and a teacher's personal development as the central part. It is a kind of self-assessment made by the teacher.
5. **The social orientation:** In this orientation, the teacher is considered as a social engineer. Teachers are trained to remove inequalities in society and promote democratic values in the classroom. They also foster group problem solving among students. Though there are various types of orientation they share the same purpose, i.e., preparing teachers to change society.

2.7.2 B.Ed. through Distance Learning

Teachers play a vital role in shaping up the future of the students. So, it is necessary for the aspiring teachers to go through formal training to acquire the skills that would assist them in becoming role models. The main objective of the bachelor of education course is to prepare individuals for this noble profession and help them learn the various aspects of it.

Candidates who are already working or those looking for flexible mode of education can opt for the distance learning programmes offered by various institutions. The comprehensive courses offered enable them to widen their understanding ability and help them judge the needs of the students. Teachers also guide the students choose the right path and achieve their goals in future.

2.7.3 Eligibility for B.Ed. through Distance Learning

Candidates who have completed their graduation in any discipline from a recognized university are eligible to apply for the course. In some of the institutes, it is compulsory for the students to have at least 45% marks in their graduation for taking admission to this course. At least two years of work experience is also essential for one to join a reputed distance learning institute. The course offered is a perfect blend of theoretical and practical form of education.

Students, after completing the course may look for the job opportunities available both in the government and private sectors. Most of the schools prefer candidates with a B.Ed. degree.

2.7.4 Indira Gandhi National Open University (IGNOU)

The Indira Gandhi National Open University (IGNOU), one of the mega universities in the world, was established by an Act of Indian Parliament in 1985. At present, the university offers more than 125 academic programmes and has around 1000 courses. It serves the educational aspirations of about 1.5 million learners not only in India but also in 30 countries across the world. Besides providing education globally through Open and Distance Learning (ODL) with extensive use additional responsibility to promote, determine and maintain standards in ODL system across the country. The vision and mission of the university gets reformulated from time to time to achieve the objectives of the university. It primarily focuses on widening access with equality of opportunity, providing for continuing professional development and training in all sectors of economy, and catering educational needs of all sections of society.

The priority of the university is to act as the National Resource Centre for Open and Distance Learning with wider international recognition. It shall provide seamless access to sustainable and learner-centric quality education, skill up gradation and training to all by using innovative technologies and methodologies and ensuring convergence of existing systems for massive human resources required for promoting integrated national development and global understanding (IGNOU Profile 2006). Hence, over the period of time, the emphasis has been laid on launching of more professional, vocational, awareness generating and non-credited extension and skill-oriented programmes, with a focus on socio-economic development and serving the disadvantaged section of the society. To have a sustainable curricular transaction system, the university provides multi-channel multiple media teaching-learning packages for instruction.

2.7.5 Bachelor of Education for In-service Teachers

Bachelor of Education (B.Ed.) Programme of IGNOU aims at developing the understanding and competencies required by practicing teachers for effective teaching-learning process at secondary stage.

The programme also provides opportunities for sharing experiences gained by practicing teachers. It enables in-service teachers to select and organize learning experiences according to the requirement of learners. In addition, it provides knowledge and develops in them an understanding of areas such as educational evaluation, and school management.

IGNOU's B.Ed. programme is recognized by National Council of Vocational Training (NCVT). NCVT recognition is an important criterion for the validity of the B.Ed. degree being awarded by a university or an institution. NCVT recognized B.Ed. degree is necessary for admission to M.Ed. /MA (Education) courses offered by some universities in the country. Further, for the appointment of teachers in government schools, it is required that the candidate have an NCVT recognized B.Ed. degree.

2.7.6 Objectives of IGNOU's B.Ed. Programme

IGNOU's B.Ed. programme aims to enable practicing teachers to achieve the following objectives:

1. To systematize experiences and strengthen the professional competencies of in-service teachers.
2. To imbibe knowledge and develop an understanding of the various methods and approaches of organizing learning experiences of secondary school students.
3. To develop skills required in selecting and organizing learning experiences.
4. To understand the nature of the learning process.
5. To develop skills involved in dealing with the academic and personal problems of learners.
6. To acquire knowledge and develop an understanding of the various procedures and techniques of evaluation and their classroom applications.
7. To develop skills involved in selecting, developing and using evaluation tools.
8. To acquire knowledge and develop an understanding of various aspects of school management.
9. To develop competencies for organizing various instructional and student support activities.

10. To develop an appreciation of the role of the teacher in the prevailing socio-cultural and political system in general and the educational system in particular.

In the distance education context, the transaction mode plays a very important role in acquiring new knowledge and demonstrating the same in a given situation. For acquiring professional skills using distance methodology, the channels of delivery of curricular inputs and application of new knowledge have greater importance. For the professional programmes, IGNOU follows multi-channel multi-media teaching learning packages for instruction. Table 2.5 gives a brief outline on the B.Ed. programme components.

Table 2.5 B.Ed. Course Components

Sl.	Programme B.Ed.	No. components (1)
1.	Target Groups	Graduates and having two years' teaching experience
2.	Age	No bar
3.	Duration of the Programme	Minimum: 2 years Maximum: 4 years
4.	Admission	Entrance test, qualification and experience.
5.	Objectives of the Programme	* Strengthen professional competencies of teachers * Develop better understanding on organizing learning experiences * Develop such skills needed to solve learners' Problems * Develop skills involved in selecting, developing and using evaluation tools * Develop competencies for organizing various instructional and student support activities
6.	Delivery Channel	Multi-media approaches to learning plus School based practical plus Workshop based practical plus Practice teaching
7.	Evaluation Mechanism	* Terminal examination (theory) * Continuous evaluation * Evaluation on practical activities

2.7.7 Programme Delivery

The methodology of instruction in this university is different from that of the conventional universities. The Open University System is more learner-oriented, and the learner is an active participant in the teaching-learning process. Most of the instruction is imparted through distance mode rather than face-to-face communication.

The university follows a multi-media approach for instruction. It consists of:

(a) Self-instructional printed material

(b) Audio-visual material

(c) Counseling sessions/contact programmes

(d) Teleconferencing

(e) Practical

(f) Practical handbooks

(g) Interactive radio counseling (IRC); Gyan Vani and Gyan Darshan

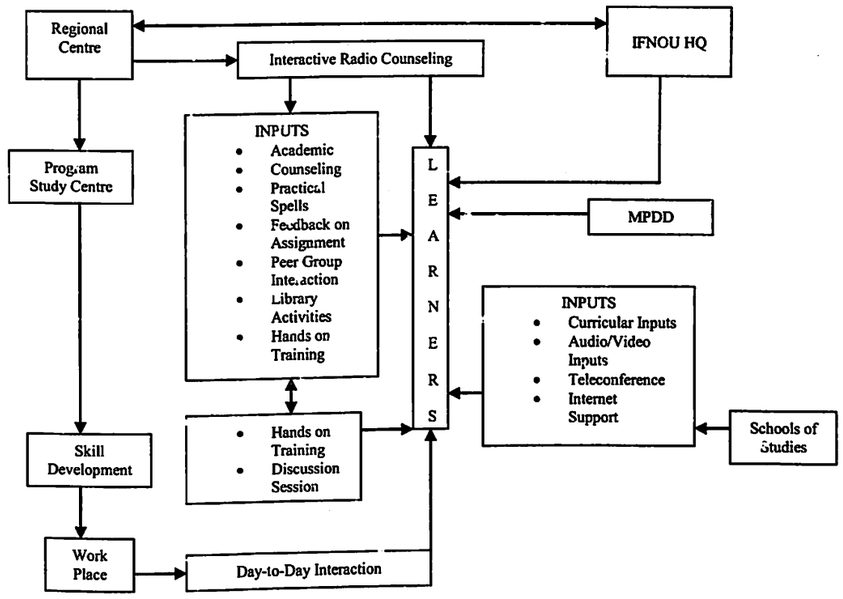


Fig. 2.4 Programme Delivery of B.Ed. Programme of IGNOU

2.7.8 Importance of In-Service Education for Teachers

Different educationists have emphasized different reasons for the need of INSET, here are the:

1. **The University Educations Commission Report (1949):** It said, 'It is extraordinary that our school teachers learn all of whatever subject they teach before reaching its fullness and the teachers to keep alive and fresh become a learner from time to time.'
2. **The Secondary Education Commission Report:** It highlighted importance of in service education in these words – 'However, excellent the programme of teacher training may be, it does not by itself produce an excellent teacher. It can only anger the knowledge, skills and attitudes which will enable the teacher to begin his task with a reasonable degree of confidence and with the minimum amount of experience.'
3. **J.P. Leonard:** In his article 'Learning is lifelong' edited by I.J. Patel, M.B. Buch and M.N. Palsare in the book, 'Readings in In-service education' Leonard emphasized the need for in-service education programme due to the following reasons:
   (i) Education is a life long process and no formal training in an institution can fully prepare a person for professional services.

(ii) In the area of teaching, new investigations are constantly revising our ideas o how and what to teach.

(iii) All individuals have a tendency to repeat experiences and teachers especially have a tendency to teach as they were taught.

(iv) In many areas of India especially in villages and small towns, there is short supply of books, research findings, demonstration of successful experiences and instructional aids, which are needed by a teacher to keep him up-to-date in his profession.

4. **Jay E. Green:** In his book, 'School Personnel Administration' Green describes following multitude o forces, operating now, and requiring increased attention tc the in-service education of teachers in a school.

(i) There has been a rapid increase in reinterpretation of knowledge, making obsolete much of what teachers were taught during their training period.

(ii) There are a large number of poorly and dissimilarly educated teachers throughout the country.

(iii) Many new techniques and tactics of instruction have been developed of which many educators are unaware.

(iv) New and recently developed instructional media, language labs, teaching machines, computers and T.Vs. require new ways of viewing the teaching and learning in school setting.

(v) As a result o research work on teacher behavior in the classroom new insight into the nature of teaching is being generated.

(vi) Day-to-day problems encountered by teachers in the classroom situations are related to the discipline and motivating the children.

(vii) Changing social environment, norms, values, etc. also force a teacher to adopt new methods and techniques of teaching and evaluation.

(viii) A teacher has to play different roles of which each requires different kind of knowledge, attitudes, skill etc.

(ix) After a period of time, a teacher generally forgets whatever he is taught in his pre-service training.

(x) The enthusiasm and morale of a teacher generally decreases as the time passes.

2.7.9 Objectives of In-service Education for Teachers

In-service education programme is uncouthly a significant program, aiming at the continuous development of teachers in the desired direction.

Following are the chief objectives of in-service education for teachers:

1. To provide incentive to the teachers to function more efficiently.
2. To help teachers to know their problems and to solve them by pooling their resources and wisdom.
3. To help teachers to employ more effective methods of teaching.
4. To help teacher to get acquainted with modern techniques in education.
5. To broaden the mental outlook of teachers.
6. To upgrade the teachers knowledge and understanding of the contents.
7. To increase the professional efficiency of the teacher,

Assumptions to in-service education for teachers

The in-service education programme for teaches is based on certain assumptions. Some major assumptions are given as follows:

1. Education of the educators continues all throughout his professional career in a planned manner.
2. In-service education will contribute to the qualitative improvement of education.
3. The pre-service training provided to the teacher is not adequate for the rest of his professional career for discharging his duties effectively.
4. There are many areas of human Endeavour in which changes occur and these changes demand corresponding changes in education and therefore, in the educators.
5. In order to bring about changes in education corresponding to the changes in other related areas, it is necessary to improve the competence of the teacher in terms o his knowledge, skill, interest, and attitudes as an essential means of improving education.
6. In order to bring about changes in solving their academic problems and meeting the academic needs the INSET programme helps effectively.
7. It is an essential means for improving education.

2.7.10 Need for In-service Education

Relationship between training and job is helping the people to be more successful on job. If we put people on job having that knowledge and skills which are required for job, prediction will be successful. Teaching is a profession which needs training. But at what level teaching it needs training, this is the question. Teaching at any level is done with a view to impart knowledge. So far as objectives are concerned they do not vary at various levels. Only content and procedure is changed at different levels.

Competence and professional skills are the very heart of the programme of teacher education. The knowledge of the metnods adopted by other teachers combined with other considerations will make the student try out various approaches to his work and during the practical work of the course.

Thus a practicing teacher generally evolves and polishes his own method. He acquires technical skills in practice and not in the lecture room. He should possess such skills and competencies which make his task easy, useful and effective. He should know the techniques and procedures to be adopted in his profession. He should be able to effectively perform of his duties.

All the teachers should be trained, but there should not be and also cannot be a specific training of teachers. Even the born teachers have to study the techniques of teaching craft. There are teachers who have acquired enormous success in teaching through training and experiences. Much wastage in teaching effort can be saved if the prospective teacher is subjected to teacher-educations situations conductive for actualization of potential in him.

A good deal of waste in teacher's efforts might be avoided by training. But a teacher is not a teaching craftsman. He has to help his students to develop certain personality traits and also to realize desirable values. In past, the training of teachers was born out of the necessity to bring up a 'literate' generation and to accomplish this

task. The teachers were helped to develop a narrow technique and a highly specialized professional approach. Today the need is to bring out a 'sophisticated' and 'cultured' generation.

Teachers are a section of community sharply segregated from the rest preparing themselves for their life's work in institution system as it exists today fails to educate the human beings. Our aim must be the education of the right human beings for work in our schools. The only means of strengthening one's intellect is to let the mind be a thoroughfare for all thoughts for all thcughts, not a selected party. From this open mindedness, sympathy tolerance intellectual adaptability and width of interest will develop the attributes essential for successful living and dealing with children.

However, all this requires a comprehensive philosophy of life and education a map by which future teachers may observe themselves in relation to other teachers as well as other human beings activities. During his training course he must be given time and opportunity to think about education because he will be engaged in the all absorbing tasks of the classroom and the common life.

Therefore the prospective teachers must be offered opportunities to associate with the best minds and to develop a disciplined intellect as well as the quality of appreciation of culture in its various forms. He will have an emotional life developed to a fine sensitivity out held in a strict control.

The most important task of education for the future is to improve the intellectual and technical competence in the teachers. It seeks to provide professional educated entrant's o the profession in adequate numbers. It aims at maintaining or increasing the quality of entrants for the profession to satisfy society's needs. While the first aim is quantitative, the second one is qualitative. Some other important reasons have been mentioned hereunder:

1. **Education of the Educator:** It continues throughout his professional career in a planned manner.
2. **Educational Extension:** It contributes to the qualitative improvement of Education.
3. **The Pre-service Training Provided to the Teacher:** It is not adequate for the rest of his professional career for discharging his duties efficiently.
4. **Changing Areas of Human Endeavour:** These changes demand corresponding changes in education and the educator. All these new developments, innovations and changes necessitate corresponding changes to be brought abut in educational objectives, curricula, textual content, teaching methods, instructional materials without delay so that education remains dynamic, up-to-date and responsive, educational extension prepares in-service teachers and other educators for bringing these required changes in education.
5. **Improvement of Competence:** In order to bring about changes in education, corresponding to the changes in other related areas, it is necessary to improve the competence of the teacher in terms of his knowledge skills, interests, and aptitudes as an essential means of improving education.
6. **Need of Change:** In addition to mass scale changes to be brought about in Education from time to time, individual teachers and small groups of school may feel the need of bringing about certain changes and aspire to solve certain specific academic problems. Educational extension is capable of helping these individuals or groups in meeting their academic needs and in solving their academic problems.

2.7.11 Present Scenario of In-service Training of Teachers

For in-service training, the country has a huge system of teacher training institutions (TTIs), which provide yearly in-service training to school teachers. The increase of these TTIs is both vertical and horizontal. At the National Level, the National Council of Educational Research and Training (NCERT), along with its 5 Regional Institutes of Education (RIEs) prepare a mass of training modules and undertake explicit programmes for training of teachers and teacher educators. Institutional support is also given by the National University on Educational Planning and Administration (NUEPA). At the state level, the State Councils of Educational Research and Training (SCERTs) prepare teacing packages for teacher training and carry out specialized courses for teacher educators and school teachers. The Colleges of Teacher Education (CTEs) and Institutes for Advanced Study in Education (IASEs) provide in-service training to secondary school teachers and teacher educators. At the district level, in-service training is provided by the District Institutes of Education and Training (DIETs). The Block Resource Centres (BRCs) and Cluster Resource Centers (CRCs) form the lowest rung of institutions in the vertical hierarchy for providing in-service training to school teachers.

Under the Sarva Shiksha Abhiyan (SSA) every teacher in a year gets 20 days training in the subject or in related area through DIETs.

Check Your Progress

8. What is the contribution of NCTE in upgrading the teacher education program?
9. List any five methods of improving teacher education programme.
10. Mention any three suggestions of NCTE to enhance the worth of teacher education programmes.

2.8 STRATEGIES FOR PROFESSIONAL DEVELOPMENT

The professionalization of distance education is controversial. Scholars like Keegan and Peters hold that Distance Education can be seen as a professional field. Those who consider it as a mode of teaching opined that there is little difference between on-campus and off-campus teaching. A competent academic or trainer can teach at a distance.

When a teacher enters into teaching profession, the knowledge and skills that she/he has acquired serve as only minimal requirements for work. Besides studying from the daily experiences, she /he has to remain in touch with the latest development in the field of education. The subject teacher has mastery over the content but feels handicap in imparting that knowledge to the students. In order to overcome this difficulty, she/he can take the following measures:

- Attend seminars, workshops, conferences
- Participate in exchange programmmes
- Publish and read articles in standard journals
- Abreast latest knowledge by reading books and articles

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- Pursue higher qualification
- Visit nearby institutions to get familiar with the different methods of teaching

Besides the above-mentioned programmes, other strategies are also used to enhance the professional preparation/development of teachers. Let us have a look at each programme.

Induction Programme for Novices

Transition from a pre-service teacher to an in-service teacher is a very challenging task. Though the pre-service teacher preparation programmes offer the basis of becoming a teacher, the actual classroom situation is new to them. Novices tend to have a limited knowledge base (about the subject, student, pedagogical procedure and classroom management). They have very general goals and are often chiefly concerned with students' personalities. Their planning tends to be inflexible, short-term and management focused. They mostly rely on direct instruction model.

Due to these limitations, they encounter some problems in the classroom. The following are the difficult areas faced by the novices.

- Large size classroom management
- Organizing activities
- Assessment procedures
- Dealing with individual differences
- Application of new strategies in classroom

The teachers from conventional system normally face the above mentioned difficulties. Whereas in the case of open and distance teacher educators, their problems are:

- Understanding the concept of open and distance education
- Self-learning preparation
- Assessment procedures
- Feedback from the tutors
- Limited support facilities

All novices might not be facing all these problems. Generally the novices can probably be divided into three groups. There are, first of all, 'the naturals,' a small number of novices who function as experienced teachers. Because they have had excellent preparation programmes and possess the personal traits that make it easy for students to like them, they do not encounter major problems. Second, there are 'the losers', a small number of novices whose failures are deeply ingrained. They are weak teachers who will continue to have major problems even after a few years' experience.

By far the largest number of novice teachers belongs to 'struggling beginners'. Their problems are developmental ones. Their problems exist due to lack of experiences. Even the best student teaching programmes cannot fully prepare novices for the realities of planning for teaching their own classes on a full-time schedule. They are not failing as teachers. Instead, they are experiencing stress that derives from having to master a very complex set of skills under quite difficult conditions.

In order to overcome the difficulties faced by the novices adequate support must be provided to them. Here support means an array of different types of infrastructure that help teachers to carry out their professional responsibilities. The support services are:

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- Administrative support
- Instructional support
- Technical support
- Community Support

Administrative Support: It includes instructional leadership, official recognition, and compliance mentoring by principles. It gives support for implementation of innovation and administrative decisions that provide teachers time and resources to carry out new instructional practices.

Instructional Support: This includes the support provided by the distance mentor with regard to content, instructional strategies, assessment procedures and the conceptual issues arising from change.

Technical Support: This comprises of giving assistance in handling machines and to fix computers, LCDs, etc.

Community Support: It includes the recognition of a teacher's efforts in the classroom by parents. This mostly takes place during the parent teacher association. They may be useful in emphasizing to the public the importance of continuing staff development and training and in sharing with programme leaders insights they have gained in employee training.

Among all the support, the most important is providing teachers the needed teaching-learning materials. The most important support for teachers is in the form of personal assistance i.e. helping a teacher to log on to the online course, provide time to plan a project, etc.

Professional Development through Mentoring

The idea of mentoring is rooted deeply in Greek mythology (Homer, 1980). The term 'mentor' originally comes from Homer's epic poem *The Odyssey*. As a good friend, Mentor was asked by Odysseus to watch over his palace and his son when he left to fight in the Trojan War. In this position of responsibility, Mentor coached and counselled Telemachus, Odysseus' son, guiding him in his development from infancy to early-adulthood.

A mentor is defined, as an influential, established, knowledgeable member of an organization who supports and commits to the upward mobility of a protégé's professional career (Mincemoyer & Thomson, 1998). Mentoring is a process in which a person is responsible for overseeing the career and development of another person. The mentor-student relationship develops over time and passes through various phases, namely the initiation phase, the working phase and the termination phase. In the initiation phase, the mentor and the student get to know each other. They provide support to each other. For the protégé, mentoring is an opportunity to learn from someone with more experience and knowledge. The second phase of the relationship is called the working phase, in which the student gets benefit from the relationship. The student gradually becomes independent and starts taking responsibility and need help less frequently. Due to less, the relationship enters into the final phase, i.e. the termination phase. This stage ends either positively or negatively. When it ends positively, supportive relationship will be retained. If it ends negatively, tension will exist between the mentor and the student.

The intensity of the coaching will vary with the novice's need and the mentor's time. The mentor should use the following coaching procedure:

1. Provide a knowledge base for the skill. If, for example , the novice needs to know how to handle a group activity, he or she should have knowledge about the following issues:
   (i) Seating arrangement
   (ii) Division of group
   (iii) Nature of group
   (iv) Activity distribution
   (v) Participation of all members in the group
   (vi) Codification of each group points
   (vii) Summarizing the final point

   The mentor should provide the knowledge before the coaching session takes place.
2. When the actual coaching session begins, skill should be explained in a step-by-step manner. Detailed expianations are necessary for skill mastery. Mostly the supervisors make only general suggestions. For example: 'You should start your class more efficiently'. Contrast that with the following specific explanation:
   - Do a quick check of attendance before starting the class.
   - Conduct a brief review of previous day's learning.
   - Start the class from the known to the unknown teaching points.
3. Demonstrate the skill step-by-step
4. Give room for practicing the skill
5. Provide constructive feedback
6. Specific arrangements should be made for the novice to use the skill when the mentor can observe and give feedback.

Strong mentoring through web technologies

Mentoring is an important programme in supporting new teachers. In distance teacher education programmes, web technologies can be used for mentoring purpose. Mentoring can be used in various ways:

- Access to mentors from same field
- Access to multiple forms of mentoring
- Access to specialized mentor feedback
- Access to mentoring collaboration

Access to mentors from same field: In this type of mentoring, new teachers are able to work with experienced teachers in the same field. Through online professional development, the teachers are able to connect individuals from the same fields regardless of distance. More than that, they are able to do collaborative work in a learning community atmosphere.

Access to multiple forms of mentoring: Usually mentoring refers to pairing of an experienced teacher with a new teacher and receiving guidance from her/him. However, in this form, the novices are able to connect not only with experts in their field, but also work with other new teachers in the same field, who are experiencing the same problems. This is possible through discussion forums, video chat and e-mail.

Access to specialize mentor feedback: In this mentoring process, video examples are provided to beginning teachers to view at their own convenience. The web technologies provide opportunity for different types of communication between mentor and beginning teacher.

Access to mentoring collaboration: In mentoring collaboration, mentors at a distance are able to meet together and discuss the ways to assist beginning teachers. Thus it improves the mentoring techniques.

ACTIVITY

If a programme is designed to make a list of educational best practices to be shared with teachers and you are asked to contribute. What will be your contribution?

DID YOU KNOW

In a survey conducted last year, 62% of the surveyed teachers reported seeing an increase in students whose behavioral problems interfered with teaching since they began teaching at their current school.

2.9 SUMMARY

In this unit, you have learnt that:

- The curriculum of pre-service elementary teacher education basically contains three types of components. These are Theory, Practice Teaching and Practical Work.
- The content of syllabus of components contains Education in Emerging Indian Society, History of Primary Education in India, Psychology of Teaching and Learning with special reference to children of age group 6-11 years, Assessment, Evaluation and remedial teaching, Health and Physical Education, School Management, Education of Children with Special Needs, Guidance and Counseling and Action Research.
- At secondary level the types of components and nomenclature of courses remains almost the same but more emphasis is given at Micro teaching, simulated teaching and Practice Teaching.
- Evaluation of teacher education programmes is quite traditional despite of several plans and strategies recommended to reduce the usual emphasis on external examination and to encourage internal assessment.
- To add to the objectivity of theoretical components various mechanisms like essay-type questions, short answer type questions, objective type questions, objective-based questions and oral examinations may be arranged.
- For democratic evaluation of inter evaluation components; all the activities like Art & Craft, Sports, Computer practical, Community Service, Tours & Excursions

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may be assigned marks. This system would ensure implementation of Continuous and Comprehensive Evaluation in teacher education.

- Teacher Education is an important instrument of National Development.
- The quality of a nation depends upon the quality of its teachers and the quality of teachers depends upon the quality of teacher education. Therefore, teacher education needs to update and innovate itself with the passage of time.
- National Council for Teacher Education (NCTE) is functioning in the field of developing and rationalizing teacher education since 1973. Teacher education programmes have reached new heights under its able guidance.
- The NCTE has taken steps time to time in order to standardize the institutions, enhance their reliability, and ensure objectivity of evaluation and Accreditation of teacher education institutions.
- The National Policy on Education - 1986 also has done a lot to overhaul the content, curriculum, methodology and evaluation processes of teacher education to make it updated and all capable.
- Even then, there are a lot of Shortcomings in the Teacher Education Programmes at various levels. These include Insufficient Duration, Excessive Content Load, Absence of ICT and Internationalization, Shortage of Quality Teacher Educators and Lack of Quality Teacher Education Institutions. To overcome these short comings the following steps may be suggested:
  - o A comprehensive and competent policy to update and renovate the content, curriculum, technology, methodology and evaluation process of teacher education programmes.
  - o Enhancing duration of teacher education programmes,
  - o Strengthening syllabus and curriculum through frequent revision of content,
  - o Application of Continuous and Comprehensive Evaluation System in teacher education programmes,
  - o Increasing the duration of School Internship,
  - o Subject Specific teacher education programmes,
  - o Compulsory accreditation for teacher education institutions,
  - o Making the teacher education ICT friendly and adding components suitable to international standards,
  - o Better liaison between schools and teacher education institutions,
  - o Quality teacher educators in teacher education institutions, and
  - o Development of practical, qualitatively updated, objective and standardized curriculum for teacher education programmes.

2.10 KEY TERMS

- **Missionary:** Member of a religious group on a religious mission in a foreign country
- **National Council for Teacher Education:** An Indian government body set up under the National Council for Teacher Education Act, 1993 (#73, 1993) in 1995, to formally overlook standards, procedures and processes in the Indian education system
- **Tertiary:** Third in order or level

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- **NCERT:** an apex resource organization set up by the Government of India, with headquarters at New Delhi, to assist and advise the Central and State Governments on academic matters related to school education
- **Rehabilitation Council of India:** The apex government body, set up under an Act of Parliament, to regulate training programmes and courses targeted at disabled, disadvantaged, and special education requirement communities
- **Curriculum Development:** The process of creating planned curriculum, pedagogy, instruction, and presentation modes
- **Curriculum Planning:** The process of setting goals, developing strategies, and outlining tasks and schedules for the setting of courses, coursework and course content
- **Micro Teaching:** Microteaching is a training technique whereby the teacher reviews a videotape of the lesson after each session, in order to conduct a post-mortem
- **Open and Distance Learning:** A field of education that focuses on the pedagogy, technology, and instructional system designs that aim to deliver education to students who are not physically onsite in a traditional classroom or campus

2.11 ANSWERS TO 'CHECK YOUR PROGRESS'

1. In India there are two types of teacher education programmes. These are Elementary Level Teacher Education programmes and Secondary Teacher Education programmes. D Ed and DETT Elementary Level Teacher Education programmes, whereas B Ed and B El Ed are examples of degree programmes in teacher education.
2. Curriculum is the sum of the learning which is planned and guided by the school, whether it is carried on in groups or individually, inside or outside the school (John Kerr). It is the totality of learning experiences provided to students so that they can attain knowledge, experience and skills through a variety of learning activities in the classroom and school.
3. Highlighting the need and importance of a good curriculum the Kothari Commission (1964-66) stated that 'essence of a programme of teacher education is quality and in its absence; teacher education becomes not only a financial waste but source of overall deterioration in educational standards.'
4. The three types of components of the curriculum of teacher education programme are Theory, Practice Teaching and Practical Work.
5. The course content of teacher education programme includes Education in Emerging Indian Society, History of Primary Education in India, Psychology of Teaching and Learning, Diagnostic Teaching and remedial teaching, Health and Physical Education, School Management, Education of Children with Special Needs, Guidance and Counseling and Action Research.
6. A comprehensive, objective and transparent system of evaluation in teacher education is necessary to evaluate the worth, usability, objectivity and shortcomings of a teacher education Programme. Evaluation also helps in bettering the programme to meet the needs of school, society and the nation.

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7. Innovation means to apply alternative solutions to solve the existing traditional problems in education. It helps to bring holistic changes of educational system and management, leading to the use of new content, methodology, technology and evaluation strategy for modernization of teacher education.
8. NCTE has helped actively in updating the course content, learning materials, transactional methodology and educational technology to make the teacher education to match the needs and requirements of the new millennium.
9. Teacher education programme can be improved through (i) Enhancing the duration of teacher education programmes (ii) Updating the syllabus and curriculum through frequent revision of content (iii) Increasing the duration of school internship (iv) Making teacher education ICT friendly (v) To ensure quality teachers in education institutions.
10. Better liaison between schools and teacher education institutions, Quality teacher educators in teacher education institutions, and development of practical, qualitatively updated, objective and standardized curriculum for teacher education programmes are the three means suggested by the NCTE for bettering the teacher education programmes.

2.12 QUESTIONS AND EXERCISES

Short-Answer Questions

1. What is the ultimate goal of in-service teacher development programmes?
2. What is meant by pedagogical theory?
3. How does teacher education change at different levels?
4. What is curriculum planning?
5. What is the need and importance of innovations in teacher education?
6. List the objectives of IGNOU's B. Ed. Programme.

Long-Answer Questions

1. Write a note on the types and features of teacher education programmes in India
2. Explain the role of NCTE, NPE 1986, POA 1992, NCF 2005 and NCFTE 2009 for the development and innovations in the teacher education programmes.
3. Discuss the need and importance in teacher education programmes.
4. List the shortcomings in the structure, curriculum and evaluation system of teacher education programmes.
5. Discuss innovative means and measures of modernizing the teacher education programmes in India.

2.13 FURTHER READING

B K Nayak. (2010). *Education in Emerging Indian Society.* New Delhi: Axis publications.

Bhatnagar, Suresh. (2004). *Education in India.* Meerut: Loyal Book Depot.

Distance Learning History. (2005). *California Distance Learning Project.* http// www.cdlponline.org/index.cfm.

IGNOU. (2006). *Bachelor of Education Programme Guide*, New Delhi: School of Education, IGNOU.

Keegan, D. (1980). *On Defining Distance Education.* Distance Education Volume 1, pp 13-36.

Bihari, Lal Raman. (2004). *Bhartiya Shiksha ka Vikas avm uski Samasyen.* Meerut: Rastogi Publications.

UGC. (2003). *Model Curriculum.* New Delhi: University Grants Commission.

Mohan, Radha. (2011). *Teacher Education.* Delhi: PHI.

Ravi Samuel S. (2011). A *Comprehensive Study of Education.* New Delhi: PHI Learning Private Limited.

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UNIT 3 MODIFICATION OF TEACHING BEHAVIOUR AND STUDENT-TEACHING PROGRAMME

Structure

3.0 Introduction
3.1 Unit Objectives
3.2 Teacher Behaviour
3.3 Student-Teaching Programme
3.4 Micro-Teaching
3.5 Flanders' Interaction Analysis Category System (FIACS)
3.6 Simulated Teaching
3.7 Problems Related to Student-Teaching Practice and Internship
3.8 Summary
3.9 Key Terms
3.10 Answers to 'Check Your Progress'
3.11 Questions and Exercises
3.12 Further Reading

3.0 INTRODUCTION

Generally, the behaviour of a teacher, in the classroom in particular, has a great bearing on the development and shaping of the behaviour of the students and in their participation in the teaching–learning process. Basically, teacher behaviour has two components—(i) verbal and (ii) non-verbal. According to Ryans (1969), teacher behaviour in the activities of persons as they go about doing whatever is required of teachers, particularly those activities which are concerned with the guidance or direction of the learning of others. McNergency and Carner (1981) regard teacher behaviour as a function of the characteristics of a teacher, his/her environment and the tasks in which the teacher engages.

Micro-teaching is one of the most recent innovations in teacher education/training programme which aims at modifying a teacher's behaviour according to the specified objectives. Micro-teaching is a controlled practice that makes it possible to concentrate on teaching behaviour in the student-teacher training programme. For removing some of the deficiencies of the demonstration lessons based on traditional lines, mechanism of simulated teaching is adopted in teacher training. Thorough simulated teaching i.e., playing the role of teachers in their own institution within their own group of fellow trainees and thereafter they are sent to schools for practice teaching.

Several techniques have been devised to observe and analyse teacher behaviour and interaction analysis in the classroom. One of the most important teacher training technique was developed by Ned. A. Flanders in 1959. In Flanders' interaction analysis system, the entire classroom interaction is put into three main sections: (i) teacher talk, (ii) student talk, and (iii) silence or confusion. The technique basically helps in the grouping of students.

In this unit, all the aforementioned topics of teaching behaviour and student-teaching programme have been covered in detail.

3.1 UNIT OBJECTIVES

After going through this unit, you will be able to:

- Explain the various aspects of teacher behaviour
- Describe the features of student-teaching programme
- Paraphrase the concept of micro-teaching
- Explain the basic assumptions of Flanders' Interaction Analysis Category System (FIACS)
- Discuss the utility of simulated teaching
- Recognize the problems related to student-teaching practice and internship

3.2 TEACHING BEHAVIOUR

Behaviour of a teacher makes him/her leave an impression on the teaching profession as a whole. So the required type of behaviour is a must for an effective and efficient teacher, hence there is a need to modify the teacher's original behaviour according to the requirements of the profession. From time to time, the educationists and psychologists have made efforts to address the issues related to teaching methods. The behavioural technology has contributed significantly in this direction. The teaching process can only be developed and improved when teacher-education institutions can prepare effective teachers.

The major assumption of training technology is that the affective-teachers are not only born but they can also be prepared by the use of feedback devices. It is the postulate of D.G. Ryan's Theory of Teacher-Behaviour that teacher behaviour is modifiable.

There are various feedback devices which are used for the modification of teacher behaviour. These are considered new innovations and current practices in teacher education programme.

Teacher behaviour includes personality characteristics, dispositions, attitudes, dominance or submission, sensitiveness or shyness and the number of greetings, and so on. Teaching behaviour, on the other hand, refers specifically to a number of acts or activities of operations of teaching of a teacher in the presence of pupils with the intention of achieving teaching-learning goals. It comprises saying or writing something on the blackboard, explaining, demonstrating, asking questions, responding, reacting, directing, praising, encouraging or reprimanding. The teaching behaviour conceived in this way becomes a system of activities or acts or operations which can be analysed in terms of each specific activity or act or operation. It employs the intellectual process in a well organized form.

The three stages of teaching behaviour are: (i) Preactive, (ii) Interactive, and (iii) Postactive. In the preactive stage, there is no face-to-face encounter between the teacher (T) and the student (S). The teacher prepares the blue-print of the acts or activities or operations of teaching to be carried out during his/her teaching in the class. All these activities are planned behind the scene. The second stage is very crucial in the teaching learning process. It is a face-to-face encounter. Here, both the teacher and the students are active. This stage consists of activities which the teacher performs with the students. The postactive stage comprises activities of the teacher after the interactive stage. The teacher no longer faces his/her students at this stage. He/She is concerned with the retrospective analysis of the events, or incidents which occurred during the interactive stage.

Major characteristics of teaching behaviour

Some of the major characteristics of teaching behaviour are as follows:

(i) ***Teaching behaviour is an interactive process:*** Teaching behaviour is a social phenomenon arising out of the interaction between a teacher (T), a student (S), and a specific content (C). A teacher (T) in his teaching behaviour plans, organizes and implements the instructional strategies to bring about appropriate changes in the student (S) by organizing the content (C). The content is also designed as a subject of study or discipline.

(ii) ***Teaching behaviour is a goal directed activity:*** A teaching activity loses its relevance and rationality without a specific goal. Behavioural objectives form an important part of teaching behaviour. Such objectives imply the changes that are envisaged to be brought about in the students through teaching behaviour of the teacher. The behavioural objectives of teaching determine the levels of achievement of the students. Teaching behaviour is thus a goal directed activity.

(iii) ***Teaching behaviour includes several skills:*** Teaching behaviour draws heavily from the cognitive powers and scholastic achievements of the person engaged in it. Teaching behaviour includes a variety of cognitive, social, managerial and manipulative skills. The cognitive skills relate to the logical, linguistic and the subject matter control, the social skills involve the manner or method of handling the questions and responses of the students, the managerial skills refer to the particular way in which the problem of relationship or adjustments among students is tackled and the manipulative skills involve the various physical movements or performances which help in focusing attention and arousing motivation and sustaining it. All these skills are interrelated.

(iv) ***Teaching behaviour is a social act:*** Teaching behaviour exists in a context of social interaction. The acts of teaching lead to reciprocal contacts between the teacher and the students, and the interchange itself is called 'teaching'.

(v) ***Teaching behaviour is a linguistic act:*** Language is an important and critical factor in the effectiveness of the teaching behaviour. Broadly speaking, teaching behaviour in the classroom may be sorted out in the following five categories:

(a) Verbal fluency
(b) Optional information amount
(c) Number of principles, concepts, comparisons, contrasts etc
(d) Interest developing or attention seeking statements
(e) Vagueness

(vi) ***Teaching behaviour is a logical act:*** Each variety of teaching behaviour involves logical operations in the form of defining, describing, stating, reporting, substituting, evaluating, opining, classifying, comparing and contrasting, conditional inferring and explaining. Socrates provided us a model for the use of logic in instruction. In recent times, other logical models were advocated by Dewey, Kilpatrick and Piaget. John Dewey argued that the rules of successful enquiry are in fact, the

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rules of logic. The concern for enquiry and discovery in problem solving method of education is the contemporary manifestation of the trend of rules of logic.

(vii) ***Teaching behaviour is a unidirectional activity:*** In a given teaching-learning situation, it is the teacher (T) who tries to influence the student (S). It is very rare that the students influence their teachers. It is, therefore, a one-side directed activity. Direction is from the side of the teacher. Teaching behaviour, is therefore, called 'unidirectional activity'.

(viii) ***Teaching behaviour is non-symmetrical:*** Effect of the teaching-learning is not the same on the teacher and the students. Rarely do the students intend to influence their teachers. If at all, a teacher is influenced by his/her students, it is just a casual or incidental effect. It is not deliberate. Smith calls the teaching behaviour non-symmetrical as the teacher influences the students and students may at times influence the teacher.

Teachers are made as well as born. Teaching behaviour is acquired through both training and experience, and as such it is modifiable. Some teachers may possess natural capacities or aptitudes, but the scope of their modifiability is quite considerable. Situations are not static. They change from time to time. So teaching behaviour also needs modification in order to meet the challenges of the new situations effectively. Programmes of teacher training all over the world have been planned on the assumption that it is economically, education-ally and psychologically sound to modify teaching behaviour so as to achieve desirable goals. The strategies used for modifying and improving teaching behaviour are: (i) simulation and gaming, (ii) micro-teaching, and (iii) action research.

Sequential pattern of teaching behaviour

The series of acts such as presenting some information to students, asking questions, eliciting responses from students, praising or encouraging them, confirming the correctness or otherwise of the responses and again proceeding to give information or explanation about facts or concepts being presented constitute the sequential pattern of classroom behaviour. Teaching activities are understood as related or sequential pattern of behaviour and not as a discrete or independent set of behaviour.

Sequential pattern of teaching behaviour in the classroom may be described by using the strategic and tactical concepts. It may be kept in view that strategic and tactical concepts are related with each other and are not contradictory or independent.

A strategy denotes a generalized plan of a lesson which includes structure, desired learner behaviour and an outline of planned tactics. A tactic may be described as a goal-linked influencing behaviour of the teacher—the way a teacher behaves in the instructional situation. A tactic is, therefore, a short term device and it may range from one question or statement to a complex or verbal or purposeful non-verbal teacher behaviour interlaced with student behaviour.

3.3 STUDENT-TEACHING PROGRAMME

Student teaching is the practical test of teacher's ability, efficiency and professional effectiveness. It determines his/her status and image among the students, among other teachers of the school and locality as well as in the society to which he/she belongs, therefore, he/she must master the art of student teaching.

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There are two terms involved in the concept of student teaching—(i) student, and (ii) teaching. 'Students' means a group of persons when we are going to teach and who all possess the traits required for a student such as personality, intelligence, etc. Teaching is an activity in which the teacher influences upon the minds of the students. It involves interaction between the teachers and the taught. It should be well planned, well designed and well thought of resulting into some change in behaviour that is learning.

Thus, student teaching means teaching a student, or to train a person for teaching effectively or to make a person good teacher or to employ the energy, ability and efforts of the students in order to make teaching effective. It emphasizes teachings as well as learning. Practice teaching emphasizes only teaching while student teaching emphasizes on teaching as well as learning. It emphasizes evaluation while student teaching emphasizes student's capabilities.

A functional programme of student teaching offers a challenge to the student teacher of acquiring and understanding of the fundamental teaching learning process, knowledge of the problem of actual teaching and a mastery of the skill of directing the learning of boys and girls. The contemporary student of teaching meets such a challenge through a positive orientation involving his/her attitude towards teaching in general, his/her concept of student teaching and his/her activities as a student. He/She takes the initiative in planning, outlining and conducting various activities rather than expecting the supervising teacher on college coordinator of student teaching to assume all such responsibility.

Definition of student teaching

(i) *Student teaching is a professional experience:* The professional experience of student teaching is designed to demonstrate educational theory in practice and aid the student to develop practical skill from the theory learned.

(ii) *Student teaching may be defined as a directed learning experience:* During student teaching, a student becomes increasingly responsible for guiding and directing a group of learners.

(iii) *Student teaching is essentially a teaching learning situation:* Student teaching implies that the activity is essentially a teaching learning situation in which the student-teacher is regarded as a 'student of teaching' by his/her 'teacher'. He/She is at times called the supervising teacher or the critic teacher.

(iv) *Student teaching is a complex activity:* Student teaching is as complicated as are teaching and learning. Its primary purpose is to facilitate the growth of the student through a professional learning experience.

(v) *Ideal opportunity of direction:* Student teaching is an ideal opportunity for directing student-teachers towards the development of self-analysis and self-improvements.

Programme of student teaching

Thus, student teaching is a learning process that provides experiences for development towards good teaching through which a student teacher secures guided experiences as a preparation for all the aspects of his/her professional career.

The traditional concept of teaching practice was rather limited in its scope in the sense that it considered practice teaching as a formal requirement needed for fulfilling the practical requirement of the university examinations. The present programme largely includes the following:

(i) Observation of demonstration lesson given by the faculty lecturers, and competent teachers drawn from the cooperating schools and practice lessons given by other student-teachers.

(ii) Preparing lesson plans, teaching aids and other auxiliary instructional materials.

(iii) Teaching of different type of lessons in the two selected subject areas.

(iv) Discussion of lessons with a view to improve the student-teachers teaching skills.

Before they undertake the task of teaching under the guidance and supervision of the concerned faculty members of the college the student-teachers are generally put through an initial programme of observation. This does not include participation of the student-teachers in co-curricular or other school activities.

Student teaching is a programme introduced to put the student-teacher through the initial steps of teaching experience. It seeks to develop the student-teachers ability to teach the school student effectively and acquire the techniques to help children to know the content taught to them.

Student teaching and taxonomy of objectives

Concept of student teaching on the basis of taxonomy of objectives, relate to three domains—(1) cognitive, (2) affective and (3) psychomotor, can be understood well which may be given in the following manner.

(1) Cognitive domain

Objective – I: The student-teacher acquires knowledge and understanding of the instructional planning, instructional preparation, instructional evaluation, etc.

Specifications: The student-teacher (i) Recognizes, (ii) Recalls, (iii) Compares, (iv) Contrasts, (v) Discriminates, (vi) generalizes, (vii) Detects, and (viii) Makes critical comments on the teaching of other student teachers.

Objective – II: The student-teacher applies the above knowledge and understandings to new and unfamiliar teaching situations.

Specifications: (i) The student-teacher selects relevant books and materials, (ii) analyses the content into teaching points, (iii) selects relevant activities, method and aids, (iv) judges adequacy of methods, materials and aids, (v) selects instructional materials, evaluation tools, assignments, (vi) predicts student behaviour, (vii) analyses the student result; and (viii) interprets students performances.

(2) Affective domain

Objective – III: The student-teacher develops proper interests, attitudes, and values relating to teaching profession and procedures.

Specifications: The student teaching teacher (i) deals with students kindly and system pathetically, (ii) respects colleagues and authorities, (iii) develops spirit of cooperation, (iv) attempts for professional growth, (v) contributes for professional journals, (vi) writes books on education and educational content, (vii) become a member of professional unions, and (viii) respects professional ethics.

(3) Psychomotor skills

Objective – IV: The student-teacher develops the needed professional skills.

Specifications: The student-teacher (i) prepares his/her own lesson plans and teaching aids, (ii) improvises apparatus and equipment, (iii) uses chalk-board judiciously, (iv) demonstrates, exhibits and experiments, (v) conducts tests to know entry behaviour and exist behaviour, (vi) gives assignment, (vii) supervises students' activities, (viii) maintains good discipline in the classroom, (ix) scores answer scripts, tabulates results and makes use of them, (x) organizes co-curricular activities, and (xi) organizes remedial instructions.

In student teaching, we generally have three things:

1. How they will be able to behave (teachers).
2. How would they deal with the problem of the students in the class?
3. Make aware or to guide.

Objectives of student teaching

An overall and long range aim of a programme of professional education for teachers is to effect the qualitative professional education for teachers for qualitative improvement of the entire educational system. The development of new knowledge in various fields is not likely to lead a nation much further until the new knowledge is appropriately passed on the next generation for conservation and further advancement.

An appropriate communication implies not only a thorough knowledge of the subject matter, but also an adequate mastery of the scientific art of communication in terms of techniques and methodology of teaching. Therefore, as aptly put by the Education Commission: 'Investment in teacher education can yield very rich dividends because the financial resources required are small when measured against the resulting improvements in the education of millions. First rate teacher training institutions can thus play a crucial role in the development of education.'

In order to achieve this long range aim, more precise thinking needs to be done regarding the objectives of a student teaching programme. The actual planning and execution of the programme should be directly related to objectives. The students will learn better if they are acquainted with the objectives of their educational activities. Students' evaiuation will be valid only if it is in order to:

- Teach in the art of teaching.
- Turn them into effective teachers.
- Convert a raw teacher into a refined stuff of teacher—student-teacher must be equipped with all necessary desirous theoretical as well as practical details which may convert him/her into a good teacher so the main purpose is to prepare good teacher into different subject.
- Create learning in the environment—a socio-emotional climate should be created in the classroom.
- Develop an ability to organize the content according to respective level of teaching.
- Develop an awareness in him/her for the choice of methodology, choice for developing a skill, gaining knowledge, understanding about the alternative use of methodology, giving assignments, etc.
- Provide training in the process of evaluation its significance and techniques.

- Develop competence with regard to preparing a lesson by using a technique, methodology and minimum knowledge, to prepare leaching aids.
- Provide a variety of exposure to experience in different situations pertaining to different areas.
- Create an environment in teacher education programme to develop a positive attitude any healthy vision among student-teachers so that they may take genuine interest during the time of lesson planning.
- Develop a comprehension and prospective of genuine and real classroom situation among student-teachers.
- Develop good understanding of different type of abilities of the students who are slow learners. Student-teacher should make lesson plan in such a manner that it may fulfil the category of three groups: (a) bright, (b) average, and (c) slow learners.
- Develop class management for effective teaching and learning.

The general objectives of student teaching can be summed up as follows:

(i) To acquaint students with different approaches of teaching and communication techniques and help them to develop skills and competencies in using narration, questioning, dramatizing, black-board writing and sketching, etc.

(ii) To expose the student-teachers to a variety of teaching learning situations to help them to develop into a good classroom teacher according to their capacity and zeal.

(iii) To build up awareness for acquiring and imparting knowledge and skills for developing desirable attitude and interest in students and providing experiences in using the curricular programme of the school. It may include study skill, abilities like consulting library, reading with speed and comprehension and expression with enough to the point detail, discussion with conviction and arguments, proper and expressive language, healthy and aesthetic intellectual interest to explore and determine one's own interest and important attitude is the democratic attitude which includes national and emotional integration, tolerance and open mindedness.

(iv) To impart him/her minimum essential technical "know how" and to develop skills in preparing simple teaching aids and using audiovisual material and aids.

(v) To develop, in him/her the competence with regard to learning material, techniques of teaching and teaching aids according to the needs of individual pupils and those of local community (particularly, in rural setting).

(vi) To introduce him/her with different evaluative devices, tools and their uses. In evaluating the growth pattern of the child.

(vii) To develop in him/her reasonable competence in designing good question papers and tools for internal assessment and to use them with fair objectivity.

(viii) To develop in him/her the ability for interpreting results and for reporting students' progress.

(ix) To provide the trainee practice in different kinds of lessons—knowledge lessons, skill lessons and lessons of appreciation at both middle and higher stages.

(x) Ability to budget the syllabus according to the purpose and time available.

(xi) To acquaint him/her, as fully as possible, with the problems which a teacher usually faces in real school situations, and indicate to him/her possible ways and means of dealing with them effectively.

(xii) To assimilate in him/her, as far as possible, a favourable attitude to a democratic way of life, and to introduce him/her to the ways and means of building up the same in students.

(xiii) To prepare him/her for performing other professional duties in the school, parents and community.

(xiv) To help him/her to develop a good understanding of how to identify the talented and good students; slow learners and low achievers and the ability to assist them to meet their needs (remedial teaching should be done for removing the difficulties of the pupils and guiding the gifted).

(xv) To enable him/her to feedback of the fundamentals of education and psychology in the classroom, school, and his/her dealings with parents and community.

Whereas the above objectives will constitute the basis for building up the programme of student teaching in all colleges of education, some of them may experiment with a more challenging teacher education programme, depending upon the availability of resources and expertise.

Scope of student teaching

As the teacher has to participate fully in the totality of experience which the school can offer, the scope of such activities has to be wide. Such activities comprises participating in co-curricular activities, organizing an effective library services, providing guidance in choice of courses and careers, reporting students progress to parents, maintaining records and registers, and planning for purchasing equipment and apparatus. All these require opportunity of training and experience for the professional efficiency of the student-teachers.

A comprehensive programme of student teaching may therefore, include the following:

1. Observation of pupils and their characteristics behaviour.
2. Observation of good lesson.
3. Classroom teaching including use of discussion, problem solving and experiment-cum-demonstration approach.
4. Organization and guidance of practical work in the field laboratory or workshop.
5. Organization and participation in co-curricular activities and programmes.
6. Planning for the equipment in a department or laboratory and maintaining the service of its facilities to students.
7. Critical study of various school services and planning to improve them, e.g., school and class libraries, guidance service, mid-day meal, etc.
8. Preparation and use of audio-visual material.
9. Maintenance of cumulative records conducting case studies and using sociometric technique, etc.
10. Planning, challenging assignments and attending correction work.
11. Development of tests and other evaluation procedures to test achievement in a unit or topic.
12. Participation in school assembly, important events or days staff meeting.
13. Induction into the organization of the school, its office and departments.

14. Studying resources in the community and utilizing the same for strengthening class teaching and other school programmes.
15. Using performance for self-assessment and about the progress gained.

In the words of James B. Conant, 'the student-teacher should be gradually trained to assume full responsibility for an extended period of instruction which he/she plans, executes and evaluates'. It is towards this end that the student teaching programme may be directed with advantage. The period of student teaching is of vital significance in the programme of teacher preparation.

It is during this experience period that the needed skill and insight will be gained and proper attitudes towards students, towards teaching and the profession generally will be formed. A thorough look on all aspects of student teaching and its organization is, therefore urgently needed so as to bring the stated objectives within a reach.

In brief, it can be said that if the efficiency is to be brought in student teaching programme, aforesaid objectives should be realized. But it is unfortunate that in our existing student teaching programme, the main emphasis is on the theoretical aspects rather than on the practical ones. There is a lack of teaching-learning situations to which the student-teachers are exposed.

As regards the communication techniques, strategies are made for developing and preparing audio-visual aids, evaluation tools, and preparing items. Interpreting results, reporting students' progress, ability to budget the syllabus, ability to deal with parents and community, is not developed and instead only the theoretical knowledge is provided to the student-teacher. It may be because of lack of effective teacher-educators, lack of motivation on the part of the student-teachers, and pupils or lack of proper organization of student teaching programme.

The challenge before the framers of the teacher education programme is how to realize these objectives of student teaching and also to think of what other objective of student teaching needs to be realized.

Organization of student teaching

The success of any educational system depends, largely, upon the qualities of teachers. The teacher education institutions play a very important role in improving the system of education by educating teachers. Student teaching is recognized as the most important aspect of the preparation of teachers. Every training institution should organize and make provision for the supervision of student teaching adequately.

Student teaching is the nucleus of any pre-service teacher training programme. The student-teachers get an opportunity to gain practical experiences of many useful things that they learn in theory classes. While organizing an effective programme of student teaching, some of the important aspects that need to be considered are as under:

(i) **A series of general lectures:** Before the student-teacher starts actual teaching in schools, it is necessary to give him/her a general background of some significant spheres of teaching so that he/she may attain a good mental preparation and awareness of such teacher education aspects as professional courses, teacher's professional growth, place of curricular activities, human relations in schools. Use of library, components of successful teaching, maxims to teaching, methods of teaching, types of lessons, use of teaching aids, class management strategies, planning of units and individual lessons.

(ii) **Demonstration lessons:** The main purpose of demonstration lessons is to expose the student teachers to certain teaching situations. By observing the lessons of good and experienced teachers, student teachers get an opportunity to examine the points critically which they have learnt in theory.

Some training situations arrange before practice teaching and some do after initially starting the practice teaching. It seems proper if demonstration lessons are organized before practical teaching as when student teacher feels some difficulty during practice teaching. As for the number of lessons in each method of the subject, it seems worthwhile to fix at least 25 lessons in each.

The demonstration lessons should preferably be delivered in the training colleges rather than in the schools. Each demonstration lesson and some of the practice teaching lessons should be followed by discussion by staff and students. The demonstration lessons may either be impacted by Training College Staff or by Effective School Teachers, or both.

3.4 MICRO-TEACHING

Micro-teaching is one of the most important developments in the field of teaching practice. It originated in Stanford University in 1963. The workers in the Centre for Research and Development in Teaching evolved an approach to practical teacher training. Micro-teaching is a more analytical method and completely new approach to provide the feedback. It is considered to be a mechanism of feedback device for the modification of teacher trainees.

Micro-teaching provides teachers with a practice instruction in which the normal complexities of classroom are reduced, and in which the teacher gets feedback on the performance.

Micro-teaching is a training procedure aiming at simplifying the complexities of the regular teaching process. In a micro-teaching procedure, the trainee is engaged in a scaled down teaching situation. It is scaled down in terms of class size, since the trainee is teaching a small group of four to six students. The lesson is scaled down in length of class time and is reduced to five or ten minutes. It is also scaled down in terms of teaching tasks.

These tasks may include: the practising and mastering of a specific teaching skill such as lecturing, questioning or leading a discussion; mastering of specific teaching strategies; flexibility; instructional decision-making; alternative uses of specific curricula, instructional materials, and classroom management.

The short lesson is recorded on an audio- or video-tape recorder and the trainee gets to hear and see himself/herself immediately after the lesson. The students who attend the lesson are asked to fill in rating questionnaires evaluating specific aspects of the lesson. The trainee's own analysis of the lesson based on the authentic feedback from the tape together with the students' reaction and a supervisor's analysis and suggestions, assists the trainee in restructuring the lesson, which he/she then immediately re-teaches to a new group of students. Further assessments by the 'learners' and the supervisor lead to further improvements when he/she teaches again, either immediately after or several days later.

Definitions of micro-teaching

Allen (1966) defines micro-teaching as a 'scaled down teaching encounter in class size and classtime'.

Clift and others (1976) have recently defined "Micro-Teaching as a teacher training procedure which reduces the teaching situation to simpler and more controlled encounter achieved by limiting the practice teaching to a specific skill and reducing teaching time and class size."

Mc Aleese and Urwin (1970) suggest that the term "Micro-Teaching is most often applied to the use of closed circuit television (CCT) to give immediate feedback of a trainee teacher performance in a simplified environment," but suggest that Micro-Teaching is best viewed as a form of simulated teaching usually incorporating reduced complexity and some feedback placed "along s simulation spectrum ranging form the purely abstract textbook of teaching practice through to actual classroom teaching"

"Micro-Teaching is defined as 'a' teacher education-technique which allows teachers to apply with defined teaching skills to a carefully prepared lesson in a planned series of five to ten minutes encounters with a small group of real classroom students, often with an opportunity to observe the performance on videotape" (Bush 1968).

The above definitions indicate the following features of Micro-Teaching.

1. It is a real teaching but focuses on developing teaching skills.
2. It is a scaled down teaching.
   (a) To reduce the class size 5 to 10 pupils.
   (b) To reduce the duration of period 5 to 10 minutes.
   (c) To reduce the size of the topic.
   (d) To reduce the teaching skill.
3. It is a highly individualized training device.
4. It provides the feedback for trainee's performance.
5. It is training devices to prepare effective teachers.

Assumptions of micro-teaching

Micro-Teaching is an idea at the core of which lie five essential propositions:

1. Micro-Teaching is a real teaching, but its focus is to develop certain teaching skill and not the development of pupil's abilities.
2. Micro-Teaching lesson reduce the complexities of normal classroom by scaled down class size, content and time.
3. Micro-Teaching focuses on training for the development of specific teaching skills. One skill is practiced during course of teaching and brings it upto the mastery level.
4. Micro-Teaching permits for the increased control o practice by providing the feedback to the pupil-teachers. A high degree of control can be imposed on the training programme.
5. Micro-Teaching greatly expands the normal knowledge of results or feedback to teaching. It is highly individualized training programme.

Micro teaching cycle

Activity	Time in Minutes
Plan	6
Teach	6
Feedback	6
Re-Plan	6
Re-Teach	6
Re-Feedback	6

B.K. Passi and L.C. Singh (1976) have described the following 13 skills:

1. Writing instructional objectives
2. Introduction a lesson
3. Fluency in questioning
4. Probing questioning
5. Explaining
6. Illustrating with examples
7. Stimulus variation
8. Silence and non-verbal cues
9. Reinforcement student participation
10. Increasing pupil participation
11. Using blackboard
12. Achieving closure
13. Recognizing attending behaviour

The meaning of important teaching skills is being discussed here under:

1. *Stimulus variation:* It comprises deliberate varying of different attention producing behaviours by the teacher or instructor in order to grab full attention of students.
2. *Set induction:* It refers to the development of cognitive rapport between pupils and teacher to obtain immediate involvement in the lesson.
3. *Closure:* This skill is complementary to set induction. It is more than a quick summary of the portions taught and the pupils are able to relate new knowledge with the previous one.
4. *Silence and non-verbal cues:* The use of silence and non-verbal cues is powerful device in order to encourage pupil's participation in classroom-teaching.
5. *Skill of reinforcement:* It involves teacher encouraging pupil's response using verbal praise, accepting their responses or non-verbal cues like a smile.
6. *Fluency in questioning:* This is a skill in asking question. By fluency we mean the use of as many questions as possible in a given period of teaching.
7. *Probing question:* Probing requires that teachers ask questions that need pupils to go beyond superficial first answers of questions.
8. *Recognizing and attention behaviour:* The successful teacher is more sensitive to note the interest or boredom of pupils through visual cues.

9. *Illustrating and use of examples:* The use of good examples and clear teaching are basic skills to teaching.
10. *Skill of explaining:* An explanation is a set of interrelated statements made by teacher in order to increase the understanding in the pupils about ideas and concepts.
11. *Skill of increasing pupil participation:* This skill involves the four components creating set questioning, encouraging pupil activities and pausing in such a way that pupil participation is maximized.
12. *Skill of writing objectives:* It involves the following activities – identifying objectives, analyzing the task and writing objectives in behaviour all terms with regard to adequate learning.
13. *Skill of using blackboard:* This skill requires legibility, neatness, appropriateness, continuity, simplicity of blackboard work. It is very essential skill for a successful teacher. The effectiveness of presentation depends on the proper use of blackboard.
14. *Skill for class management:* This skill involves a number of activities and a teacher performs for creating and maintaining conductive environment of re learning in the classroom.
15. *Skill of using audio-visual aids:* It implies the effective use of appropriate teaching aids to make teaching interesting and desired objectives can be achieved. The effective use of audio-visual aids makes the pupil active and attentive in classroom.
16. *Skill of giving assignments:* This skill consists of the pupils to organize and assimilate the learnt material.
17. *Skill of pacing lesson:* The pacing of a lesson means the variation in the teaching speed. This skill involves adjustive devices for satisfying the needs of the pupils or student variation.
18. *Use of higher order question:* This skill involves the questions which cannot be answered by memory or sensory description. The questions consist of rules, principles and generalizations.
19. *Divergent Question:* It requires the respondent to organize elements into new pattern, predict, or infer from the situation. This skill involves higher order of thinking creativity.
20. *Lecturing:* It requires the effective presentation of content by using appropriate techniques and devices of teaching aids. This is known as communication competency.
21. *Planned repetition:* It is a powerful skill in focusing and highlighting important points of teaching.
22. *Completeness of communication:* It is a skill which is developed by sensitivity training for a clear communication o ideas and concepts in teaching. The teachers are more responsive to possible miscommunication.

Micro-teaching procedure

Clift and others (1976) have given three phases of micro-teaching procedure:

I. *Knowledge acquisition phase:* It involves two major activities:
   (a) To observe demons rationed skill.
   (b) To analyses and discuss demonstration.

II. *Skill acquisition phase:* Three activities are performed under this phase in the following sequence:
   (a) To prepare micro-lesson.
   (b) To Practice teaching skills
   (c) To evaluate the performance.

   The evaluation activity provides the basis to re-plan the lesson for re-teachings the same topic to practice the same skill.

III. *Transfer phase:* After acquiring skills in the second phase, the students are given a chance to use the skill in normal classroom teaching situation.

The microteaching procedure involves the following steps:

1. A particular skill is defined to trainees in terms of teaching behaviours to impart the knowledge and awareness of teaching skills.
2. These specific skills are demonstrated by the expert or shown through videotape or film to the teacher's trainee.
3. The student teacher plans a short lesson in which he can practice a particular skill.
4. The pupil-teacher teaches the lesson to a small group of pupils which is observed by supervisor or peers or videotape or audio taped.
5. The teaching is followed by a discussion that is conducted to generate feedback to the students, The videotape or audiotape may be displayed to observe his/her own teaching activities by the trainee. The awareness of own teaching performance provides the reinforcement to the pupil-teacher.
6. In the light of the discussion and suggestions the student-teacher replans the lesson in order to practice the same skill effectively.
7. The revised lesson is re-taught to different groups of same class for the same duration to practice the same skill.
8. There re-teaching is followed by discussion, suggestion and encouraging the teaching performance. In this way, the feedback is again provided to the trainee.
9. The 'teach and re-teach cycle' is repeated till desired level of skill is achieved.

Evaluative instruments: The teaching skills being developed through micro-teaching lesson are to be evaluated or observed by the peers or supervisors. The rating schedule is used as criterion measure. The most popular evaluative instrument for assessing the effectiveness of micro-teaching is the Stanford Teaching Competence Appraisal Guide (STCAG).

Allen and Ryan (1969) have given an evaluation sheet for assessing the skill of reinforcement. It consists of four dimensions of the reinforcement skill as follows:

1. The correct responses of the students are praised or rewarded by saying 'fine', 'good', 'excellent', etc.
2. The teacher uses non-verbal cues (smile) to encourage his/her student.
3. The teacher gives credit to students answering a question partly correct.
4. The teacher refers to positive aspects of a student's previous responses.

These four dimensions are recorded by observer in terms of frequency that the teacher has used the category number of times. The categories are assessed on scales ranging from three to seven points. The STCAG consists of a number of scales rating the broad aspects of a teacher's performance.

Advantages of Micro-Teaching

The following are main advantages of micro-teaching:

1. It is an effective feedback device for the modification of the teacher-behaviour.
2. The knowledge and practice of teaching skills can be given by the use of micro-teaching.
3. It is useful for developing teaching efficiency in pre-service and in-service teacher-education programmes.
4. The specific teachings skills are developed by the micro-teaching experiences, e.g., reinforcement skill, probing question, etc.
5. It is a training device for improving teaching practice and prepares effective teachers or better teachers.
6. The mechanism of feedback device can be combined with other device such as stimulated social skill training and interaction analysis device which provide continuous reinforcement to the trainee performance.
7. The training of teachers becomes individualized. Each trainee makes progressing developing teaching skills at his/her own rate depending on his/her ability.
8. It permits increased control and regulates teaching practice.
9. Micro-teaching can be done either in real classroom conditions or in simulated conditions.
10. It is an economical device and the use of videotape enables the trainee to analyse his/her own teaching performance.
11. It resolves the complexities of the normal classroom teaching by 'scaled down teaching'.
12. It focuses attention on thatching behaviour to modify and improve in the desired direction.

Check Your Progress

1. Name the three stages of teaching behaviour.
2. Name a few strategies used for modifying and improving teaching behaviour.
3. What is meant by 'student teaching'?
4. What is the main purpose of 'demonstration lessons'?

3.5 FLANDERS' INTERACTION ANALYSIS CATEGORY SYSTEM (FIACS)

Teaching is an interaction process between a teacher and the taught. The classroom teaching activities and events can be studied objectively by observing these situations. Recently, a number of systematic observational techniques have been developed. The classroom teacher behaviour can be measured objectively by employing these techniques. Prior to the systematic observation, the classroom ratings have been used for observing and evaluating classroom teaching. The ratings would provide a grading, but could not provide the basis for improving and modifying teaching activities or teacher behaviour.

On the other hand, systematic observational techniques are used for analysing the teaching activity systematically and objectively. The flow of classroom events can be recorded and analysed. It provides the structure to teaching events and flow to teacher behaviour. Thus, the teaching activities are diagnosed and provide the awareness about the teaching events and components, but teaching or teacher behaviour has originated the concept of interaction analysis of teaching.

Classroom interaction analysis

Interaction analysis is a specialized research procedure that provides information about only a few of the many aspects of teaching. It is an analysis of spontaneous communication between teacher and pupils and it is of no value, if no one is talking or if teacher talks continuously, or if student reads from a book. The entire process of interaction analysis becomes a measure of teacher-influence because it makes an assumption that most of teacher-influence is expressed through verbal statements and mode of non-verbal influence is positively correlated with verbal. In the field of teacher education, teachers' classroom interaction has also been taken as target and attempts are made to analyse it and to quantify it. The most intensive long-range programme of this dimension has been conducted under the leadership of Ned A. Flanders.

Flanders' interaction analysis technique

Ned A. Flanders has developed ten categories system. The first seven categories are used when teachers are talking and next two categories are used when any student is talking, and the last category is used to indicate the silence or confusion in the classroom. It is an objective and systematic technique for evaluating the classroom performance of a teacher. Interaction analysis is basically an observational technique that can be utilized in order to gain a fairly dependable record of spontaneous verbal statements to determine their quality. Flanders analysis is primarily concerned with verbal behaviour. This can be observed with high reliability than the non-verbal behaviour. An assumption is made that verbal behaviour of teacher is an adequate sample of his/her total behaviour in the classroom. The verbal statements of the teacher are consistent with his/her non-verbal gestures, in fact, his/her total behaviour.

Flanders' ten category system

This system attempts to categorize all the verbal behaviour found in the classroom. So far as the communication is concerned, these three condition are: (a) teacher talk, (b) student talk, and (c) silence or confusion are said to exhaust all possibilities. The teacher talk is further subdivided into two categories: (a) direct teachers' talk and (b) indirect teachers' talk. Indirect influence is further subdivided into the more specific categories. All the categories are mutually exclusive but subsume all types of verbal behaviour. The categories or verbal interaction are based upon the following two major activities 'initiation' and 'response' of both the agents of classroom teaching. An interchange between initiation and response forms the classroom verbal interaction. The non-verbal interaction takes place through on-task and off-task activities caused by teacher of students.

In this method, an observer observes a teacher's verbal behaviour and puts a tally every three seconds against one of the ten categories of teacher behaviour as may occur. After observation, the total number of tallies in each category is counted and the ratio between teacher talk and student talk determined. If a teacher talk is more often followed by student talk and student talk by teacher talk, it results in better student-teacher interac-tion. Teaching is an interactive process which is mainly influence-directed.

NOTES

A teacher tries to influence the students. However, this influence is not only one way. Both the teachers and students influence each other, but the influence exerted by the teacher on the students is of greater and far-reaching significance. But the question arises, how to describe the teacher's behaviour which is not only complex but also variable in nature. Flanders' interaction analysis is 'an observation procedure designed to minimize these difficulties, permit a systematic record of spontaneous act, and scrutinize the process of instruction by taking into account each small bit of interaction'.

As per Flanders' the encoding process, or the procedure of observation, includes the following steps:

1. The observer sits in a classroom in the best position to hear and see the participants.
2. At the end of each three-second period, he/she decides which category best represents the communication events just completed.
3. He/She writes down the category number while simultaneously assessing communication in the next period, and continues at a rate of 20 to 25 observations per minute, keeping his/her tempo as steady as possible.
4. His/Her notes are merely a series of numbers written in a column, top to bottom so that the original sequence of events is preserved.
5. Occasionally, marginal notes are used to explain the class formation of any unusual circumstances.
6. When there is a major change in the class formation, the communication pattern or the subject under discussion, a double line is drawn and the time indicated.
7. As soon as the total observation is completed, the observer retires to a nearby room and completes a general description of each separate activity period separated by the double lines including the nature of activities, the class formation and the position of the teacher.

Furthermore, Flanders listed the following principles for classroom observations:

(i) No interaction analysis data should be collected, unless the person is familiar with the entire process and knows its limitations.

(ii) Questions to be answered by inspecting the matrix should be developed before the observation takes place.

(iii) Value judgments about good and bad teaching behaviour are to be avoided.

(iv) Emphasis is to be given to the problem being investigated so that cause-and-effect relationship can be discovered.

(v) A consultation based on two observations or at least two matrices helps to eliminate value judgment or at least control them. Comparisons between the matrices are more likely to lead to principles.

The decoding of the interaction matrix is the interpretation stage. The decoding may be done at two levels: (i) quantitative analysis of teacher behaviour, and (ii) qualitative analysis of the teacher behaviour.

Behaviour ratios

There are three arithmetic procedures that are commonly used in order to make comparison between two or more matrices. They all share in common the setting up of proportions so that direct comparison of number can be made regardless of how long a particular observation is lasted. Out of the three methods, the second method which involves converting all rows and columns tallies of matrix into certain behaviour ratios, has been used here and is generally used for research purposes. These behaviour ratios have been explained and formulas for these ratios are organized in a tabular form. This method requires a simple ratio based upon the average of two observations of matrix.

The indices of behaviour ratios are meaningless and cannot be interpreted as such. The normative expectations are developed as standards for the behaviour ratios. The obtained behaviour ratios can be interpreted with the help of these norms. The behaviour ratios cannot be used for evaluating the effectiveness of teaching, but these are used for analysing the nature of teaching whether teaching is democratic or authoritarian. The teachers who have the greater values of pupil-talk, teacher response ratio, teacher question ratio, pupil initiation ratio, and indirect teacher influence than the normative values are said to be an effective teacher. On the other hand, teacher who have higher teacher-talk, silence or confusion, content cross ratio and direct teacher behaviour than their normative values are stated as ineffective teachers. The table is given on the left hand page.

Interaction variables

The second type of verbal behaviour is obtained as interaction variables. These variables have been used by Flanders himself for extracting the factors in classroom interaction. Symbols and formulae are summarized in the table on the left hand page.

Merits of Flanders' interaction analysis technique

The merits of Flanders' interaction analysis technique are as follows:

- It helps to understand classroom interaction analytically.
- As the system's rule is to take observation after every three seconds, it is ensured that the observer records almost all the behaviours of the teacher and the students.
- It helps to determine the classroom climate.
- A teacher can control his/her teaching behaviour, so this system is well suited to be used as a mechanism of feedback device for the modification of teacher behaviour.

Demerits of Flanders' interaction analysis technique

The demerits of Flanders' interaction analysis technique are as follows:

- The system cannot describe classroom activity in its totality. Sometimes, an unrecorded aspect may be more important than the recorded one.
- More emphasis is laid on teacher behaviour as compared to student behaviour. It has seven categories for teacher behaviour and only two for students.
- Since the categories are too broad, there is always a fear that an element of subjectivity may be introduced. Different people may differ on clarifying verbal statements.
- Major focus of the system is verbal behaviour, whereas non-verbal behaviour in classroom interaction is equally important.
- Tabulation of data pairs into a 10 × 10 matrix is a time consuming process.
- This technique does not provide any information about the quality of content. It confines only to verbal communication of teaching.

- It encodes the occurrence of a particular activity, but does not consider its intensity. Teaching effectiveness concerns with force and intensity of teaching events.
- It records the actions of teacher and students, but does not encode their reactions.

Check Your Progress

5. What forms the classroom verbal and non-verbal interaction as per the Flanders' ten category system?
6. Give any two merits of Flanders' interaction analysis technique.

3.6 SIMULATED TEACHING

A number o technique is being used currently in India as well as in other countries for the modification of teacher-behaviour. The simulated social skill training is one of them. Cruick Shank (1968) has developed a teacher training system. This system of training is being denoted by several terms such as: Role-playing, Artificial teaching, Pilot training, laboratory method, clinical method and Inductive scientific method.'

The current teaching practices of the Indian teacher-education programmes have the following limitations:

(i) The pupil-teachers are sent to actual classroom teaching during teaching practices programme without inducing the role of teacher. Some training institutions have the provision for demonstration lesson.

(ii) There is no provision for providing reinforcement for the pupil-teacher behaviour. The supervisors give remarks for their teaching task in general way as criticism of lesson. There is no scope to follow the suggestions given by the supervisors.

(iii) The teaching practices involve risk and humiliation for pupil-teachers because they do not know even the classroom manners.

The simulated social skill training (SSST) has the direct improvement over these limitations of traditional teaching practices.

The simulation technique is to induce certain behaviours in artificial situation. A pupil-teacher has to play several roles as a teacher, as a student and as a supervisor.

Simulation gives us greater control over the teaching variables. It is based on socio-drama that is very much related to the practice. The most important aspect of simulation is the introduction of the student to teaching in non-stressful conditions.

The simulated social skill training can be defined as mechanism of feedback device to induce certain desirable behaviours among pupil-teachers by playing the role of teacher in their own group as an artificial situation of classroom teaching.

Assumptions of simulation technique

The SSST is based on the following assumptions:

1. The teacher-behaviour is modifiable by the use of feedback devices.
2. The basic assumption is that there are certain patterns of teacher-behaviours which are essential in effective-teaching. These behaviours can be described and practised like any other skill. The observer identifies those behaviour and teacher practice those pattern of teaching-behaviour.
3. The teacher-behaviour has its taxonomy. Karl Openshaw has developed the taxonomy of teacher-behaviour by the use of simulated technique.
4. Another assumption is that social skills are developed by practice and imitation in a group. All members of the group have an opportunity to practice in controlling and improving, their own behaviour for teaching purposes.

Advantages of simulated teaching

Cruick Shank suggested following advantages of simulated technique:

1. The major advantage is that in using the technique we are forgoing close links between theory and practice.
2. The student-teachers are given an opportunity to study and analyze critical teaching problems.
3. The student can acquire classroom manners through the technique of simulation.
4. The student can understand behavioural problems of classroom and develop insight to encounter them.
5. The technique provides reinforcement to students to develop teaching skills and avoid the risk of actual classroom encounter.

Uses of simulated social skill training

This technique may be sued in the following situations of teaching:

1. The appropriateness of open or closed question skills is ascertained in teaching situations.
2. The ability to ask questions is developed in which the concepts and logical sequence have been expressed previously by pupils.
3. The confidence in teaching is developed to encounter the face to face situation in pupil-teachers.
4. The SSST technique provides a situation to expose the pupil-teacher to play the role of teacher and observer prior going to actual classroom teaching. It helps in developing social skills of teaching.
5. It is best replacement of demonstration lesson because every teacher-educator is not an effective teacher. It eliminates the opportunity of imitation of certain skills of teaching.
6. The ability to demonstrate and explain the rule of logic in classroom teaching helps in maintaining consistency in the meaning of works.
7. The micro-teaching can be best used for developing certain teaching skills but it is difficult to use in our teacher-education programme during teaching practices. It can combine with SSST to be employed in our situations to develop teaching skills.
8. It provides the feedback to each pupil-teacher and also helps them to act as teacher, pupil and observer to perceive the role in each situation. This may provide insight to make a decision about his/her own teaching activities. It helps in predicting consequence of teaching and may change the flow of actions of teaching.

3.7 PROBLEMS RELATED TO STUDENT-TEACHING PRACTICE AND INTERNSHIP

Practice teaching is a set-up where student-teachers teach their specialized subject to school students in a regular school for a specific period. During this period, a student-teacher take up the role of a regular subject teacher, and even does all the assignments given by the cooperating school authorities.

Practice teaching is defined as teaching by a student under the supervision of an experienced teacher. Through this, the student-teachers are able to gain hands-on experience to deal with children of diverse ages and contexts and also be able to move back and forth between theory and practice. They should also be given the opportunity to interact with children from diverse backgrounds like first generation learners, street children so that they learn to communicate and relate with them.

Internship is defined as the 'extended school based professional learning negotiated by the different stakeholders in the teaching preparation phase'. The intern is mentored by the classroom teacher, with increased opportunities to involve in a broad range of teacher's work activities. There is a subtle shift in the classroom teacher and intern's relationship from evaluative to collegial.

Internship experiences need to be organized in such a way that it becomes useful in evaluating the teacher's ability and supports socialization within the profession, stimulates development of teaching-learning concepts, allows insight into new perspectives, and enhances motivation to continue learning.

Objectives of practice teaching

Teacher education, when viewed as a holistic enterprise involves actions of different kinds, and from multiple fronts aimed at the development of the total teacher—knowledge and understanding, repertoire of skills, positive attitudes, habits, values and the capacity to reflect, will require an intensive internship for student-teachers. Thus, student-teachers should be made aware of the need to:

(i) Care for students and be sensitive to their needs

(ii) Perceive the need to make learning a joyful activity, not mere rote learning

(iii) Examine curriculum in the local context

(iv) Devise learner-centred activities suited to the needs and interests of the children

(v) Integrate academic learning with the diversities present in every classroom

(vi) Promote values of peace, equality and secularism

(vii) Communicate amicably with children

(viii) Reflect on classroom activities and learning

(ix) Development of professional skills in pedagogy, observation, documentation, analysis and interpretation

(x) Interpret reality within varying theoretical and experiential frameworks

Organization of student teaching

Teaching practice helps the trainees to acquire practical skills through direct experience and at the same time, the trainers get the opportunity to assess and guide the trainees in both summative and formative evaluation process. It also helps the teacher-educators to develop an understanding of the student-teachers and their style of teaching which they inculcate under professional guidance and supervision. The schools who agree to let the student-teachers to teach extend materialistic and moral support to them. Therefore, it is important to have a conducive environment for the student-teachers to be able to gain confidence and work effectively with the fellow students and the school personnel. This will give the student-teachers the opportunity to engage in profitable experiences in observing, sharing and in teaching with the guidance and supervision of student supervisors or tutors.

Teaching practice is a cooperative venture involving the student-teachers and their supervisor on the one hand and the staff and students, on the other. The programme includes teaching, demonstration, participation in co-curricular activities and evaluation, which is the final assessment of the student-teachers.

There are various problems related to student-teaching practice as well as internship. Some of these issues have been discussed below.

1. **Lesson planning:** In the student-teaching practice, student-teachers need to formally write the lessons before taking sessions in the classroom. But very often, this 'paper planning' does not match the criteria followed in the classroom session for at least the few introductory rounds. The points jotted down as points and pre-set plan or strategy may not pertain to the face-to-face interaction in classroom environment. Generally, the students either know more or less about a subject matter when compared to the student-teachers. This may demand patience and 'on-the-spot' smartness of the student-teachers in tackling with the class students. They need to remain calm and mentally readjust or replan their written lesson plan. It should also be noted that the introductory lessons/questions may not be answered in accordance with the anticipation of the student-teachers.
2. **Classroom management:** Apart from teaching, the other challenge remains to maintain the decorum in the classroom. The student-teachers need to be tactful in dealing with mischievous students of the classroom for effective classroom management. And, the next challenge in classroom management includes the aspect of acceptance and agreement of the students on whatever has been taught by their student-teacher. Besides, many student-teachers find it difficult to deal with a big class strength of say 50–60 students in a classroom.
3. **Extra workload:** Teaching demands multitasking. Student-teachers have to utilize their time many activities that go together—such as preparation of the day's lesson plan and teaching aids, assessment of the home task allocated to the students, evaluation of class test papers, monitoring the individual performance of the students, and so on. The amount of work pressure experienced in this training period leads to development of mental and physical stress in many student-teachers who even start re-considering continuing the training programme. A good amount of mental stress is also felt when not very favourable remarks are made in the record books of the student-teachers by their supervising teacher or lecturer.

It has been pointed out by Stephens (1996) that how student-teachers can at times be weighed down by sort of panic attack when they cannot complete the particular job such as managing an unruly class. Even preparation of models and charts by the student-teachers does consume a lot of time. For instance, science students can get some help from school laboratory, but for many it a heavy home task day in and day out.

4. **Time table for the classroom:** In general, classes are allotted to the student-teachers in accordance with convenience and also depending upon the number of teachers who go on leave. More often, the school administration expresses its unwillingness on disturbing the school schedule for the convenience of the student-teachers. Then there are some of the schools that do not give much preference to experimental modes of teaching in their classrooms, especially when it comes to higher grades like IX, X or +2 as that is considered to be a waste of time in classes that require time-bound completion of the curriculum. Another issue related to the student-teaching practice is that the student-teachers at times conduct lectures on a similar topic in various sections of the same class, thereby the lesson plan remain unchanged i.e., single lesson plan is created to address the various sections of a class standard. Moreover, many a times, the student-teacher needs to discuss the problems related to a lesson before giving the home assignment. This is time-consuming as the student-teachers need to spend an hour or two on the evaluation of the work and that too without technically counting it as their lesson plan.
5. **Evaluation by teacher supervisor:** Basically, evaluation anxiety in a teacher-student refers to the situation where the anxiety is induced in him/her on being observed by his/her teacher supervisor or lecturer. It is a common complaint made by the student-teachers they tend to regress or forget the content matter completely when they are conscious that their supervisory teacher is sitting in the back row of the classroom and evaluating their teaching task. On being nervous, the behaviour of student-teachers undergoes a change, they turn uncomfortable and their focus turns on how to get better comments on their records. The pressure of carrying out the right procedure as well as managing the classroom activities effectively makes teaching a more challenging job for the already apprehensive student-teachers. Most of the student-teachers can overcome such a jittery feeling in a couple of days or so, but many require positive intervention by their supervisors from time to time to regain their self-confidence and hone their teaching abilities.
6. **Insufficient allocation of preparatory time:** It is a common observation that if the allocated preparatory provided to the student-teachers before the onset of teaching practice session is considerably less, this may lead to obscurity in translating theoretical ideas in practical classroom situation due to insufficient time to reflect or refract the topic.

Solutions to student-teaching practice

Some of the solutions to the student-teaching practice are as follows:

1. Allocation of more time by the school/college authorities to the student-teachers for learning and applying teaching skills under mock conditions, where time to time evaluation as well as feedback can be provided by both their batchmates and supervisors.
2. Lesson planning should be made flexible. Student-teachers need to be motivated and imparted proper guidance in resorting to new innovative methods of teaching rather than sticking with the age-old lecture system of only making notes and mugging up.
3. Teaching aids, which is an essential element in classroom proceeding, are generally supposed to be arranged or prepared by only the student- teachers. To save their time and ensure better classroom participation, other students should also be encouraged to prepare charts or models that serve as teaching aids in the class. Such a practice can aid in the growth of psychomotor skills and the interaction level of the student-teachers and other class students.
4. Workshops can be conducted from time to time, every time the student-teachers leave for practice schools. Such a workshop can be organized by the faculty members of college for supervising student-teachers. This also gives an insight to supervising teachers as what they need to take into consideration while observing the job of student-teachers in a classroom.
5. At the end of lesson plan, along with the supervisor's observation sheet, one more sheet should be included where student-teachers can record their own observations, experiences, classroom environment, extempore activities, improvisations of that particular class session, and so on, to reflect and for better upgrading.
6. The teaching practice session should not be bounded by a pre-set number of lesson plans; instead emphasis should be on quality teaching, where student-teachers have a chance of reflecting and improving the teaching practice.
7. First couple of days of teaching practice should be kept for interaction of student-teachers with students in the classroom, in order to build a comfortable zone for themselves for 'acceptance' of what would be taught in the class .
8. Supervisor teachers or lecturers of a school should conduct a continuous evaluation on the work performance of the student-teachers. A both formative and summative type of evaluation needs to be carried out in student-teaching practice. It should be made mandatory for the school authorities to follow this practice. It is a common observation that in many schools, teachers do not even bother to maintain record files of the student-teachers. It is a must that for the success of the student-teaching practice, the supervisor teacher or lecturer dons the mantle of a counselor as and when required.

The student-teaching practice needs to provide sufficient time to student-teachers to play the role of a regular teacher without the fear of being observed, or getting acceptance from the taught, or multitask like any other teacher whose duties are not restrained to the classroom sessions, but also include the organization of co-curricular activities or sports. At all the weekends, feedback from the mentor (supervisory) teacher/lecturer and class students needs to be collected by means of conducting open discussion or informal conversation within the class.

Check Your Progress

7. What is meant by the 'simulated social skill training'?
8. What kind of problem is encountered while working on a lesson plan in student-teaching practice?

ACTIVITY

1. Research on the Internet and make a list of some of the schools that have conducted student-teaching practice.
2. Read a few articles and book, can even research on the Internet, and write a note on the significance of micro-teaching in Indian education system.

DID YOU KNOW

Micro-Teaching was developed by Professor Dwight Allen and Robert Bush in a teacher preparation programme conducted at Stanford University during 1960–1967.

3.8 SUMMARY

In this unit, you have learnt that:

- Micro-teaching is one of the most recent innovations in teacher education/training programme which aims at modifying a teacher's behaviour according to the specified objectives.
- Teaching behaviourrefers specifically to a number of acts or activities of operations of teaching of a teacher in the presence of students with the intention of achieving teaching-learning goals.
  (i) Teaching behaviour draws heavily from the cognitive powers and scholastic achievements of the person engaged in it. Language is an important and critical factor in the effectiveness of the teaching behaviour.
  (ii) The teaching behaviour in the classroom may be sorted out in five categories: (a) verbal fluency, (b) optional information amount, (c) number of principles, concepts, comparisons, contrasts etc., (d) interest developing or attention seeking statements, and (e) vagueness.
- Student teaching is the practical test of teacher's ability, efficiency and professional effectiveness. It determines his/her status and image among the students, among other teachers of the school and locality as well as in the society to which he/she belongs, therefore, he/she must master the art of student teaching.
- Concept of student teaching on the basis of taxonomy of objectives, relate to three domains—(a) cognitive, (b) affective, and (c) psychomotor.
- Before the student-teacher starts actual teaching in schools, it is necessary to give him/her a general background of some significant spheres of teaching so that he/she may attain a good mental preparation and awareness of such teacher education aspects as professional courses, teacher's professional growth, place of curricular activities, human relations in schools.
- In a micro-teaching procedure, the trainee is engaged in a scaled down teaching situation. It is scaled down in terms of class size, since the trainee is teaching a small group of four to six students. The lesson is scaled down in length of class time and is reduced to five or ten minutes. It is also scaled down in terms of teaching tasks.
- The teaching skills being developed through micro-teaching lesson are to be evaluated or observed by the peers or supervisors. The rating schedule is used as criterion measure. The most popular evaluative instrument for assessing the effectiveness of micro-teaching is the Stanford Teaching Competence Appraisal Guide (STCAG).
- Prior to the systematic observation, the classroom ratings have been used for observing and evaluating classroom teaching. The ratings would provide a grading, but could not provide the basis for improving and modifying teaching activities or teacher behaviour.
- Flanders' ten category system attempts to categorize all the verbal behaviour found in the classroom. So far as the communication is concerned, these three condition are: (a) teacher talk, (b) student talk, and (c) silence or confusion are said to exhaust all possibilities.
- Practice teaching is defined as teaching by a student under the supervision of an experienced teacher. Through this, the student-teachers are able to gain hands-on experience to deal with children of diverse ages and contexts and also be able to move back and forth between theory and practice.
- Student-teachers have to utilize their time many activities that go together—such as preparation of the day's lesson plan and teaching aids, assessment of the home task allocated to the students, evaluation of class test papers, monitoring the individual performance of the students, and so on. The amount of work pressure experienced in this training period leads to development of mental and physical stress in many student-teachers who even start re-considering continuing the training programme.
- Workshops can be conducted from time to time, every time the student-teachers leave for practice schools. Such a workshop can be organized by the faculty members of college for supervising student-teachers. This also gives an insight to supervising teachers as what they need to take into consideration while observing the job of student-teachers in a classroom.

3.9 KEY TERMS

- **Interaction analysis:** A specialized research procedure that analyses the spontaneous communication between teacher and pupils
- **Internship:** Extended school based professional learning negotiated by the different stakeholders in the teaching preparation phase
- **Micro-teaching:** A process of subjecting samples of human behaviour to 5 R's of video tape—'recording', 'reviewing', 'responding', 'refining' and 'redoing'
- **Simulated social skill training:** Mechanism of feedback device to induce certain desirable behaviours among student-teachers by playing the role of teacher in their own group as an artificial situation of classroom teaching
- **Strategy:** Denotes a generalized plan of a lesson which includes structure, desired learner behaviour and an outline of planned tactics
- **Tactic:** A goal-linked influencing behaviour of the teacher—the way a teacher behaves in the instructional situation

3.10 ANSWERS TO 'CHECK YOUR PROGRESS'

1. The three stages of teaching behaviour are: (i) Pre-active, (ii) Inter-active, and (iii) Post-active.

2. The strategies used for modifying and improving teaching behaviour are (i) simulation and gaming, (ii) micro-teaching, and (iii) action research.
3. Student teaching means teaching a student, or to train a person for teaching effectively or to make a person good teacher or to employ the energy, ability and efforts of the students in order to make teaching effective.
4. The main purpose of demonstration lessons is to expose the student teachers to certain teaching situations. By observing the lessons of good and experienced teachers, student teachers get an opportunity to examine the points critically which they have learnt in theory.
5. As per the Flanders' Ten Category System, an interchange between initiation and response forms the classroom verbal interaction. The non-verbal interaction takes place through on-task and off-task activities caused by teacher of students.
6. The merits of Flanders' interaction analysis technique include the following:
   - It helps to understand classroom interaction analytically, and determine the classroom climate.
   - As the system's rule is to take observation after every three seconds, it is ensured that the observer records almost all the behaviours of the teacher and the students.
7. The simulated social skill training can be defined as mechanism of feedback device to induce certain desirable behaviours among pupil-teachers by playing the role of teacher in their own group as an artificial situation of classroom teaching.
8. In the student-teaching practice, student-teachers need to formally write the lessons before taking sessions in the classroom. But very often, this 'paper planning' does not match the criteria followed in the classroom session for at least the few introductory rounds. The points jotted down as points and pre-set plan or strategy may not pertain to the face-to-face interaction in classroom environment. Generally, the students either know more or less about a subject matter when compared to the student-teachers.

3.11 QUESTIONS AND EXERCISES

Short-Answer Questions

1. What are the principal characteristics of teaching behaviour?
2. State the chief characteristics of micro-teaching.
3. Write short notes on:
   (i) Simulation games.
   (ii) Role playing in games.
4. What are the limitations of a student-teaching programme?
5. Write a short note on 'simulated teaching'.

Long-Answer Questions

1. Explain the term 'teacher behaviour'. Differentiate between 'teacher behaviour' and 'teaching behaviour'.
2. Elucidate in detail Flanders' Ten Category System by outlining encoding and decoding process.
3. Write a short note on Flanders' Interaction Analysis Category System (FIACS).
4. Discuss the nature, characteristics and scope of micro-teaching.
5. 'Micro-teaching is the real teaching but is used for developing teaching skills among teachers.' Discuss this statement.
6. Give a detailed account on the problems related to student-teaching practice and internship.

3.12 FURTHER READING

Aggarwal, S. P. and J.C. Aggarwal. (1997). *Development of Education in India,* Vols 4–5. New Delhi: Concept Publishing Company.

Andrews, Dan, and Widen Marvin, (Eds). (1987). *Staff Development for School Improvement: A Focus on Teacher*. New York: Falmer Press.

Government of India. (2005). *National Curriculum Framework for School Education 2005*. New Delhi: MHRD.

Mohan, R., (2011). *Teacher Education*. New Delhi: PHI Learning.

Mohanty, J. (2003). *Teacher Education.* New Delhi: Deep and Deep Publications Pvt. Ltd.

UNIT 4 TEACHING PROFESSION AND TRENDS OF TEACHER EDUCATION

Structure

4.0 Introduction
4.1 Unit Objectives
4.2 Professional Ethics and Professional Development of Teachers
  4.2.1 Developing Professionalism among Teachers
  4.2.2 Developing Professional Ethics among Teachers
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4.0 INTRODUCTION

India has one of the prime systems of teacher education. Moreover, the university departments of education and their affiliated colleges, government and aided institutions, private and self-financing colleges and open universities are also engaged in teacher education. The programmes are almost identical but the standard varies. In certain areas, the supply of teachers far exceeds the demand while in others there is sharp scarcity. The situation at the elementary level in certain states is similar to international standards, where DIETs, CTEs and IASEs are making tangible impact on pre-service and in-service teacher education. But the same cannot be said about the preparation of secondary, vocational and pre-school teachers.

The purpose of teacher education is to equip teachers with the credentials necessary for the work they are called upon to undertake. To become a good teacher it is very important to go through formal professional training on a continuous basis. Training helps to develop the personality and communication skills of the teachers. Education of teachers needs to strengthen and stress upon the main attributes of their profession, such as, code of conduct, generation of knowledge through research and specialization and training from time to time.

In this unit, we will discuss the various aspects related to professional ethics and professional development of teachers, innovations in teacher education and ICT in teacher education. The role of NCTE, NCERT, SCERT and DIET in teacher education has also been discussed in detail in this unit.

4.1 UNIT OBJECTIVES

After going through this unit, you will be able to:

- Explain the various aspects of professional ethics and professional development of teachers
- Describe some of the innovations in teacher education
- Discuss the role of NCTE, NCERT, SCERT and DIET in teacher education
- Explain the significance of ICT in teacher education

4.2 PROFESSIONAL ETHICS AND PROFESSIONAL DEVELOPMENT OF TEACHERS

Teacher education is needed to provide quality education to the student community. Quality of teacher is dependent on the various teacher education programmes with respect to method of teaching, pedagogical application and application of the latest trends in practice of teaching–learning process.

Unless and until strict procedure is adhered to, the system will only churn out low quality which would adversely affect the concept of preparing good quality teachers. We have studied the concept of profession which says it is an occupation with some specialized skills to perform along with certain specialized tasks in the area concerned. Teaching being a profession, teachers are required to perform tasks like executing well organized teaching-learning process, providing counselling strategies to students, helping internalize knowledge in various subjects, organizing learning experiences and help prepare students to become worthy member of the society. Hence, it is understood that teacher education is comprehensive and complex.

Professional development of teachers is very important and hence, efforts have been taken to provide in-service training to teachers at various levels. If we analyse the educational policies and programmes implemented to enhance teaching capabilities, we can understand that these professional building programmes fail to develop qualities as desired. Why are these teacher training programmes organized? This question seems to be very important in the sense that teaching being a complex activity, teachers are expected to tackle the changing situations of the society, learning style of students, latest trend in education, and the daily teaching-learning process. Hence, professional programmes should be formulated to develop the professional qualities of teachers. Professional development is needed on the following grounds:

- To provide knowledge on the misconceptions related to teacher education
- To make them aware about gap between theory and practice in teacher education
- To focus on the areas neglected in teacher education programmes
- To provide knowledge in competencies and skills in teacher education
- To provide adequate experience to practice recent trend in learning and teaching methods
- To make aware about the aim of education as conceived by the nation

The concept of 'profession' leads us to the concept of professionalism. The competencies of professionalism as desired by the teacher profession must be inculcated in teachers to succeed in the profession. What are the qualities of professionalism of teachers? For the well conduction of teaching–learning process, certain theoretical knowledge must be developed. This may be provided either through intensive training or through professional development programmes. The traditional bureaucratic-administrative model needs to be replaced by a professional-managerial model. In bureaucratic model, stress is on the bureaucratic style of education were teachers play a vital role to provide knowledge in subject areas to the students without minding the professional skills of a teacher. But in a professional model, teacher should have the skills and competencies as required by the profession. Let us look at the difference between these two models.

Table 4.1 Administrative-Bureaucratic Model and Managerial-Professional Model

Administrative–Bureaucratic Model	Managerial-Professional Model
Input orientation	Output orientation
Accountability for maintenance and control	Accountability for growth and outcomes
Relationships based on authority and jurisdiction	Relationships based on expertise and autonomy
Rigidity in rules and procedures	Flexibility in rules and procedures
Reward system linked to seniority	Reward system linked to performance

Now let us discuss the concept of professionalism and move on to the ways of developing professional ethics in teachers. What is the meaning of professionalism? Being a teacher does not mean you are a professional teacher. Professionalism means the ability to perform a task effectively. It includes the competence to perform, confidence in the skills, focused approach to perform, have pride and satisfaction in the work, motivation to achieve the desired goals, accountability in work, responsibility towards the profession, respect for the work and circumstances concerned, control of emotions and commitment to the work.

Teacher professionalism may be explained as the responsibility to the teaching profession in executing well-organized teaching–learning process, emotional control over students, subordinate and other staff of the organization, enjoyment on execution of teaching process, confidence to tackle complicated situation inside classrooms and motivating students to excel in learning, etc., are some of them. The complexity of teaching–learning process gets reduced by being a professional teacher.

Some of the common traits of professionalism is given for your reference below.

- *Reliability:* Prove the reliability in all works assigned
- *Competence:* Proficient in the knowledge and skills as required by the profession
- *Honesty:* Be true to oneself and activities undertaken
- *Integrity:* Try to integrate activities with other departments
- *Respect:* Respect towards work and others profession
- *Being positive:* Should possess positive attitude towards the profession
- *Supporting others:* Should develop the habit of helping others
- *Staying work:* Develop the habit of involvement in completion of task assigned
- *Listening carefully:* Listen to others for self-development

4.2.1 Developing Professionalism among Teachers

Teacher professionalism has pivotal role to play in educational settings as it being the core of teaching profession. Only professional teachers succeed in conducting organized objective-oriented teaching–learning activities, motivating students and helping students to achieve the aim of education. Professional teachers help to improve the learning of the students, make learning a joyful activity, inspire students and prepare students to be worthy members of the society. Teacher professionalism contains three essential characteristics: (i) competence, (ii) performance, and (iii) conduct.

These components help in self-development of a professional teacher. Let us briefly discuss the above components. Competence in teacher profession is a vital component as it explains the skills needed for a teacher to deliver effectively in a class. What are those core competencies? To name a few skills—introducing the subject matter, skill in questioning techniques, ways of motivating students, techniques to sustain students attention, strategies of class management, power to make them understand, counselling needy students, help in solving problems related to curricular and co-curricular activities, and maintain discipline in class and organization where he/she works.

A professional teacher must be equipped with such qualities to maintain proper classroom climate and to achieve the desired goal. It is seen that some teachers are good in handling classes but poor in delivery of content, similarly those who are good in delivery of lesson may lack quality of building up emotional relationship to solve problems of students, and so on. Knowledge of subject area is one of the major competence required for professional teachers, it helps to deliver subject concepts to students. If subject knowledge is excellent, professional teachers can concentrate on different delivery methods. Knowledge in subject area and on different teaching methods helps to work out proper instructional strategies in the classrooms.

The second component is performance. It is a continuation of competence. Once the teacher is competent enough, automatically excellent performance in all fields of teaching can be expected. Competence in the subject help to tackle queries related to the subject while knowledge on psychological methods of handling students helps to deal with problems of the students. Performance paves the way to achieve goals of education. A competent teacher is capable of handling all the problems related to his/her classrooms.

The third characteristic of teacher professionalism is conduct. It is as important and significant as the first two. The way educators carry themselves reflects on the classroom, school, community and the educational system. It also includes one's ability to initiate and maintain good communication with all the people involved such as students, fellow teachers, administration, school authority and parents of the students. It is very important for teachers to have effective communication skills to achieve the preferred educational goals.

4.2.2 Developing Professional Ethics among Teachers

Every profession is well performed by certain behavioural pattern and style, which we call code of conduct. Code of conduct explains various behavioural patterns to be followed by professionals. It guides the work of professionals so that clients can take maximum benefit. The controlling authority or professional organizations initiate and frame the code of conduct for any particular profession. For example, in case of teacher educators, the statutory body NCERT explains the code of conduct to be followed. Thus, every profession is expected to frame ethical principles to guide conduct and behaviour of professionals. It provides a base which dictates the wanted and unwanted behaviour from professionals.

Pertaining to each profession, professional ethics and code of conduct has been framed to regulate the activities of the professionals in a desired direction. Unless and until proper code of conduct or professional ethics has been framed, the tendency of professionals to indulge in unfair means of activities increases.

The code of professional ethic may be defined as a set of self-imposed professional ideals and principles necessary for the attainment of self-satisfaction and professional excellence. Professional ethics refers to the principles, guidelines or norms of morality which a teacher has to follow in teaching profession while dealing with students, parents, community and higher authorities. The professional ethics tend to change from time-to-time, society-to-society, and hence, it is dynamic in nature. The professional ethics of teacher in the Vedic period was entirely different from that of 21st century. Professional ethics also differ from profession-to-profession. For doctors, professional ethics concentrates on their work climate, while for advocates it is different. It provides guideline to their work nature. The need for professional ethics is explained below:

- **Tool for self-correction:** Professional ethics act as a tool for self-correction.
- **Tool for self-satisfaction:** When we are honest and truthful in our activities, it gives us self-satisfaction. Professional ethics shows the way for our self-satisfaction.
- **Guides conduct and behaviour:** Inside a class, teachers mould the behaviour of their students. Code of ethics act as a base to shape the behaviour of teachers.
- **Helps to build personality:** Personality is reflected by the character of the individual. Professional ethics helps a person to be cautious about his/her words, activities, dress, style of speaking, etc. It builds up the personality.
- **Creates ideals for students:** Professional ethics motivates and help teachers to pass their character to the students. The personality of teachers in a way becomes the personality of the students.
- **Improves relationships:** Professional ethics build up qualities like concern for others, respects for others, brotherhood feelings, and cooperation. These characteristics help to maintain good human relationship.
- **For growth of society:** Only teachers obeying healthy professional ethics are able to contribute for the betterment of the society. The qualities imbibed as part of professional ethics help them in nation building process.
- **For professional excellence:** The effective functioning and excellence in particular profession is dependent on the professional ethics followed. Non-obeyance of the directions mentioned in professional ethics leads to negative result and poor excellence in professional practices.
- **Improvement of professional environment:** Professional environment consists of people, institutions, higher authorities, infrastructure, and working conditions. Professional ethics help to maintain excellence in all these components.
- **To follow professional principles:** Each profession has its own work rules and ethics under its work climate. These rules and regulations must be followed to excel in profession.

Professional obligations

Each individual is bestowed with certain responsibilities and activities to perform in their respective environment whether it is professional or non-professional. This responsibility imposed by one on their self is termed as 'obligation'. Obligation in case of professionals is more important since they are entrusted to perform specific tasks in the society. So as a professional, they are supposed to obey the rules and responsibilities as required by the profession. Usually teacher educators/teachers have obligation in the following ways:

1. Obligation toward students

Teacher and students are the core component in teaching-learning process. Teaching being a professional activity is bound to obey certain rules and professional ethics. Once ethics are followed teaching-learning becomes joyful and an interesting activity. In classrooms teachers have a great role to play in educating children. Apart from teaching, a variety of roles are played by teachers to help the students achieve the goal of education. These roles include counselling, creating awareness regarding the importance of education, dealing with children with special needs and so on. Teachers are supposed to act beyond the rigid boundary of imparting instructions. This helps to build up personality and worthy members of the society. Teachers have the following obligations towards their students:

- *Sincerity in teaching*: Sincere efforts have to be taken to make teaching–learning a joyful activity.
- *Motivation to students*: No subject is boring; it is the way of teaching which makes it boring. Teachers have to adopt strategies to make students motivated toward learning.
- *Maintain emotional stability*: Students are emotionally unstable due to variety of reasons. Teachers should be able to identify, rectify and maintain emotional status of the students.
- *Psychological support*: Teachers should psychologically handle students to build a positive personality.
- *Performance of various activities*: Apart from teaching, teachers have to perform various activities such as counselling, conducting orientation programmes, arranging club activities, and so on.
- *Help to take decisions*: Students of various ages find it difficult to take critical decision on different matters. At this stage, teachers should help them to resolve critical issues.
- *Development of leadership qualities*: To succeed in life, students should develop leadership skills. Teachers should provide opportunities that would help in building leadership qualities.

2. Obligation toward parents

Parents send their children to school to get educated, to build knowledge in subject areas, to build personality and for all round development. Nowadays, it is the duty of the teacher to fulfill the objectives of the parents. Students spend most of their time with teachers during the school hours. So, teachers have to provide all necessary guidance and support to the all-round development of their students. Teachers have to be in touch with parents and should inform them about the progress of their wards at various stages. Obligation to parents is as follows:

- Providing information on students' performance regularly. Students' progress in studies, attitudes, and behavioural aspects can be informed to parents.
- Guiding parents in selecting higher courses to their child. Parents may have less knowledge on the professional courses available. Teachers can suggest the best courses according to the attitude and aptitude of the student.
- Attitude and aptitude of students may be better guided by teachers. Teachers should inform parents about the attitude and aptitude, so they can keep an eye on their children for better personality development.
- Help parents to provide favourable environment at home. Students might face difficulties both in school and at home. Teachers should be aware of it and help parents in providing conducive environment for student growth.
- Counselling services to parents are required for various aspects of their children's growth. Parents may not have enough knowledge on child growth so in such a situation teachers can adopt steps to educate the parent.
- Knowledge and importance of various hobbies and interest should be shared with parents so that parents can make their children spend some time on hobbies which would lead to positive result in their studies and personality.
- Building rapport with parents and informing about the various activities conducted in school.

3. Obligation towards society

School is a miniature form of society with parents, teachers and students as major components. The cooperative and interdependent activities of these components bring positive output to the society. The role of teacher is of major concern in this context as they are the guiding force for bringing a positive structure to society. Hence, the obligation of teachers towards the society can be understood in the following ways:

- Steps to provide prospective citizens to the society. In school apart from subject content, students inculcate qualities which help them to become worthy member of the society. Teachers should help them to develop the desired qualities for becoming good citizens.
- Make them aware about the duties and responsibilities and rights of a citizen. As a member of society each individual is bound to obey rules and regulation framed by the nation. Knowledge on these responsibilities and duties should be taught by the teacher.
- Equip students with knowledge on various social norms to be followed in the society.
- Help students to develop ethical standards among students. Ethical standards act as a base, when followed, improve the standard of the society.
- Teachers should provide basic knowledge on secularist views so that religious tolerance can be developed in the students. This helps to develop qualities like respect for other religions and also bring religious harmony in the country.
- Foundation for integration of nation should be provided in classrooms where students from various backgrounds meet. In a miniature society like classrooms, the skills to live in a multicultural society should be imparted.

- Developing community relationship among the individuals of the society. It is understood that no individual can live in isolation instead a balance among individual members has to be maintained for proper harmony in the society.
- Individuals in the society live in harmony with the biological environment. So proper guidance on preservation of natural resources, and environmental resources, should be provided to the members of the society.

4. Obligation towards profession

Teaching profession is considered to be one of the noblest professions in the world. A teacher is expected to behave, act and be honest at all levels of his/her professional life. Such teachers enjoy high status and recognition in the society. Teachers should be true to their profession all their life. Considering all these, a teacher's obligation to their profession should be the following:

- Teachers should be simple in life and should possess a polite character. They should have a noble behaviour in and outside the school. Their appearance and way of life should reflect simplicity and wisdom.
- Should be optimistic about teaching profession and should respect their profession. When teachers respect their own profession, the whole society respects the profession.
- It is obligatory on the part of the teachers to be willing to accept and attend opportunities for professional growth. This enhances the professional knowledge.
- The experience in the field should motivate them to work for the growth of the profession. Teachers should be able to contribute with their suggestions to the concerned authorities for the betterment of the profession.
- Working environment enhances the productivity of the teachers. So it is the duty of all teachers to maintain congenial atmosphere at their workplace.
- Act as an inspiring personality to attract others to take up the profession of teaching. Those people aspiring for teacher education must be properly guided and motivated.
- Try to be active at all levels of teaching profession. This should be done inside classrooms, in professional meetings, etc. so as to develop their skills.
- Keep secrecy in work related to confidential activities such as preparation of question papers, evaluation of answer sheets, etc. This increases the credibility of the profession.

5. Obligation toward higher authorities

A higher authority is the section or a group of people who have been entrusted with the task of formulating and managing the rules, regulations and policies for the development of the institution. For successful functioning of the organization teachers should coordinate and balance the activities with the higher authorities. Obligation of teachers towards higher authorities includes the following activities:

- Teachers should abide by the rules and regulations of the institutions framed by higher authorities concerned. It brings uniformity in staff and related work of the organization.
- The policies framed by the higher authorities for the betterment of student community must be properly understood and communicated to the students. Hence, teachers act as a link between student and higher authorities.

- Teachers should be able to provide strategic measures to higher authorities from time-to-time.
- Proper steps may be taken to adapt and implement innovative policies taken by the higher authorities.
- Teacher professionals should be respectful to the higher authorities.

Apart from the obligations discussed, there are innumerable other obligations for teachers. A professional teacher should fulfil all these obligations and in no way let their prejudice or emotions come in the way of being a true professional. So, we can say that a teacher has greater responsibilities and duties towards the society. .

As mentioned by Dutt (1970) in India the various occupations have been classified, defined and briefly described by the National Classification of Occupations (NCO) but has not distinguished 'Occupation or Vocation' from 'Profession'. It has mentioned that an occupation is a trade, profession or type of work performed by an individual, independent of the workers, industry, status or years of experience. In an occupational hierarchy, this classification has provided of all divisions consisting of 75 groups sub-divided into 331 families under which the individual occupations are classified. One of these divisions is a professional, technical and related worker which has two groups—one sub-group is teachers who are sub-divided into virus families of teachers such as teachers of universities, secondary schools, middle and primary schools, nursery and kindergarten schools and NCC. On the whole, teaching has been regarded as a profession in India, although it needs more preparation for improving the specialized knowledge, skills and expertise of teachers to be really effective professional.

Professional growth

In view of the great importance of teaching and significant need for making it a true profession, adequate growth of specialization and expertise of teachers is essential. Rabindranath Tagore has rightly remarked, 'A teacher can never truly teach unless he is still learning himself'. A lamp can never light another lamp unless it continues to burn its own flame. Teachers, therefore, require to develop their knowledge base, skills, understanding, interests issues on a regular basis, updating themselves with the changes in the system. They have to advance their expertise via different means, media and methods. The preparation of the teachers is actually continuous, multi-dimensional and multifaceted.

Pre-service and in-service education and training

The teacher is prepared for his profession prior to his entering into it, but he has to be prepared himself continuously in order to keep himself abreast with the latest developments in his subject areas and to acquire the communication skills for effective teaching. For this purpose, pre-service communication skills for effective teaching. For this purpose, pre-service education and training are essential. Modern teachers should be exposed to various media and methods so that they can improve their teaching practices in order to ensure students increasing attention and better achievements. Since the frontiers of knowledge have been going on expounding every now and then, teachers would lag behind even their own students unless they keep in touch with the latest trends and developments in their own subjects, sometimes in other subjects also which assume current importance due to certain occurrence and incidents.

Teachers should, therefore, participate in various orientation and refresher courses not in perfunctory manner but seriously taking full advantage and maximum benefits.

UGC has made it mandatory on their part to participate such courses as a part of their service and promotion conditions under new pay scales.

Different kinds of in-service education and training in a planned, systematic and continuous manner need to be provided of improving the professional competence of teachers. The Programme of Action on NPE, 1986, discussed the emerging needs and importance of in-service training due to change of national goals, revision of curricula new issues and innovations in teaching techniques and class/school management.

The POA (1986) has rightly enunciated that the erstwhile system did not accord teachers a proper economic and social status, opportunities for professional and career development and initiative. For innovative and creative work, proper orientation and in concept techniques and value system are required to fulfil their role and responsibilities. Motivation of teachers was felt important for implementation of the policy. In order to achieve this, POA proposed:

(i) To organize specially designed orientation programme in teaching methodologies, pedagogy, and educational psychology, for all new entrants at the level of lectures;

(ii) To organize refresher courses for serving teachers to cover every teacher at least once in five years;

(iii) To organize orientation programme by using internal resources of universities and by bringing a number of colleges together;

(iv) To encourage teachers to participate in seminars, symposia and so on.

Since it was felt that the traditional or conventional models and modalities of in-service education might not be adequate, the POA (1986) suggested that the Indira Gandhi National Open University would run special programmes for promoting self-learning among teachers. Methodologies would be developed for evaluation of teacher performance through self-appraisal, through peer groups and also by students. Career development/ advancement of teachers would be linked with professional development and performance appraisal. The management structure of universities and colleges should be remodelled to provide opportunities for greater participation of teachers at all levels of academic administration.

The Acharya Ramamurti Committee in its review of National Policy on Education, 1986 (1990) has also added that teacher training in the university system is rather weak. All along, very rightly, emphasis has been laid on building of professional cadres of teachers from down at the level of primary school teachers. However, 48 Academic Staff Colleges have been established, but their organization of in-service education programmes is not adequate. The said committee (1990) has recommended: 'In order enhancing the quality of the teachers in the university system pre-induction training for a period of one year after recruitment should be organized. This training should be organized on a decentralized basis by the respective universities themselves.'

Research activities

Research activities/studies should be conducted not only for award of degrees like PhD, but also for the professional growth of teachers. The process of higher education has to develop research projects in the frontier areas of science, technology, humanities and social sciences. The POA (1964–66) has rightly observed, "If higher education has to become relevant and solve the most difficult problems, universities must come centrestage".

Adequate infrastructural facilities and incentive measure should be developed with cooperative and autonomous management structures. Various industries need to be encouraged to set-up centre for and support research activities of the scholars working in different organizations and sectors. Appropriate research studies can be undertaken for modifying curricula and methodologies of learning with incorporation of problem solving, creativity and relevance. There should be adequate coordination and cooperation among funding agencies to ensure effectiveness and efficiency in research activities of teachers. The POA has suggested organizations like the National Research Foundation for pooling together and augmenting resources.

The Acharya Ramamurti Committee (1990) has also suggested that science and technology agencies must support these research activities and should provide certain proportion of overheads (say 20 per cent) as part of the research grants. Research in humanities and social sciences should be directed towards contemporary realities and also in Indian intellectual and cultural traditions seriously in order to understand ourselves and to develop the composite culture of India envisaged in the constitution. Research Institute and Institutions of higher learning and research should be established in and outside the agencies of the universities for promoting the research studies of social relevance and applicability.

Extension and community development activities

Participation of teachers in the extension and community development activities of the colleges and universities contribute to the professional growth of teachers to a great extent. It adds to their social awareness and responsibilities and develops their insights and experience. It enables teachers to reciprocate their debt to the society to some extent through sharing the national development programmes. The NPE, 1986, Review Committee (1990) has laid more emphasis on this aspect of teacher's professional growth and said: 'Extension work in universities, as of now is largely in the nature of individual *ad hoc* activities undertaken by the teacher social work, adult literacy works population work, slum clearance, work relations to National service Scheme, etc. mostly these activities are undertaken during the vacation period. What is needed; however is extension work being originally linked with the regular process of teaching/learning/research.'

The committee has recommended that universities should involve themselves in development issues and become instrument of development in the concerned regions. Consistent with this concept, curriculum development, etc., should undergo significant changes.

Writing and publications

Contributions of articles to standard journals at the national and international levels are regarded as the indices of the professional growth of teachers. Writing and publication of books of good quality and relevance are necessary for professional development of teachers. Long back English essayist Bacon aptly said that writing makes an exact man. Teachers to be real academics need to devote their time and energy to the development of materials both textual and reference, which enable them to improve their professional growth.

The Ministry of Human Resource Development (Education) and UGC have developed certain schemes to give grants to the teachers for writing and publication of the scholarly books as well as students. Dutt (1990) has remarked: 'Besides these there are also other types of professional literature, including books, curricular guides, pamphlets,

and monographs, which are produced and printed for and by teachers. These not only help professional growth of the writers themselves but also of the readers of materials. In many universities of the developed and developing countries, therefore, publications of high standard are regarded as equivalent to PhD degrees. Teachers of higher education should develop materials in the fields of specialization and interests for the benefits of their own in particular and of the students, teachers and scholars general.'

Role of teachers' organizations in professinal growth

In India, there are a good number of national as well as state organizations for teachers working at various levels and stages of education. According to a survey conducted by the All India Federation of Educational Associations of Teachers' Organizations (1966) there were not less than 17 national or all-India organizations of teachers and not less than 65 state associations of teachers. In the meantime, the numbers must have raised up to more than a hundred and a thousand, respectively. It has been properly analyzed by Dutt (1990) when she said, 'Teachers' organizations in India are often criticized by the public for paying attention to only teachers' welfare and status rather than to the raising of the professional standards in education.' A reference to the survey (1966) showed that ten state associations did not indicate the aims and objective of their organizations and six organizations have very vaguely laid down the objectives of their associations. But the rest of these took great pains in formulating the objectives of their association to promote education to improve service conditions and to maintain security and integrity of the profession. But not a single association either at the national or state level could draw out a code of conduct or ethics for its members.

Although no up-to-date survey of this type seems to have been conducted about the teacher;' organization in India, it is evident from the reporting in the newspapers and journals that many national and even state teachers' associations have streamlined their activities and taken up a number of programmes for the professional growth of teachers. Certain all-India professional organizations have developed a strong network of affiliated associations at various levels and been implementing various programmes like seminars, workshops, conferences, publications, and research studies for professional growth of teachers.

These teachers' organizations should become the most effective of all organized teachers' groups. They can influence improvement of education to a great extent by improving their service conditions of teachers, augmenting resources for educational institutions, ensuring security and status of the profession solving regional and national problems and carrying out various national programmes of education.

Teacher' organizations should be professionally oriented and implement various faculty development programmes for their own professional growth and development of education in general.

Teachers' participation

Teachers should be provided with opportunities to participate in a wide range of activities that are necessary not only for their own professional advancement, but also improvement of their organization. They should be encouraged to play an important role in different academic activities such as preparation of the institutional plans, curriculum designs, conducting innovative programmes for improving teaching methods and strategies etc., they can be involved in management and resource mobilization and curriculum and co curricular activates. Teachers should keep their mind open to all ideas and activities that

can contribute their own experiences and help improving the educational quality and standard. Their slogan should be 'let noble though come from all sides'.

Like all important professions, teaching profession should have its own professional ethics, which is one of the basic requirements and characteristics. There should be a code of conduct or professional ethics which can guide the teachers' conduct and behaviour in their institutions and outside. A code of professional ethics when properly enforced enhances the power, prestige and status of the teacher in particular and of the teaching profession as a whole. Teachers can enjoy certain responsibilities. A code of professional ethics is, in fact, a charter of rights and duties for the protection of professional autonomy and freedom. Particularly, teachers' organization should formulate and enforce this in their own interest and for improving the quality of education. The constructive progress in this direction can develop a positive attitude of the teacher as well as of the society towards the teaching profession. This can ensure development of a high degree of recognition, regard and social status of the profession so that true professionalism can emerge in the long-run.

Although in India professions like law and medicine have their own code of conduct which are enforced by agencies namely the Bar Council and the Medical Council, teaching profession has not yet accepted such a code of conduct. But the teaching profession has a long and hoary heritage and maintained high moral values through ages. Even though it has not evolved and enforced a code of processional ethics. It has been based on a set of ethical values like love, affection, sympathy, help and cooperation towards students since time immemorial. These ethical values need to be articulated and formalized in a written document which can be implemented by the teachers themselves and honored by the society in general. The unwritten and implicit code of conduct should be explicitly converted into a written code of professional ethics which should not remain only at a philosophical level, but be transacted into practical actions by all means.

According to S. Sreedhara Swamy (1992), 'Formulation of a code of professional ethics for teachers and voluntary enforcing it on the members, is one area which has been almost completely neglected by professional organizations of teachers in the country'. The All India Federation of Educational Associations, the All India Federation of University and College Teachers' Organizations and a few state level organizations made certain attempts to evolve a code of ethics, most of which remained on paper. No serious attempt has been made to enforce it on their members. With the vast increasing number of educational institutions at all stages again under different managements and cadres, it is found very difficult to enforce the code of professional ethics. Teaches are working not only in a very large number but also have different interests and service conditions. It is often found that many teachers indulge in activities not conducive to their status and dignity.

The National Policy on Education (1986) laid down, "National level association of teachers could prepare a code of professional ethics for teachers and see to its observance." In pursuance of this, the Department of Teacher Education, NCERT, New Delhi organized a national workshop in November 1986 at Hyderabad which developed a draft code of professional ethics defining the duties and responsibilities of teachers, parents and administrators for effective enforcement. The preamble of this code *inter-alia* says that the teachers of India are determined to organize teaching as a profession requiring expert knowledge, specialize skills and sense of individual and collective responsibility for the welfare (students in our charge and committed to self-direction and self-disciplined, have resolved to adopt this Code of Professional Ethics

and enforce it on themselves voluntarily to practice their profession according to the highest ethical standards. The salient features of this code are as follows:

(i) The teachers shall treat all students with impartiality, and help the students in their intellectual, physical, social, emotional and moral development and character formation and shall promote scientific temper, a spirit of enquiry and creative self-expression.

(ii) The teacher shall seek to establish friendly and cooperative relations with parents, provide information to parents regarding the attainments and shortfalls of their children and strive to promote effective parent-teacher association.

(iii) The teacher shall strive to develop the educational institutions as community and human resource development centre strive to fight fissiparous tendencies based on religion, region, language and separatist tendencies and shall refrain from interfering in the local factional politics.

(iv) The management and the educational administrators shall be just fair and impartial in matters like recruitment and promotion of teachers, admissions and promotion of students; shall provide the needed resources and infrastructure facilities in schools, ensue fair service conditions to teachers and involve teachers in planning and decision-making.

(v) The teacher shall be aware of legislative enactments, rules and regulation governing educational policies cooperate with the head of the institutions, the management and educational administrators.

(vi) The teacher shall seek and participate in programmes of continual professional growth like in-service education, seminars, and symposia and shall be ever willing to assist his colleagues who are new entrants to the profession.

(vii) The teacher shall be a member of a professional organization, pay her/his dues regularly, participate as a matter of right in the formulation of policies, contribute to strengthen the unity and solidarity of the professional organization and observe its code of behaviour and discipline.

The workshop recommended that teachers' organizations, after adopting the code of professional ethics, have to evolve a suitable machinery and procedure for its observance.

Teaching is more a profession than a service to society. Hereunder are the professional characteristics of teaching profession.

- **It essentially involves an intellectual operation:** Teaching is more than talking. It requires adequate content knowledge, conscious organization of learning activities, and deliberate creation of a conducive and supportive learning environment. While providing learning experiences a teacher has to constantly analyse and evaluate classroom environment and evolve suitable plan of action to achieve the pre-specified desirable change in the behaviours and outlook of the group of learners. All these are intellectual operations.
- **It draws material from science:** Teaching is not only an art but also a science.
- **It transforms raw material into a practical and definite end:** Learners are the raw materials who are through knowledge, skills and attitudes are transformed into useful products.
- **It possesses an educationally communicable technique:** Teaching techniques are systematic and have definite steps to be followed.

- **It tends towards self-organization:** People in teaching are sensitive towards self growth and development.
- **It essentially performs a social service:** Education is a potent tool to bring about social change.
- **It has a lengthy period of study and training:** Teachers take years to gain mastery over content knowledge and methodology of teaching.
- **It has a high degree of autonomy:** A teacher plans and performs his duties in a desired way. The methodology, material, techniques and activities are planned by the teacher himself.
- **It is based upon a systematic body of knowledge:** There is fixed curriculum for school learning.
- **It has common code of ethics:** These include mastery over content, knowledge of learning principles, practice of teaching skills, proficiency in handling teaching aids, sense of responsibility, concern for students' cause, accepting and appreciating students' efforts, and so on.
- **It generates in-service growth:** A true teacher learns at all the stages of teaching.

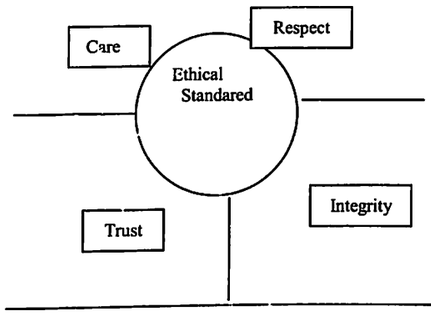


Fig. 4.1 Components of ethical standards in teaching profession

4.3 INNOVATIONS IN TEACHER EDUCATION

Innovation is the key to improvement. In current time the obsolete ideologies and methods of teaching do not work. In order to relate with children, teachers need to keep themselves upgraded with new ways of teaching. For instance if a teacher is not net savvy then he/she cannot make History classes interesting. In today's age of videos and podcasts, children can easily learn through interactive media, hence, teachers need to keep up with the current technology.However, the idea of innovation can mean different things to different people. For example, the use of coloured chalk and basic audio-visual materials may be regarded as being an educational innovation in some developing countries in the region, while in other more affluent countries innovations may largely refer to the development and use of sophisticated computer facilities.

Educational innovation refers to an idea or practice new to a specific educational context that meets unsatisfied needs. It is the introduction or promotion of new ideas and methods that are devised in education and/or school practices which have a substantial effect on changing the existing patterns of behaviour of the group or groups involved.

Innovative strategies imply the development of new ideas which are disseminated and utilized; they usually occur in response to particular problems that exist in the education systems.

The innovation of micro-teaching has been institutionalized across India. Model-teaching appeared and disappeared at demonstration level, whereas techno-pedagogy is in infancy stage. A number of schools have started the smart classes. Hence, some teacher education institutions are also trying to do a lot to prepare their future teachers to cope up with these challenges. Personalized teacher education appeared in one form or the other (DAVV, Indore, Banasthali, Lucknow University). A large number of visitors appreciated these personalized teacher education programmes, but none adopted them in their institutions. Participatory approaches to problem solving have been effectively demonstrated in classrooms.

Attempts have been made by the Intel 'Teach to the Future' in integrating information and communication (ICT) in Teacher Education at pre-service and in-service levels. Intel has been organizing training programs to orient the pre-service and in-service teachers with sizeable inputs of ICT.

The regional institutes of educations (RIEs) of the NCERT have been offering four year B.A./B.Sc./B.Ed. integrated programs of teacher education. Also, the RIEs have been offering two-year B.Ed. programme. The University of Delhi has been offering 4 year integrated programme (B.El.Ed) for the preparation of elementary teachers. A two-year PG Diploma in Educational Technology proposed by PG Departments of Teacher Education of SNDT University and two-year integrated M.Ed. programmes have been approved.

Modular integrated teacher education programmes for higher education, and e-teacher education programmes have been formulated by some of the institutions. A number of innovations have been attempted in evaluation such as Choice Based Credit System, Electronic Distribution of Examination Papers (EDEP), On Demand Testing, Automated Testing, Double Valuation, Testing of Affect Attributes have been attempted. Progressively, there is a shift to total internal evaluation based semester system. Such innovative practices in evaluation are being progressively integrated in teacher education curricula.

4.3.1 Educational Technology

A sizeable number of studies on effectiveness of CAI developed through various computer languages, employing either pre-experimental design or quasi-experimental design have revealed significant mean score gain from pre-test to post-test. Studies on the effectiveness of CAI reveal favourable reactions of students and teachers. There are few studies on effectiveness of CALM in various modes, namely, text, graphics, text, and graphics, text graphics and music. It has been found that the composite modes may not always ensure higher level of language learning (Das, 1998, MSU).

A study conducted on Time Space Personnel Management System revealed that the computer-based TSPM system was found relatively more acceptable and better functional than the manual TSPMS (Biswal, 1995, DAVV).

The studies on the pedagogic/techno-pedagogic analysis of the computer-based educational instructional programmes are not too many. These studies reveal that there should be added focus on production variables, pedagogic principles and spatial and temporal contiguity of various message forms (Patel, 2001 MSU; Chaudhari, 2005, MSU).

A sizeable number of teacher education institutions in India have initiated ICT in education either as a core course or as an optional course. In spite of the impeding factors, namely, limited staff, inadequate laboratories with maintenance problems, sizeable classes, the courses have been found to realize their objectives reasonably (Goel, Das, and Shelat, 2003, MSU). A large number of teacher education institutions have been found lacking in facilities such as Internet, MS Publisher, Acrobat Reader (Goel, 2005, MSU). A few studies conducted on the use of Internet in teacher education institutions revealed that the student teachers largely lack in info-savvy skills and techno-pedagogic skills (Joshi, 1999, MSU; Dhodi, 2005, MSU).

Some studies have been conducted on bridging the gaps between teaching styles and learning styles. The studies are appreciable but there is a need to conduct many more studies (Rathod, 2005, MSU). Studies conducted on language instruction through power point presentations on realizing communicative and functional languages have found that such presentation are indeed effective tools of learning the various languages.

There have been very few studies on developing language learning strategies and learner autonomy through web blogs. Blogs not only provide teachers with an exciting new way to approach communicative language learning, these also give students a new reason to enjoy reading and writing. Educational technology and ICT in education have established their values. But, technology in education is not yet fully integrated. Hence, technology in education is still under-utilized.

Some of the teacher trainees make use of Internet for surfing, e-mail, research, core courses, and special areas. But, the Internet is rarely used for web designing, reflective dialogue and outsourcing. Measures of Internet safety are rarely employed. There is a need to develop net-savvy skills in teacher educator trainees.

4.3.2 Teaching Methods

A study on the science curriculum transaction in secondary schools of Baroda city revealed that teachers are not clear about values of science (P.S. Umashre, 1999, MSU). Student teacher is found to be more interested in using innovative methods of teaching the language than the in-service teachers. English language teaching at school level is found to be suffering from lack of interest and attitude (Kshamata Chaudhary, 2002, VMOU). Use of inductive thinking model to teach science at primary level proved fruitful in developing the reasoning ability of students (Kishor Kumar K. Leuva, 2002, VNSGU). A study on development of science education in Nagaland concluded that more than half the total number of science teachers (57%) were of the opinion that objective of science education were not clear to them which resulted in less achievement of objectives of science education (Khriesamhalie Pienyu, 2004, Kohima).

4.3.3 Educational Evaluation

K. Charate (Barkatullah University, 1993) investigated the causes of low achievement among normal children and attempted to design an appropriate curriculum and instructional strategies to tackle low achievement. N.S. Rathod (Bhavnagar University, 1993) conducted a study on Application of Item Response Theory to Criterion Referenced Testing. M. Singh (Agra University, 1994) conducted a study of the differential effect of anxiety on performance in progressive and terminal examinations.

A large majority of the candidates while taking examinations are rarely normal because of the faulty examination system, be it admissions into the educational

programmes, periodical tests, or 'at end test' fear of failure and aspiration for success keeps disturbing the candidates.

Neela Shelat and Anjali Mehta (MSU, 2003) investigated errors committed by students of Std. VIII in writing Gujrati. Number of attempts has been made on construction and standardization of tests in various areas. All these studies have definitely added to the knowledge base in the area o educational evaluation.

4.3.4 Environmental Education

Video film on environmental pollution was found to be effective in eliciting students' positive response (Indu Bala and U. Singh, 1999, SGU, Surat). Teacher educators were found to be very positive towards environmental education (Anuradha, 2005, Punjab University, Chandigarh). The instructional programme on environmental studies facilitated the teacher in evolving teaching strategies for enhancing teacher-pupil interactions during the acquisition of process skills (N. Ramkumar, 2004, MSU. Baroda). Fr. Rayappan Irudayam, SJ. (MSU, 2006) conducted a study on Development and Implementation of a Computer Based Multimedia Software Package to Enhance Environmental Awareness in the Students of Std. IX. The study concluded environmental education needs to be institutionalized in teacher education very intensively.

4.3.5 The 5 E-Model of Constructivism

It is said that learners build new thoughts on the basis of their old thoughts. Students of all ages, including adults, can use 5 Es. Each of the 5 Es describes a phase of learning, and each phase begins with the letter 'E'—engage, explore, explain, elaborate and evaluate. The 5 Es allow students and teachers to experience common activities, to exercise and build on previous knowledge and experience, to construct meaning, and to constantly evaluate their understanding of a concept.

Table 4.2 Difference between Traditional Classroom and Constructivist Classroom

Traditional classroom	Constructivist classroom
Curriculum begins with the parts of the whole. Emphasizes basic skills.	Curriculum emphasizes big concepts, beginning with the whole and expanding to include the parts.
Strict adherence to fixed curriculum is highly valued.	Pursuit of student questions and interests is valued.
Materials are primarily textbooks and workbooks.	Materials include primary sources of material and manipulative materials.
Learning is based on repetition.	Learning is interactive, building on what the student already knows.
Teachers disseminate information to students; students are recipients of knowledge.	Teachers have a dialogue with students, helping students construct their own knowledge.
Teacher's role is directive, rooted in authority.	Teacher's role is interactive, rooted in negotiation.
Assessment is through testing, correct answers.	Assessment includes student works, observations, and points of view, as well as tests. Process is as important as product.
Knowledge is seen as inert.	Knowledge is seen as dynamic, ever changing with our experiences.

Advantages of constructivism are as follows:

1. Students learn more, and enjoy learning more when they are actively involved, rather than passive listeners.
2. Education works best when it concentrates on thinking and understanding, rather than on rote memorization. Constructivism concentrates on learning how to think and understand.
3. Constructivist learning is transferable. In constructivist classrooms, students create organizing principles that they can take with them to other learning settings.
4. Constructivism gives students ownership of what they learn, since learning is based on students' questions and explorations, and often the students have a hand in designing the assessments as well. Constructivist assessment engages the students' initiatives and personal investments in their journals, research reports, physical models, and artistic representations. Engaging the creative instincts develops students' abilities to express knowledge through a variety of ways. The students are also more likely to retain and transfer the new knowledge to real life.
5. By grounding learning activities in an authentic, real-world context, constructivism stimulates and engages students. Students in constructivist classrooms learn to question things and to apply their natural curiosity to the world.
6. Constructivism promotes social and communication skills by creating a classroom environment that emphasizes collaboration and exchange of ideas. Students must learn how to articulate their ideas clearly as well as to collaborate on tasks effectively by sharing in group projects. Students must therefore exchange ideas and so must learn to "negotiate" with others and to evaluate their contributions in a socially acceptable manner. This is essential to success in the real world, since they will always be exposed to a variety of experiences in which they will have to cooperate and navigate among the ideas of others.

4.3.6 Value-based Teacher Education

Values are not add-ons but are integral to the process of education. All education is, in sense, value education. Education is a process of bringing about desirable 'changes in the way one feels, thinks and acts in accordance with one's concept of the good life'. In this sense, education necessarily involves the transmission of values. To inculcate values, we need to design a curriculum based on a planned collection of skills, desirable knowledge, attitudes and values that we wish to pass on to the younger generation.

Approaches to value based teacher education: At present, various kinds of programmes in the in-service and pre-service levels are being conducted for the orientation and training of teachers in value education. The focus is on personal development of the subjects through prayer, yoga, mind-improvement techniques, meditation and relief from stress. Messages are delivered through discourses, lectures, benedictions and exhortations.

With this analysis and understanding background, the following methods and techniques may be suggested:

1. **Classroom learning activities method:** The very basic purpose of value education is to develop moral values in the learners. The methods and activities should be such that it should not sound like preaching. Value judgment and internalization to be achieved by exposing students to a variety of experiences and activities which may include discussions, reading, listening, narration, direct presentation, etc.

2. **Practical activities method:** The essence of practical approach is that they provide the learners with suitable opportunities to practice and live their lives according to the principles and values they have perceived and understood. Children should engage themselves in life related practical activities which will enable them to apply in their day-to-day life.
3. **Socialized techniques and activities:** In socialized techniques, learner is involved in activities and experiences which represents functions and problems of agents of socialization. Role playing activities may be organized based on the life experiences as per the age level of students.
   - Staging play, dramas with value themes on traditional and modern themes.
   - Enacting different kinds of roles from epics and scriptures.
   - Modelling exercise on themes such as (i) gender inequality, (ii) caring for animals and human beings, (iii) problems pertaining to women's role and education, (iv) problems related to environment, and (v) consequences of air water pollution.

Check Your Progress

1. What do you mean by regulatory body of teacher and school education?
2. What teacher education degree is required to teach elementary and secondary students?
3. How is Master of Education (M.Ed.) different from Master of Arts in Education (M.A. Education)?
4. Which courses are considered as higher studies in education?

4.4 ROLE OF NCTE, NCERT, SCERT AND DIET IN TEACHER EDUCATION

India is a vast country with several types of education such as school education, higher education, technical education, teacher education, medical education, management education, law education, para-medical education, and distance education. Many national institute/council and regulatory bodies function in India to regulate and govern these various types of education.

All the regulatory bodies function under the umbrella of University Grants Commission (UGC). Moreover, the national councils and the regulatory bodies enjoy functioning and decision-making autonomy. Lately, a fruitful initiation has taken place to propose University Grants Commission as National Commission on Higher Education and Research (NCHER). The list mentioned below are the regulatory bodies of various form of education governed in India.

Table 4.3 Regulatory, Statutory, and Governing Education Bodies in India

S. No.	Name	Main Role
1.	University Grants Commission (UGC)	Funding, recognition of institutions and degree titles, maintaining overall standards
2.	Distance Education Council (DEC) under the IGNOU Act	Funding, maintaining standards of open education
3.	All India Council for Technical Education (AICTE)	Approval for technical institutions and limited funding role for quality improvement
4.	Council of Architects (CoA)	Registration of architects and recognition of institutions for education in architecture and town planning
5.	Medical Council of India (MCI)	Registration of medical practitioners and recognition of medical institutions and qualifications
6.	Pharmacy Council of India (PCI)	Registration of pharmacists and approval of pharmacy institutions
7.	Indian Nursing Council (INC)	Accepts qualifications awarded by universities within and outside India
8.	Dental Council of India (DCI)	Recommend to the Central Government for approval of dental colleges etc.
9.	Central Council of Homeopathy (CCH)	Maintain Central Register of Homoeopaths
10.	Central Council of Indian Medicine (CCIM)	Maintain central register
11.	Rehabilitation Council of India (RCI)	Recognition of institutions for physiotherapy and related fields
12.	National Council for Teacher Education (NCTE)	Recognition of teacher education institutions, framing norms and standards
13.	Indian Council for Agricultural Research (ICAR)*	Coordinate and fund agricultural education
14.	Bar Council of India (BCI)	Listing of Members of Bar
15.	National Assessment and Accreditation Council (NAAC)	Inspecting and grading education institutes
16.	National Council Of Education Research And Training (NCERT)	Develop curriculum and other necessary actions for school education

* Not a statutory body

Source: Compiled by the author from various sources.

Table 4.3 contains the regulatory, accredited, and the governing education bodies. The bodies mentioned above are unique and manage to assure quality in education. Among them, few institutes are those which are working for the development of teacher education in India. The National Council for Teacher Education (NCTE) is directly associated with teacher education, its management and quality check; whereas other institutes such as UGC, NCERT, DEC, NAAC, and RCI are closely associated with the development of teacher and school education in India. Besides the regulatory and the governing bodies, other institutes like SCERT, DIET, BRC, and CRC equally work for the development of teacher education. Let us discuss the institutes associated with teacher education.

1. Role of NCTE in Teacher Education

National Council for Teacher Education (NCTE) is the apex body in teacher education in India. It has its main campus in New Delhi with a regulating authority of teacher education throughout India including teacher education through distance mode.

Establishment

National Council for Teacher Education (NCTE) was set up in the year 1973 on the recommendation of Education Commission (1964–66), to advise the central and state

governments on matters relating to Teacher Education. NCERT provided secretarial support to the non-statutory NCTE. NCTE developed a 'National framework for teacher education Curriculum' in the year 1978 and also created awareness on issues related to teacher education nationwide. However, it was unable to prevent proliferation of bogus or sub-standard teacher education institutes from functioning as NCTE was a non-statutory body. Therefore, a need was felt to empower NCTE and make it an autonomous statutory body so that it could regulate the institutions of teacher education and guide them in their curricula and methods.

NCTE as a statutory body came into force in pursuance of National Council for Teacher Education Act, 1993, on 17 August 1995 by a bill passed in Parliament.

Organizational structure

NCTE has its headquarters at New Delhi and four regional committees at Bangalore, Bhopal, Bhubaneshwar and Jaipur to look after its statutory responsibilities. NCTE in Delhi along with four regional committees have academic and administrative wings to deal with functions research, policy planning, monitoring, curriculum, innovations, co-ordination, library and documentation, in-service programmes apart from having the responsibility of introducing innovations in teacher education programmes and planned and coordinated development of teacher education institutions. The NCTE headquarters is headed by the chairperson, while each regional committee is headed by a regional director.

Table 4.4 given below discusses more in detail about the organizational structure of NCTE.

Table 4.4 Organizational Structure of NCTE

Units	Structure	Situated at	States Covered
NCTE, Head Office, New Delhi	Chairperson, Vice-chairperson, Member Secretary, and Deputy Secretary	NCTE, Hans Bhawan, Wing II, 1, Bahadur Shah Zafar Marg, New Delhi - 110 002.	All the States of Indian National besides the State Jammu and Kashmir
Northern Regional Committee (NRC)	Regional Director and Executive Committee	Northern Regional Committee (NCTE), 20/198, Kaveri Path, Mansarover, Near Mansarover Stadium, Jaipur - 302020. Rajasthan.	Haryana, Himachal Pradesh, Punjab, Rajasthan, Uttar Pradesh, Chandigarh and Delhi, Uttaranchal
Western Regional Committee (WRC)	Regional Director and Executive Committee	Western Regional Committee(NCTE), Manas Bhawan, Shyamla Hills, Bhopal - 462002, Madhya Pradesh.	Goa, Gujarat, Madhya Pradesh, Maharashtra, Dadra, and Nagar Haveli and Daman & Diu, Chattisgarh
Eastern Regional Committee (ERC)	Regional Director and Executive Committee	Eastern Regional Committee (NCTE), 15, Neel Kanth Nagar, Nayapalli, Bhubaneshwar - 751 012, Orissa.	Arunachal Pradesh, Assam, Bihar, Jharkhand, Manipur, Meghalaya, Mizoram, Nagalanda, Odisha, Sikkim, Tripura, West Bengal
Southern Regional Committee (SRC)	Regional Director and Executive Committee	Southern Regional Committee (NCTE), Jnana Bharathi Campus Road, Nagarabhavi, Opp. National Law School, Bangalore - 560 072	Andhra Pradesh, Karnataka, Kerala, Tamil Nadu, Lakshadeep, Andaman & Nicobar Islands, Pondicherry

The organizational structure of NCTE is decentralized. It has four executive regional committees in its regional offices. As mentioned in Table 4.4, NRC, ERC, WRC, and SRC have their regional director and executive committee headed by a chairperson to discuss the matter relating to teacher education at their jurisdiction.

Objectives of NCTE

The main objective of the NCTE is to achieve planned and coordinated development of the teacher education system, the regulation and proper maintenance of norms and standards in the teacher education system and for matters connected therewith. The mandate given to the NCTE is very broad and covers the whole gamut of teacher education programmes, including research and training of persons for equipping them to teach at pre-primary, primary, secondary and senior secondary stages in schools, and non-formal education, part-time education, adult education and distance (correspondence) education courses.

Role and Function of NCTE

NCTE undertakes various functions relating to teacher education, starting from setting the norm and standards to affiliate the teacher education institutes and to ensure quality in its teaching learning process. Regular supervision and monitoring of the institutes of teacher education is another important function of NCTE. Let us discuss more about the role and function of NCTE:

- It undertakes inspection to observe the facilities provided by the teacher education institutes and recognition of various teacher training courses based on application submitted by the institutions concerned in the prescribed pro forma and along with the requisite documents.
- It conducts studies and surveys on various aspects of teacher education and then publish them.
- It provides suggestions and recommendations to central and state governments, UGC, universities, Distance Education Council and the recognized teacher education institutes on preparation of plans and programmes for teacher education.
- It monitors and coordinates teacher education and its development.
- It formulates guidelines in respect to qualification and eligibility of teachers who want to teach in schools, colleges and teacher education institutes.
- It sets norms for any specified training or category of courses for teacher education and the selection method of candidates, course content, mode of curriculum and curriculum transaction.
- It sets guidelines for starting new courses or training, staffing pattern, staff qualification and providing physical and instructional facilities.
- It fixs standards in respect to examinations, criteria for admission to such examinations, and schemes of courses.
- It decides the guidelines regarding tuition fees and other types of fees that are charged by institutes.
- It conducts and promotes research and innovation in different areas of teacher education.
- It lays down norms and standards, and curriculum for conducting Central Teacher Eligibility Test (CTET) to make the teacher eligible for teaching up to Class VIII,

which is mandatory according to Right to Education Act 2009. This is for the information of all concern that norms, standards, and curriculum of CTET has been developed by NCTE where as the test is conducted by CBSE.

- It examines and reviews periodically the implementation of the norms, guidelines and standards laid down by the Council, and to suitably advise the recognized institutions. In case the violation of set norms and standards by the institute, it has the power to withdraw affiliating status of that institute.
- It lays down norms for suitable performance appraisal systems and mechanisms for enforcing accountability on recognized institutions.
- It makes schemes for different levels of teacher education.
- It identifies recognized institutions and set up new institutions for teacher development programmes.
- It takes necessary steps to prevent commercialization of teacher education.
- Publication is an important function of NCTE. It publishes good quality books, scholarly journals, articles, conduct high standard lectures, within its jurisdiction.
- NCTE also makes a nationwide survey to identify the institute of excellence in the field of teacher education and the contribution of the teacher educators in pedagogy, use of new methodology in teaching, and other areas of teacher education. Accordingly, it awards the teacher educators who make excellent contribution in teacher education. It provides 32 awards annually, four in each region to elementary teacher training, Two from each region to CTE/B.Ed., one from each region to IASE/universities, and one from each region to physical education (B.P.Ed./ M.P.Ed.).
- NCTE also develops norms and standards for affiliating to the institutes, run the courses of physical education such as Bachelor of Physical Education (B.P.Ed.) and Master of Physical Education (M.P.Ed.) as physical education is a part of school education practices.
- It performs such other functions as may be entrusted to it by the central government from time-to-time.
- It works with proper coordination with NCERT, UGC, MHRD, RCI, DEC, CBSE and other regulatory bodies promote teacher education and school education.
- It also develops norms and standards to operate teacher education programmes offered by distance education mode such as D.El.Ed./B.Ed./M.Ed. through open universities like IGNOU and other state open universities.

NCTE: Vision 2020

NCTE will have transformed the public understanding of the connection between teacher knowledge and student learning. To accomplish this, NCTE will develop a system that provides rich opportunities for career-long teacher learning and that documents the growth of both literacy teachers and their students. Teachers who choose to participate in this system will be celebrated for their achievements by community leaders and the media. Policymakers also will rely upon these teachers for their expertise in literacy teaching and learning.

2. Role of NCERT

National Council of Education Research and Training (NCERT) is a premier organisation in India to take care of the matters relating to school education and research in education. It has a long history of providing quality services to students and teachers. NCERT is well known for its text book publication up to 12th standard. Central Board of Secondary Education (CBSE) follows the curriculum of NCERT and its textbooks. Most state board schools also use NCERT books.

Establishment

The National Council of Educational Research and Training (NCERT) was set up in 1961 as an autonomous organization registered under Societies Registration Act (Act XXI of 1860) to advise and assist the Ministry of Human Resource Development, Government of India and Departments of Education in States/ UTs. The responsibility of NCERT is to formulate and implement their policies and programmes in the field of education for the improvement of school education and provides technical and academic support to schools in India.

Organizational structure

- ***General body:*** The Union Minister of Human Resource Development is the President (ex-officio) of the General Body of NCERT. The members of the General Body are the Education Ministers of all States and Union Territories and Chairperson of the University Grants Commission (UGC); the Secretary to the Government of India, Ministry of Human Resource Development (Department of Education); four Vice Chancellors of Universities (one from each region); the Chairman of the Central Board of Secondary Education; the Commissioner of the Kendriya Vidyalaya Sangathan; the Director, Central Health Education Bureau; the Director of Training, Directorate General of Training and Employment, Ministry of Labour; one representative of the Education Division, and the Planning Commission; members of the Executive Committee of the Council and nominees, not exceeding six, nominated by the Government of India (not less than four of them shall be school teachers). The Secretary, NCERT, is the Convenor of the General Body of the NCERT.
- ***Executive committee***: It is the main governing body of NCERT. The Union Minister of Human Resource Development is its President (ex-officio) and the Union Minister of State in the Ministry of Human Resource Development is the ex-officio Vice-President. The members of the Executive Committee are Director, NCERT; the Secretary to the Government of India, Ministry of Human Resource Development (Department of Education); Chairperson of the University Grants Commission; four educationists well known for their interest in school education (two of whom shall be school teachers); the Joint Director, NCERT; three members of the faculty of NCERT (of whom at least two are of the level of Professor and Head of Department); one representative of the MHRD and one representative of the Ministry of Finance (who is the Financial Adviser of NCERT). The Secretary, NCERT, is the Convener of the Executive Committee. The Executive Committee is assisted in its work by the following Standing Committees/Boards:
  (i) Finance Committee
  (ii) Establishment Committee

(iii) Building and Works Committee
(iv) Programme Advisory Committee
(v) Educational Research and Innovations Committee
(vi) Academic Committee of the NIE
(vii) Advisory Board of the Central Institute of Educational Technology
(viii) Advisory Board of Pandit Sunderlal Sharma Central Institute of Vocational Education
(ix) Managing Committees of the Regional Institutes of Education
(x) Advisory Boards of Departments of the NIE

Functions of the Council are looked after by the Director, Joint Director and Secretary. Three Deans, the Dean (Academic) coordinates the work of the Departments, the work of the Educational Research and Innovations Committee (ERIC) and Dean (Coordination) coordinates the activities of the Service/Production Departments and the Regional Institutes of Education. Presently five Regional Institute of Education (RIE) is functioning as a part of NCERT, which are situated at different regions of India. All the RIEs are mostly teaching and research campus. RIE conducts their regular courses such as: four year integrated B.Sc./B.A. and B.Ed., Two years B.Ed., M.Ed. and Research in Education. Besides teaching, they conduct many training programmes for the in-service teachers of that region. In every RIE, there is a Multi-Purpose Demonstration English Medium School situated in RIE campus which primarily used to conduct teaching up to 12th standard and conducts practice of teaching for the students who are admitted in different teacher education programmes. Besides that the school is used for conducting many educational experiment and practical work. Details of the RIE and the States they cover are given below in Table 4.5.

Table 4.5 Organizational Structure of NCERT

Units	Structure	States cover
NCERT Head Office, New Delhi	Director, Joint Director, Secretary	All the Indian States and Union Territory
RIE Ajmer	Principal, Heads	Chandigarh, Haryana, Himachal Pradesh, J & K, Delhi, Punjab, Rajasthan, U. P., Uttarakhand
RIE, Bhopal	Principal, Heads	Chhattisgarh, Dadra and Nagar Haveli, Daman & Diu, Goa, Gujarat, Maharashtra, Madhya Pradesh
RIE, Bhubaneswar	Principal, Heads	Andaman and Nicobar Islands, Bihar, Jharkhand, Odisha, West Bengal
RIE, Mysore	Principal, Heads	Andhra Pradesh, Karnataka, Kerala, Lakshya Deep, Puducherry, Tamil Nadu
NE-RIE, Shillong	Principal, Heads	Arunachal Pradesh, Assam, Manipur, Meghalaya, Mizoram, Nagaland, Sikkim, Tripura

The Regional Institutes of Education (RIEs) located at Ajmer, Bhopal, Bhubaneswar and Mysore cater to the educational needs (pre-service and in-service education) of teachers/teacher educators in the States and UTs under their jurisdiction. Pre-service professional training programmes are offered to prepare school teachers for teaching of different school subjects. These are Regional Resource Institutions for school and teacher education and they extend assistance in implementing the policies of the States/UTs and help in monitoring and evaluation of the Centrally-Sponsored Schemes. The North-East Regional Institute of Education (NERIE), Shillong, caters to the in-service educational needs of North-Eastern States as indicated earlier. However, the pre-service teacher preparation programmes for the North-East Region are still being taken care by RIE, Bhubaneswar.

Objectives

The major objectives of the NCERT and its constituent units, RIE, are as follows:

- Undertake, promote, aid, and coordinate research in areas related to school education
- Prepare and publish model textbooks, supplementary material, newsletters, journals and other related literature
- Organize pre-service and in-service training of teachers
- Develop and disseminate innovative educational techniques and practices
- Collaborate and network with state educational departments, universities, NGOs and other educational institutions
- Act as a clearing house for ideas and information in matters related to school education
- Act as a nodal agency for achieving goals of universalization of elementary education.

In addition to research, development, training, extension, publication and dissemination activities, the NCERT is an implementation agency for bilateral cultural exchange programmes with other countries in the field of school education. The NCERT also interacts and works in collaboration with the international organisations, visiting foreign delegations and offers various training facilities to educational personnel from developing countries.

Role and function of NCERT

NCERT focuses on six areas such as Research, Development, Training, Extension and Dissemination, Publication, and Exchange programmes. Let us discuss the specific role NCERT.

(i) Research

- Conduct and support research and offer training in educational research methodology.
- NIE, RIE, CIET, and PSSCIVE undertake programmes of research related to different aspects of school education, including teacher education.
- Support research programmes of other institutions/organizations by providing financial assistance and academic guidance.
- Provide assistance to research scholars for publishing their PhD thesis and also provide fellowship to conduct research in education and related areas.
- Organize various courses for educational researchers and educational project undertakers.
- Conduct countrywide educational research and surveys on the development of school education such as achievement of the students in various subjects, retention, dropouts, and pedagogical issues.
- Collaborate with international agencies in inter-country research, projects, and comparative studies in school and teacher education.

(ii) Development

- Develops and renews curricula and instructional materials for various levels of school education and makes them relevant to changing needs of children and society.
- Comes out with new innovative practices and methodology including pre-school education, formal and non-formal education, vocationalization of education and teacher education.
- Undertakes many developmental works in the field and domain such as educational technology, population education, women education, moral and value education, and education of the disabled and the children of special needs.
- Suggests the State Education Department to use new techniques, methods, and technology in the field of school and teacher education.

(iii) Training

- It conducts pre-service and in-service training of teachers at various levels—pre-primary, elementary, secondary and higher secondary, and also in such areas as vocational education, educational technology, guidance and counselling, and special education.
- RIEs of NCERT incorporates innovative features such as integration of content and methodology of teaching, long-term internship of teacher trainees in the actual classroom setting, and participation of students in community work in their pre-service teacher training programme.
- At present, it practices to send their staffs to the rural schools to get school based experiences for three months in every three years. That helps the teacher educators to understand the development and the requirements of educational practices in ground root level.
- RIEs also undertake the training of teachers of the states and of state level institutions and training of teacher educators and in-service teachers.
- Train thousands of teachers in India in a single effort, it uses two-way-audio and video teleconferencing in various issues. Teleconferencing on National Curriculum Framework 2005 is an example of such types of training module.
- Train both in-service and pre-service teachers to be proficient in ICT.

(iv) Extension

- Organize many extension services and programmes through its departments such as NIE, RIEs, CIET, PSSCIVE.
- Works in close collaboration with various agencies and institutions in the states and also works extensively with Extension Service Departments and Centres in teacher training colleges and schools.
- Provides assistance to various categories of personnel, including teachers, teacher educators, educational administrators, question-paper setters, textbook writers, etc. Conferences, seminars, workshops and competitions are organized as regular on-going programmes as a part of the extension activities.

- Organizes various educational programmes in rural and backward regions to motivate, inspire, and to bring the rural talents to the main stream of the society.
- Organizes extension programmes throughout the country and union territories on special educational programmes for the children with special needs and differentlyabled.

(v) Publication and dissemination

- Publishes textbooks for different school subjects for Classes I to XII in English Hindi, and Urdu.
- Brings out workbooks, teachers guides, supplementary readers, research reports, etc. In addition, it publishes instructional materials for the use of teacher educators, teacher trainees and in-service teachers.
- Publishes six educational journals in various fields such as Research in Education, New Trends in Education, Publishing Abstract of Good Educational Research, reflecting critical thinking in education on contemporary issues.
- Publishes in-house journal called NCERT Newsletter both in English and Hindi language.
- Publishes teacher support materials subject wise which helps the teachers and the teacher educators to make use of content by properly designing with pedagogy.

(vi) Exchange programmes

- To study educational problems and organize training programmes for personnel from developing countries, NCERT interacts with international organisations such as UNESCO, UNICEF, UNDP, NFPA and the World Bank.
- Acts as the Secretariat of the National Development Group (NDG) for Educational Innovations. It is one of the Associated Centres of APEID.
- NCERT offers training facilities through attachment programmes and workshops to educational workers of other countries.
- Acts as a major agency for implementing Bilateral Cultural Exchange Programmes in the field of school education and teacher education by sending delegations to study specific educational problems and by arranging training and study visits for scholars from other countries.
- Educational materials are exchanged with other countries and also equally get the materials from other countries for comparing it and to produce quality materials for its students.
- It also organizes faculty exchange programmes on request, and the faculty members are deputed to participate in international conferences, seminars, workshops, symposia, etc.

3. Role of SCERT

All states have their State Council of Educational Research and Training (SCERT). SCERT works for educational development of School and Teacher education of the States. It is responsible for initiating and continuation of state-run projects and implementing the project lunched by the centrel. It coordinates with NCTE and NCERT in the matter relating to educational development of School and Teachers. Let us discuss the establishment, organizational structure, objectives, and major function of SCERT.

Establishment

The National Policy on Education (1986) had recommended the creation of State Council of Educational Research and Training (SCERT) in each State to decentralize the functions of quality education, research and training. It also laid emphasis on the improvement of educational quality and suggested to adopt some programmes such as:

1. Improvement of curriculum
2. Teacher enrichment programme
3. Continuous and comprehensive evaluation
4. Quality textbooks
5. Improvisation and utilization of teaching aids

Keeping the future in mind, alternative strategies like informal education and vocational education after Class 12 has also been highlighted. SCERT has been given the responsibility to conduct these activities at the state level on behalf of NCERT for the improvement of education. Soon state governments started to establish SCERT in their States. State NCT of Delhi established its SCERT in 1988, Odisha in 1979, Tripura in 1996, Uttar Pradesh in 1981, Maharashtra in 1984, Andhra Pradesh in 1967 and accordingly in other States.

Organizational structure

Organizational structure of State Council of Educational Research Training (SCERT) is not same as the NCERT. The governor of the State is the ex-officio President of the council and the Minister of School and Mass Education of that State is the ex-officio Senior Vice President of the Council. The Executive Committee of the SCERT acts as the governing body of SCERT and administers day-to-day affairs in accordance with the rules, regulations, and orders of the State and Centre. School Education Secretary is the ex-officio Chairperson of the executive committee and the Director of SCERT is its member Secretary.

The programme advisory committee of SCERT finalizes all the activities relating to training, extension, research, implementation of school development plans, and Sarva Shiksha Abhiyan and undertaken by the council every year. Eminent educationist, representative of State and National Level Education organization such as: NCERT, NUEPA, Leading University, Principals of the selected schools, becomes the members of the committee. Director of SCERT becomes the Chairperson of the committee. The organisational structure of SCERT, Odisha, has been described below for understanding.

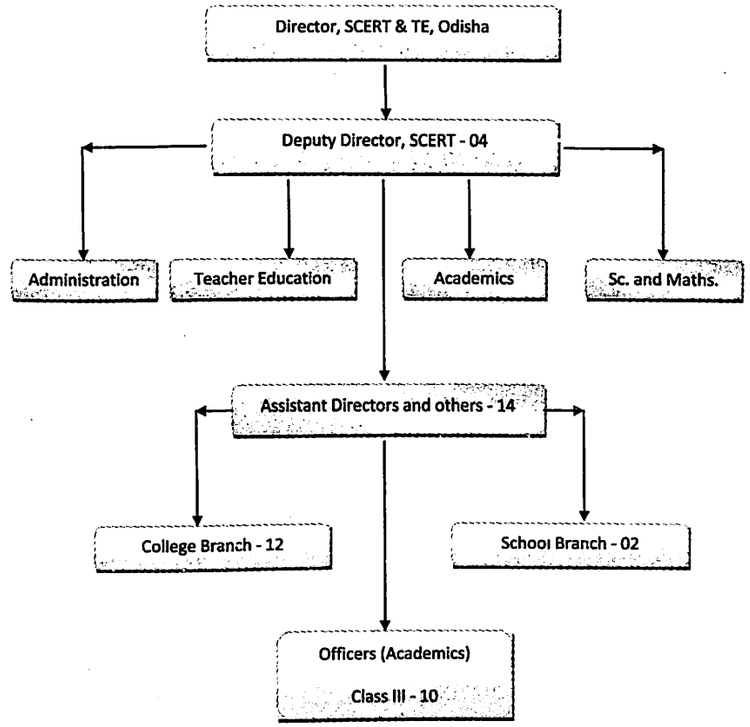


Fig. 4.2 Organizational Structure of SCERT, Odisha: An Example

Director of SCERT holds the apex position in the official working, next to four Deputy Directors, one for each Department—Administration, Teacher Education, Academics, and Science & Mathematics. In the chronology, next are 14 Assistant Directors out of which 12 are in College Branch i.e. Teacher Education Institutes and two in School Branch. Academic Officers are under Assistant Directors distributed in different subject areas. It governs Training Colleges (TC), College of Teacher Education (CTE), Institute of Advance Studies in Education (IASE), District Institute of Educational Training (DIET), and Certified Teacher (CT) Schools.

Objectives

The main objectives of SCERT in the States are as follows:

- To work in the areas of elementary education and teacher education programme (elementary and secondary) in the state.
- To organize pre-service training for prospective teachers, and capacity building programmes for in-service teachers, conferences, meetings, seminars and briefing sessions for State Education Officers and field functionaries.
- To organize induction level training programmes for the new entrants/teaching workforce of the teachers training institutions.
- To restructure syllabus and curriculum used at the elementary education and teacher education sector so as to make it need-based and relevant based and functional.
- To undertake, aid, promote and coordinate research and innovation activities among faculty members of teacher training institutions.

- To generate new ideas, innovations, improved practices in education, quality monitoring and supervision, etc. by conducting studies and researches both short term and longitudinal and their dissemination among faculty members of teacher training institutions.
- To produce high quality teaching learning materials and enriched literature for teachers, trainers, supervisors and key educational functionaries.
- To provide academic and professional support and guidance to agencies and institutions working in the field of education, population and development education, child rights and environment protection, and eco-friendly lifestyle, community education etc.
- To collaborate with other agencies, institutions, organizations for the cause of quality in school education and teacher education programme.
- To implement educational projects relating to school and teacher education lunched by NCERT, NCTE, MHRD, and Department of School and Mass Education of various States.

Role and functions

The following roles and functions generally SCERT undertakes in the State Level:

- To act as an agent of change in school education including formal and non-formal education and teacher education.
- To control and supervise the working of the Elementary Teacher Education Institutions (Secondary Training Schools, and Elementary Training Schools) and to coordinate the work of the Teacher Education Institutes.
- To organize in-service training for different categories of teachers, inspecting officers, and teacher educators and to coordinate the work of other agencies operating at the state level.
- To organize programmes, including correspondence-cum-contact courses for professional development of teachers, teacher educators, and inspecting officers.
- To produce curricula, instructional materials, textbooks for the use of educational institutions, teachers of pre-schools and elementary schools.
- To provide extension service to teacher training institutions at various levels.
- To organize and implement the special education projects, sponsored by UNICEF, UNESCO, COL, NCERT, NCTE and other agencies, for qualitative improvement of school education, teacher education and supervisors of education.
- To prescribe curricula and textbooks for the schools and teacher training institutes.
- To produce instructional materials for the use of teacher educators and school teachers.
- To conduct studies and investigations on various problems of education.
- To evaluate the adult and non-formal educational programme or any other programme relating to its jurisdiction.
- To conduct public examinations specially at terminal stages like end of Class III and Class V etc., with a view to controlling quality of education and selecting candidates for scholarships through such examinations.

- Provides resource support in terms of development of curriculum and textbooks, training packages, prototype teaching learning materials, capacity building of District Resource Groups and Block Resource Groups etc. for DPEP/SSA and Mid-day-Meal and other Projects.
- Provide assistance to preparation of Perspective Plan and Annual Work Plan and Budget for DPEP/SSA.
- Preparation of Perspective Plan and Annual Work Plan and Budget for Teacher Education.
- Introducing Distance Education Programme for training of Untrained Elementary School teachers.
- Monitoring of schools, CRCs and Training Programmes by SCERT and DIETs.
- Renewal and revision of Teacher Education Curriculum—both Elementary and Secondary.
- Disaster Management and preparedness programmes in schools.
- Conducting NRTS Examination in the state.
- Conduct of Studies sponsored by NCERT, NCTE, NIEPA, UNICEF, DPEP / SSA, EFA Society.
- Preparation of Vision 2020: An Agenda for School and Mass Education: Report of the Task Force
- Implementation of externally assisted Projects: Population and Development Education.
- Opening of State Open School under the aegis of National Institute of Open Schooling.
- Collaboration with NGOs working for Education.

4. Role of DIET

District Institute of Education and Training (DIET) is the ground level institute to prepare teachers for elementary classes. It organizes training and orientation programmes relating to elementary education. It also trains the SMC members, parents, village workers relating to various projects undertaken by state governments and the Central Government.

Establishment

According to Education Commission (1964–66), 'Of all the factors that influence the quality of education... the quality, competence and character of teachers are undoubtedly the most significant'. All these characteristics of a teacher depend majorly on the quality of training and the support that are provided to them. Due to the increase in elementary and adult education, the state level agencies found it difficult to manage. The NPE and POA envisaged addition of a third-district level-tier to the support system in the shape of District Institutes of Education and Training (DIETs).

DIETs were expected to have a better control of the institutes as they would be closer to them and more aware of their problems and needs. In accordance to the provisions of NPE a centrally sponsored Scheme of Restructuring and Reorganization of Teacher Education was approved in October 1987. One of the components of the Scheme was to set up DIETs. Till October 1989, central assistance had been sanctioned under the Scheme for setting up a total of 216 DIETs in the country. At present a total of 500 (approximate) DIETs exist in India.

Organizational structure

District Institute of Education and Training (DIET) works under State Council of Educational Research and Training (SCERT) of the state. Principal works as the head of the DIET with teachers in different subjects and pedagogy teachers. Trainee teachers get complete education in content and pedagogy to transact school curriculum up to elementary level.

Based on the above functions, a DIET would need to have staff strength in the following areas:

(i) Foundations of Education and Pedagogy

(ii) The subjects taught at the Elementary stages; namely:
- Languages taught at the elementary level in the district (these may be two, three or even four, depending on the number of languages which are introduced in a State at the elementary stage and factors like bilingual character of a district)
- Mathematics
- Environmental Studies –Social Science
- Environmental Studies–Science

Objectives

District Institute of Education and Training (DIET) has the following objectives:

- To conduct classes of regular teacher education programmes such as Diploma in Elementary Education or Diploma in Education.
- To conduct programmes for Elementary School and Pre-School Teachers (both pre-service and in-service).
- To organize specially designed courses for Headmasters, Officers of the Education Department, members of the School Management Committees (SMC), Community Leaders, Elected Heads of the *Panchayati* institutions, Block and Cluster Resource coordinators, etc.
- To actively participate in Preparation of District plans for UEE.
- To work for implementing Right to Education Act, 2009.
- Development of district specific curricula and teaching learning materials.
- To provide support to Block Resource Centres (BRC) and Cluster Resource Centres (CRC) for Elementary Schools and Programmers of UEE.
- To actively engage in Action Research and experimentation for an improved understanding of Elementary Education and to solve the difficulties of the teachers and the students in teaching–learning and other related areas.
- To tackle specific problems of the District and the State for achieving the objectives of UEE and to provide quality elementary education.

Role and Functions

The DIETs are envisioned as 'Academic Lead Institutions' to provide guidance to all academic functionaries in the district. The main functions and roles undertakes by DIETs are as follows:

- Quality teacher training, leading to high learning levels among students.

- Improving pedagogy and making classroom learning interesting.
- Developing curriculum and academic material such as child-friendly textbooks.
- Planning and management of primary, adult education and non-formal education of the district.
- Conducting research, developing low and no-cost teaching aids, supporting innovative materials and methods.
- Evaluating students, teachers, programmes and institutions.
- Using technology in education and making the elementary teachers' technology friendly.
- It organizes training and orientation programmes for the:
  - o Elementary school teachers (both pre-service and in-service education)
  - o Headmasters, Heads of Schools and officers of Education Department up to Block and Cluster level
  - o Instructors and supervisors of non-formal and Adult Education (induction level and continuing education)
  - o Members of School Management Committee (SMC), community leaders, youth and other volunteers who wish to work as educational activities; and
  - o Resource persons who wish to conduct suitable programmes for the target groups in BRC and CRC centres other than the DIET.
- Provides academic and resource support to the elementary and adult education systems in the district like development of locally relevant materials and teaching aids, evaluation tools, etc., and serving as an evaluation centre for elementary school and programmes of NFE/AE.
- Conducts Action research and experiments to deal with specific problems of the district.

4.5 ICT AND TEACHER EDUCATION

Information and communication technology (ICT) is considered the most effective way of enhancing competence and enriching skills among pre-service teachers. E-education is considered to develop a positive attitude towards e-learning and future use of computer-based classroom education. E-teaching applies the constructivist principles in the designing of learning experiences. There are different forms of e-learning programmes.

(i) **Online professional learning community:** Student teachers participate in online learning activities and exchange ideas with teachers as well as students. This form of web-based technology allows asynchronous discussion and debates, creating interactive lessons and critical assessment procedures.

(ii) **Individualized self-paced instructional procedures:** Online interaction between student teachers and teacher is mostly driven by inquisitiveness and urge to challenge oneself in the process of testing others. It is a form of self-study which involves no direct interaction, but can be done through email, Skype.

(iii) **Hybrid teaching models**: This format involves integrated onsite meetings, visits to classroom, face-to-face workshops, coaching and mentoring programmes, and small study groups.

E-tutors: Teachers play a crucial role in development of a student. Online education requires a teacher to be pro-active and remain updated not only practically but also theoretically. In the dynamic online world, a teacher has to be technally savvy to answer all questions. A teacher's competence in this regard would involve —

(i) **Educational competencies:** A teacher should have sound theoretical knowledge, skills, and ability to think futuristically.

(ii) **Programme competencies:** This would mean having course competencies, i.e., well-versed in the course that the person is teaching. The teacher should be able to develop content and smart activities.

(iii) **Communication competencies:** A teacher should be able to smartly communicate and motivate the invisible on the other side.

To achieve the desired results, both teachers and students use information and communication technology. E-teaching competencies would enhance professional competencies of teachers.

Competencies structure of teachers

Acquiring e-teaching competencies would require a combination of didactical, technological, personal and organizational components. There are three dimensions of the teacher' ICT competencies; these are:

(i) They are aware of the effectiveness of ICT in the teaching-learning process

(ii) The teacher has the necessary skills for using hardware and software (ICT readiness)

(iii) The teacher knows the pedagogical-didactical elements of ICT (ICT drill and practice)

A teacher can be the creator of the e-teaching process as well as the user of e-teaching/e-learning modules. Teachers need to rethink their underlying assumptions about teaching, about the learning process and, most fundamentally, about their role as educators. A teacher has two key roles to play in the e-teaching system — that of a teacher imparting knowledge and providing contents and acting as a effecient communicator between the students and the tutors. E-teachers should be able to create different e-teaching modules and activities of students. Some e-teaching modules are mentioned below.

- Learning based on webs
- E-Learning in class rooms
- On line-Learning in classrooms
- Courses from net
- E- learning from media technology
- E-learning from the combination of traditional and constructivist classrooms

E-tutors have many professional roles in the e-learning process. Some central and some peripheral roles of e-tutors in e-learning. They are as follows:

S. No.	Central Roles	Activities and Behaviours of E-tutor
1.	Content facilitator	Here teacher provides content in the form of soft copy or he suggests the site from where the students can take the help.
2.	Metacognition facilitator	He not only helps in provide in materials but also supports reflection on learning activities and outcomes, and prepare them to develop the study skills in them
3.	Process facilitator	He also supports the students about the time management and writing the notes
4.	Advisor (counselor)	He works as counselor to. He makes them psychologically strong in learning.
5.	Assessor (formative and summative)	He evaluates their performance by feed back, formative assessment and summative assessment.
6.	Technologist	He also guides them to get the skills on ICT and to use it in their learning.
7.	Resource provider	How and where the students can access the learning materials
S. No.	**Peripheral Roles**	**Activities and Behaviours of E-tutor ...**
1.	Manager and Administrator	He not only give the tips of learning but also keep the records of the task performed by the students
2.	Designer	He also helps in designing the course and its structure.
3.	Co-learner	Simultaneously he also learns and enriches his knowledge
4.	Researcher	He/She can take action researches who act on the basis of his/her e-tutor experience.

The competencies that are developed through e-teacher education are as follows:

1. General competencies

(i) System of knowledge, abilities and skills of the vocational and scientific critical approach to investigation and problem resolving; writing skills and skills of the presentation of the vocational and scientific papers; research autonomy and self-reliance;

(ii) Team competencies and effective communication skills in the work and research processes;

(iii) Qualified persons for continual education and development of interdisciplinary approach; and

(iv) Professional activities in keeping with professional and scientific ethics.

2. Subject Specific Competencies

(i) Complex theoretical knowledge system of the education processes and technological systems;

(ii) Qualification for selection, applying investigation, evaluation, innovation and development of the current methods as well as types of learning and teaching;

(iii) The skills of the planning and managing of learning and teaching process, modeling of the learning situation;

(iv) Specialized knowledge and skills of the special domains of the e-education, design, creation, implementation, delivering, evaluation and management of the e-courses;

(v) Qualification to use complex theory and interpretation, to demonstrate practical knowledge and apply it in the online, synchronous and asynchronous mode;

(vi) The student teachers and teacher educators would be able to :

- Functionally explain the processes and dimensions of e-education, e-teaching and e-learning;
- Research the basic principles of the learning base on the multimedia, analyze interaction as well as synchronous and asynchronous e-learning/e-teaching communication;
- Select and apply the adequate technologies and tools in the effective creation of different e-learning solutions;
- Understand the functioning of the hardware, software and
- communication e-learning infrastructure;
- Create configuration and apply different multimedia devices, software tools, video conferencing solutions in the process of e-learning development and realization;
- Design, develop and realize e-learning procedures based on the specific educational needs of individuals, groups and systems;
- Develop assessment plan, e-assessment techniques, collect data of the achievement, and interpret student performance in the frame of the formal, informal and social learning;
- Analyse and improve roles of e-educator, e-manager, e-administrator, manage one's own learning and make plans for professional development;

Check Your Progress

5. How is NAAC and DEC associated with teacher education?
6. What is the organizational structure of NCTE?
7. What is the main objective of NCTE?
8. What are the major objectives of NCERT?

ACTIVITY

1. Research on the Internet and make a short note on e-learning in India.
2. Research on the Internet and discuss the publication objectives of NCERT.

Did You Know

Academic Staff Colleges has to plan, organize, implement, monitor and evaluate orientation courses for newly appointed college/university Assistant Professors of one or more universities in a state.

4.6 SUMMARY

In this unit, you have learnt that:

- Each individual is bestowed with certain responsibilities and activities to perform in their respective environment whether it is professional or non-professional. This responsibility imposed by one on their self is termed as obligation.
- Competence in teacher profession is a vital component as it explains the skills needed for a teacher to deliver effectively in a class.
- Teachers have to provide all necessary guidance and support to the all-round development of their students as desired and expected by parents. Teachers have to be in touch with parents and should inform them about the progress of their wards at various stages.
- For the well conduction of teaching–learning process, certain theoretical knowledge must be developed. This may be provided either through intensive training or through professional development programmes.
- Teacher professionalism may be explained as the responsibility to the teaching profession in executing well-organized teaching–learning process, emotional control over students, subordinate and other staff of the organization, enjoyment on execution of teaching process, confidence to tackle complicated situation inside classrooms and motivating students to excel in learning, etc., are some of them. The complexity of teaching–learning process gets reduced by being a professional teacher.
- Participation of teachers in the extension and community development activities of the colleges and universities contribute to the professional growth of teachers to a great extent. It adds to their social awareness and responsibilities and develops their insights and experience.
- The students of all ages, including adults can use 5 Es. Each of the 5 Es describes a phase of learning, and each phase begins with the letter 'E' Engage, Explore, Explain, Elaborate and Evaluate. The 5 Es allow students and teachers to experience common activities, to exercise and build on previous knowledge and experience, to construct meaning, and to constantly evaluate their understanding of a concept.
- NCTE is directly associated with teacher education, its management and quality check; whereas other institutes such as UGC, NCERT, DEC, NAAC, and RCI are closely associated with the development of teacher and school education in India.
- The major role and function of NCERT focuses on six areas such as Research, Development, Training, Extension and Dissemination, Publication, and Exchange programmes.
- District Institute of Education and Training (DIET) is the ground level institute to prepare teachers for elementary classes. It organizes training and orientation programmes relating to elementary education. It also trains the SMC members, parents, village workers relating to various projects undertaken by state governments and Central Government.

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- E-learning programmes use broadcast formats, lectures reviewing, class demonstrations, reviewing other online materials; this form uses multiple sites, interaction via video conferencing, online text messaging; video conference-based teaching approach is important part of the (presented) curriculum.

4.7 KEY TERMS

- **Code of professional ethic:** A set of self-imposed professional ideals and principles necessary for the attainment of self-satisfaction and professional excellence
- **Communication competencies**: System of the knowledge, skills, abilities and motivational dispositions to realize the goals of communication and teaching social interaction
- **Competence:** Explains the skills needed for a teacher to deliver effectively in a class
- **Educational competencies:** System of knowledge, skills, abilities and motivation dispositions to realize educational professional roles
- **Professional ethics:** Refers to the principles, guidelines or norms of morality which a teacher has to follow in teaching profession while dealing with students, parents, community and higher authorities
- **Professionalism:** Ability to perform a task effectively

4.8 ANSWERS TO 'CHECK YOUR PROGRESS'

1. Regulatory body of teacher education is the central institute who develops norms and standards to affiliate teacher education institutes like NCTE. Accordingly, regulatory body in school education are those institutes that develop norms and standards for development of school education like NCERT, SCERT, etc.
2. To teach elementary students in school, a teacher requires a Diploma in Elementary Education (DELED) or Diploma in Education (D.Ed.) teacher education degree, whereas to teach secondary students in the school, a teacher requires a Bachelor Degree in Education like B.Ed. One can do D.Ed. after completion of 12th whereas to enrol in B.Ed. the minimum education required is Graduation in any discipline.
3. M.A. Education is a general course usually provided by the universities where as M.Ed. is a professional course that comes under teacher education and is governed by NCTE.
4. The courses considered as higher studies in education are M. Phil. Education. Ph. D. Education, etc. These courses are generally research based degree and are governed and run by the university teaching department of Education or the Institute of Advanced Studies in Education.
5. National Assessment and Accreditation Council (NAAC) inspect the teacher education institute and assign a grade to considering the maintained quality in all aspects whereas Distance Education Council (DEC) is a regulatory body meant for developing norms and standards for distance education in India including teacher education programme runs in distance mode.
6. The head quarter of NCTE is at New Delhi and it has four regional committees established at various regions in India like; Western Regional Committee (WRC) is a Bhopal, Eastern Regional Committee (ERC) is at Bhubaneswar, Northern Regional Committee (NRC) is at Jaipur, and Southern Regional Committee (SRC) is at Bangalore. The power is decentralised for better management of teacher education programme.
7. The main objective of the NCTE is to achieve planned and coordinated development of the teacher education system throughout the country, the regulation and proper maintenance of Norms and Standards in the teacher education system and for matters connected therewith.
8. The major objectives NCERT undertakes are as follows:
   - To control school education up to standard 12th.
   - To develop curriculum for school education.
   - To publish books for school education.
   - To conduct quality research in education.
   - To conduct training programme for the teachers in various themes.
   - To operate regular courses for preparing teacher in school and teacher educators.

4.9 QUESTIONS AND EXERCISES

Short-Answer Questions

1. What is the significance of professional ethics in teacher education?
2. Write a short note on how professional growth happens in teacher education.
3. Why was NCTE set up?
4. Write any four objectives of SCERT.
5. What is the mission of DIET?
6. What is the significance of ICT in teacher education?

Long-Answer Questions

1. Discuss the functions of professional ethics in teacher education.
2. Write a short note on role and functions of NCTE.
3. Discuss the objectives of DIET.
4. Write a short note on SCERT functions.
5. Compare the functioning of NCTE and DIET.
6. Give a detailed account on competencies that are developed through E-teacher education.

4.10 FURTHER READING

Kumar, A., (2004). *Recent Trends in Indian Education*. New Delhi: Ashish Publishing House.

NCTE. (1998). *Policy Perspective in Teacher Education—Critique and Documentation*. New Delhi: NCTE.

- E-learning programmes use broadcast formats, lectures reviewing, class demonstrations, reviewing other online materials; this form uses multiple sites, interaction via video conferencing, online text messaging; video conference-based teaching approach is important part of the (presented) curriculum.

4.7 KEY TERMS

- **Code of professional ethic:** A set of self-imposed professional ideals and principles necessary for the attainment of self-satisfaction and professional excellence
- **Communication competencies**: System of the knowledge, skills, abilities and motivational dispositions to realize the goals of communication and teaching social interaction
- **Competence:** Explains the skills needed for a teacher to deliver effectively in a class
- **Educational competencies:** System of knowledge, skills, abilities and motivation dispositions to realize educational professional roles
- **Professional ethics:** Refers to the principles, guidelines or norms of morality which a teacher has to follow in teaching profession while dealing with students, parents, community and higher authorities
- **Professionalism:** Ability to perform a task effectively

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1. What is the significance of professional ethics in teacher education?
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1. Discuss the functions of professional ethics in teacher education.
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NCTE. (1998). *Policy Perspective in Teacher Education—Critique and Documentation*. New Delhi: NCTE.

Singh, L.C. (1990). *Teacher Education in India: A Resource Book*. New Delhi: NCERT.

Mohanty, J. (2003). *Teacher Education*. New Delhi: Deep and Deep Publications Pvt. Ltd.

NCERT. (2005). *National Curriculum Framework*. New Delhi.

NCERT. (2006). *Teacher Education for Curriculum Renewal*. New Delhi.

NCTE. (1998). *Perspectives in Teacher Education*. New Delhi

Ram, S. (1999). *Current Issues in Teacher Education*. Sarup & Sons Publications: New Delhi.

UNIT 5 PROBLEMS OF PRIMARY AND SECONDARY EDUCATIONS

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5.1 Unit Objectives
5.2 Constitutional Provisions on Education and their Implications
  5.2.1 Educational Scenario in India
  5.2.2 Fundamental Rights of Education
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5.0 INTRODUCTION

Education is vital to the life of an individual, society and nation. Without education no individual, society or nation can grow, develop or make its own place in the world. Since oldest times known, man has endeavoured to stock up, transact, execute and carry forward the knowledge, information, skills and expertise to make life easy and comfortable. The education process and education provided at the beginning of life is termed as primary education. Similarly, education that follows primary education is known as higher education.

The period of British rule in India has been an epoch making era in the development of modern system of education. This was the time when India got a well-defined system of education in the form of primary, elementary, secondary and higher education. In the post-independence period, there came several changes in the nomenclature and structure of education. The Constitution of free India has elaborated upon varied aspects of educational structure, management and objectives in the country. Many of these are still being followed as the guiding principles of educational system in India.

Primary education is the broadest base of education upon which the structure of elementary, secondary, senior secondary and higher education depends. Unfortunately, the course of primary education has not been quantitatively extensive

and qualitatively reasonable in our country. Therefore, it has been a thrust area for educational planners and policy makers since Independence. Even now, the condition of access and success of primary education; otherwise known as universal access, universal enrolment and universal retention, i.e., universalization of primary education, is a distant dream. There are several regions of our country where this objective has been achieved to a great extent, whereas many parts of India are big black spots, devoid of schools, infrastructure, teachers, teaching-learning materials, and libraries.

This unit deals with the constitutional provisions on Education and their implications, the process of development of primary education in India, schemes for universalization of primary education, particularly the operation blackboard and Sarv Shiksha Abhiyan (SSA). At the end, the unit deals with the issue of regional imbalances in the field of primary education and qualitative development of primary and secondary education in our country.

5.1 UNIT OBJECTIVES

After going through this unit, you will be able to:

- Examine the constitutional provisions in education and their implications
- Discuss the relevance of schemes for universalization of primary education
- Describe regional imbalances in education and discuss the reasons
- Analyse the qualitative development of primary and secondary education

5.2 CONSTITUTIONAL PROVISIONS ON EDUCATION AND THEIR IMPLICATIONS

5.2.1 Educational Scenario in India

Education is an instrument for developing a society and for ensuring equity and social justice. In India, the education scenario at the time of Independence had structural flaws with inequities characterized by gender, social and regional imbalances. Even though the post-Independence period saw significant achievements in the field of education, the structural flaws continued and to a certain extent got accentuated.

The Indian Constitution guarantees the values based on the principles of equality, liberty and fraternity, and ensures the dignity of an individual irrespective of his caste, creed, political, economic or social status. Humayun Kabir has rightly said, 'as a democratic republic, India has abolished all vestiges of privileges and vested interest. Our constitution not only offers but guarantees equality of opportunity to all. Such equality can be realized only in an atmosphere of justice and fair play'. Students, the future citizens of India, should be trained in a democratic set-up, its values and ideals, so that they will have sense of justice, which is conducive for the development of national integration.

The fourfold idea of Justice, Liberty, Equality and Fraternity in the Indian Constitution has been incorporated for the elimination of social inequalities, economic disparities and political privileges. In the eyes of law, everyone has an equal status; justice is denied to no one. Everyone has liberty of thought, expression and to practise his own faith and belief. The dignity of each individual is assured.

The (Forty-Second Amendment) of 1976, brought about drastic changes in the Indian Constitution. Before 1976, education was a State subject while the Central Government played only an advisory role. Soon it was felt by the educational administration that education should be the joint responsibility of the Central Government and state governments. It was effected by a Constitutional Amendment in 1976.

The Amendment was made on the recommendation of the Swaran Singh Committee to put education on the 'Concurrent List'. The report of the Committee stated, 'Agriculture and Education are subjects of primary importance to the country's rapid progress towards achieving desired socio-economic changes. The need to evolve all-India policies in relation to these two subjects cannot be over-emphasized'. In accordance with this Act of 1976, Education was put on the Concurrent List with the implications that both the Centre and the States can legislate on any aspect of education from the primary to the university level. With education in the Concurrent List, the Centre can directly implement any policy decision in the states.

The Forty-Second Amendment makes the Central Government and State Governments equal partners in framing educational polices. But the enactment on the laws on education, i.e., the executive power, has been given to the Union. The states have limited powers to the extent that these do not impede or prejudice the exercise of the executive powers of the Union. National institutions like University Grants Commission (UGC), National Council of Educational Research and Training (NCERT), and national bodies like Central Advisory Board of Education (CABE) play a crucial role in the Indian education system.

We know that the Constitution of India declares India to be a federal state. It divides powers between the Centre and the States and describes some powers as Concurrent. Accordingly, there are three lists:

(i) Union List (List-I): It includes items which are of great interest to the nation. The Centre has exclusive powers to make laws in respect of the items in List-I.

(ii) State List (List-II): It includes items of local interest. The states have the power to make laws to cover items in List-II.

(iii) Concurrent List (List-III): It includes items which concern both the Centre and the states, and for which the Centre and the states both can legislate. Education comes under the Concurrent List; therefore, both the Centre and the states are meaningful partners in it.

5.2.2 Fundamental Rights of Education

The Kothari Commission (1964–66) recommended the Central Government should undertake the responsibility for the equalization of educational opportunities with special reference to the reduction of inter-state differences and the advancement of the weaker section of the community.

Instruction in mother tongue

After Independence, special emphasis has been laid on using the mother tongue of a region as a medium of instruction. In the Constitution of India, it has been laid down that the study of one's own language is a fundamental right of the citizens.

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Article 26 (1) states, 'any section of the citizens, residing in the territory of India or any part thereof, having a distinct language, script or culture of its own; shall have the right to converse the same'.

Article 350A directs, 'it shall be endeavour of every state and every local authority to provide adequate facilities for instruction in the mother tongue at the primary stage of education to children belonging to linguistic minority groups'.

Secondary Education Commission, 1952–53, recommended that subject to the provision that for linguistic minorities, special facilities should be made available. The mother tongue or the regional language should generally be the medium of instruction throughout the secondary school stage.

The Kothari Commission also recommended that mother tongue should be the medium of instruction at college and university stage.

Promotion of Hindi

The Constitution makes provision for the development and promotion of Hindi as national language. Article 351 enjoins the Union with the duty to promote the spread of the Hindi language. Hindi has been accepted as the Official Language of Indian Union. This has been laid down by the Constitution as: 'it shall be the duty of the Union to promote the spread of the Hindi language, to develop it so that it may serve as a medium of expression of all the elements of the composite culture of India'.

In practice, Hindi is largely in use as a link language in India, in order to facilitate the movements of students and teachers, and to strengthen national unity. The educational system should be the one that contributes to the acceleration of this process in nation building.

Higher education and research

Indian Parliament has the exclusive rights to enact legislation in respect of educational institutions and Union Agencies mentioned in items 63, 64, 65 and 66 of Union List (List-I).

Item 63 relates to universities administered by the Central Government. Item 64 relates to scientific institutions of national importance. Item 65 includes institution for professional, vocational or technical training, including training of police officers; promotion of special studies or research; and scientific or technical assistance in the investigation of detection of crime. Item 66 relates to coordination and determination of standards in institution for higher education or research and scientific and technical institution.

Women's education

A unique feature of modern Indian education is the tremendous advancement made in the education of women. Education of a girl child is considered very important in the changing times. The Indian Constitution makes the provisions on women's education under different Articles.

Article 15 (1) provides that the state shall not discriminate any citizen on the grounds of gender, and that nothing in this Article prevents the state from making any special provision for women and children.

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National Policy on Education, 1986, was concerned about the status and education of women in the country. It envisaged that education would be used as a strategy for achieving a basic change in the status of women. It opined that the national system of education must play a positive role in this direction. It stated, 'Education will be used as an agent of basic change in the status of women. In order to neutralize the accumulated distortions of the past, there will be a well conceived edge in favour of women'.

Education in the Union Territories

Article 239 of the Constitution states, 'Save as otherwise provided by Parliament by Law, every Union Territory shall be administered by the President acting to such extent as he thinks fit, through an administrator to be appointed by him with such designation as he may specify'. Thereby, this Article lays down the provision that the education in the Union Territories comes under the responsibility of the Centre.

Educational and cultural relations with foreign countries

Item 13 of the Union List includes participation in international conferences, associations and other bodies and implementing decisions made thereat.

5.2.3 Constitutional Provisions on Education

The Constitution of India contains as many as 34 provisions related to education. These provisions are in the form of articles, entries, rights to special categories, admission norms, language and special provisions. A list of such provisions since the implementation of the Constitution in 1950 till the inclusion of Article 21 A in 2002 after the 86th amendment in the constitution is given hereunder:

1. Article 28

According to our Constitution, Article 28 provides freedom as to attendance at religious instruction or religious worship in educational institutions.

2. Article 29

This article provides equality of opportunity in educational institutions.

3. Article 30

It accepts the right of the minorities to establish and administrate educational institutions.

4. Article 45

According to this article 'The state shall endeavour to provide within a period of ten years from the commencement of this Constitution for free and compulsory education for all children until they complete the age of 14 years.'

5. Article 46

It provides for special care to the promotion of education and economic interests of the Scheduled Caste, Scheduled Tribes and the weaker sections of society.

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6. Article 337

This provides for special provision with respect to educational grants for the benefit of Anglo-Indian community.

7. Article 350A

This article relates to facilities for instruction in mother tongue at primary stage.

8. Article 350B

It provides for a special offer for linguistic minorities.

9. Article 351

This article relates to the development and promotion of Hindi language.

The seventh schedule of the Indian Constitution contains legislative powers under three lists, viz., The Union List, the State List and the Concurrent List

A. Union list

This list contains 97 subjects where the following entries are related to education:

1. Entry 13

This provides educational and cultural relations with foreign countries.

2. Entry 62

The institutions known on the date of commencement of this Constitution, as National Library, the Indian Museum, the Imperial War Museum, the Victoria Memorial, the Indian War Memorial, and any other institution financed by the Government of India wholly or in part and declared by Parliament by law to be an institution of national importance.

3. Entry 63

Institutions of national importance.

The institution known at the commencement of this Constitution as Benaras Hindu University (BHU), Aligarh Muslim University (AMU) and Delhi University; declared by Parliament by law to be an institution of national importance.

4. Entry 64

The institution of scientific and technical education financed by the Government of India wholly or in part and declared by law to be institutions of national importance, like Indian Institute of Technology (IITs) and Indian Institute of Management (IIMs)

5. Entry 65

Union agencies and institutions for:

(i) Professional, vocational or technical training, including the training of police officers

(ii) Promotion of special studies or research

(iii) Scientific or technical assistance in the investigation of detection of crime

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6. Entry 66

Coordination and determination of standards in the institutions of higher education or research and scientific and technical institutions

B. State list

State list consists of 66 entries, out of which the following is the entry related to education:

1. Entry 12

According to this entry all libraries, museums and other similar institutions controlled or financed by the state, ancient and historical monuments and records other than those declared by or under law made by the Parliament to be of the national importance.

C. Concurrent list

The list comprises 47 entries, among them the following are related to education:

1. Entry 20

Economic and social planning

2. Entry 25

Education, including technical education, medical education and universities subject to provision of entries 63,64,65,66 of the Union List

3. Entry 39

Newspapers, books and printing presses

Reservation in education (Education of minorities)

Cultural and Educational Rights

Under these, Article 29 and 30 are for the protection of educational interest of minorities, viz.,

1. Article 29 (i)

Any section of citizen residing in the territory of India on any part thereof having a distinct language, script or culture of its own shall have the right to conserve the same.

2. Article 30 (i)

All minorities whether based on religion or language shall have the right to establish and administer educational institutions of their choice.

3. Article 30 (ii)

The state shall not in granting and to educational institution discriminate against any educational institution on the ground that it is under the management of a minority whether based on religion or language.

Admissions

Article 29 (II)

No citizen of India can be denied admission into any educational institution, which is either maintained by the state or receiving aid out of state funds oil ground only of religion, race, caste, language or any of them.

Article 15 (III)

This article is meant to make special provisions for the education of woman. It says that separate educational institutions can be established for women.

Mother tongue

For promotion of teaching of and through mother tongue the Constitution of India has made distinct provisions. These include provisions for Hindi language also:

1. Article 350 (A)

It shall be the endeavour of every state and local authorities with the state to provide adequate faculties for instruction in the mother tongue at the primary stage of education to children belonging to linguistic minority groups; the President may issue directions to any state as he considers necessary for recurring the facilities.

2. Article 351

It is to promote the development of Hindi language and slates that it shall be the duty of the Central Government to promote the spread of Hindi language in the entire country.

Right to Education

Article 41 of the Constitution provides that all the citizens have equal right to education. It states that 'The state shall, within the limits of its economic capacity and development, make effective provisions for the right to work, to education and to public assistance in cases of employment, old age, sickness and disablement'.

Weaker Section

Our Constitution has made some special provisions for the weaker sections of our society.

1. Article 45

The state shall endeavour to provide within a period often years from the commencement of the Constitution for the free and compulsory education for all children until they complete the age of 14 years.

2. Article 46

The state shall promote with special care the educational and economic interests of weaker sections of the people and, in particular, of the Scheduled Caste and Scheduled Tribes, and shall protect them social injustice and all forms of exploitations.

3. Article 21A

The State shall provide free and compulsory education to all children of the age of six to fourteen years. (86th Amendment in the Constitution, 2002)

5.2.4 Implication of the Constitutional Provisions on Education

Like other areas of functioning of governments at the center and state; the structure, management, curriculum, syllabi, special provisions and features of education in India are exactly as per the provisions of the Constitution. The division of powers and levels of education among centre and state governments is done suitably. Establishment of educational institutions by minority categories, freedom to attendance at religious instructions and abolition of religious instructions in the state run institutions is being followed religiously.

There are special provisions for regional, lingual and cultural minorities to protect their heritage through education. There is no discrimination in admission of students in the schools run by the governments. Special provisions are being followed to ensure educational enhancement of the students of Scheduled Casts, Scheduled Tribes and other weaker sections of the society. Special grants are available for the benefits of Anglo-Indian community. Most of the government schools provide facility for instruction in mother tongue at primary stage.

Various supportive institutions such as National Museums, Libraries, Historical Buildings and Memorials are being protected by the governments as subsidiary services for the development and promotions of education in children. Several institutions of national importance such as Vishwa Bharti, Banaras Hindi University, IITs and IIMs, AIIMS and others are being supported by the central government to set high standards of education and training in various fields.

Planning of education is done centrally with the consent of state governments, and the centre is assisting states in the implementation of several schemes such as Operation Blackboard, Sarv Shiksha Abhiyan and others. The centre is also directly responsible for the education in the Union Territories. The central government is fulfilling responsibility of liaisoning with international organizations such as UNESCO and UNICEF in implementing internationally accepted schemes such as Universalization of Primary Education within given time frame.

Check Your Progress

1. How many entries are there in the union list of Indian Constitution regarding education? Identify them.
2. Which articles of the Indian Constitution ensure protection of educational interest of minorities?
3. What is the importance of Article 21A?

5.3 UNIVERSALIZATION OF PRIMARY EDUCATION

The government of India along with state governments, philanthropic societies, non-governmental organization and private entrepreneurs has been striving to ensure education for all since the independence of the country. Education in India has three basic divisions viz. Primary Secondary and Higher Education. Amongst these, the

primary education forms the basis for the other two. But, provision of primary education to all the citizens is still a challenge for the Government of India. The effect of non-provision, poor-provision and sparse-provision of primary education hampers the growth of secondary and higher education. Along with the quantity the quality of primary education also is an issue of concern for the government.

To overcome the problems of quantitative and qualitative improvement of primary education the government has made numerous efforts since Independence. Some of these are Operation Blackboard, Sarv Shiksha Abhiyan and District Primary Education Programme. An overview of some of these schemes is given hereunder at appropriate stage.

Primary education should be so developed that it is provided to every child leading to their growth and development. The following three measures will be important in making education universal:

1. **Universalization of schools:** The universalization of primary educational facilities is to locate primary schools near homes so that all children can attend schools. To make primary educational facilities universal, schools will have to be opened in every village, large or small. Therefore, primary schools should be located in close proximity to homes of children.
2. **Universalization of enrolment:** Universalization of enrolment in primary schools means to admit all children in the age group of 6–14. To provide primary education, it is necessary that all children are admitted to schools. As per the statistics, this goal has not yet been achieved and still the problem is acute in rural areas.
3. **Universalization of retention in schools:** By universalization of retention in schools we mean to keep children at school once they have completed basic education. Generally, students drop out without completing primary education. Available data points out that about 60 per cent students drop out before class V, and 75 per cent drop out before class VIII. That is, out of 100 children taking admission in school, only 40 reach class V and only 25 reach class VIII. Such a situation does not allow the goal of compulsory primary education to be realized.

The four aspects of universalization of primary education in India are discussed below:

1. **To provide primary education to all children:** The foremost problem pertains to provide primary educations to all children. The Constitution instructs the state to secure universalization of primary education within 10 years of it coming into force.

The initiatives undertaken by government can be summed up as follows:

(i) The Central Government and the State Governments have increased general and planning budgets for education, allocating almost half of it for primary education.

(ii) Primary schools have been set up as per needs and are also well equipped.

(iii) The schools have been specifically opened in areas where people belonging to Scheduled Castes, Scheduled Tribes and minorities live.

(iv) The number of schools for handicapped and mentally-challenged children has been increased.

The state governments should keep the following in view:

(i) The projects meant for universalization of primary education work efficiently and smoothly.

(ii) The funds allotted for the purpose are well utilized.

(iii) The government cannot establish schools at all places in required numbers, therefore, people's cooperation should be sought. Thus, it is also necessary that voluntary organizations, private individuals and trained teachers establish primary schools in deprived areas, and they should be given due recognition and financial aid.

(iv) Residential schools should be opened in far-flung areas, such as distant hilly, desert and forested areas, and their number be increased if needed.

(v) The family planning scheme should be implemented on all people compulsorily and legally for seeking control over population.

2. **To secure enrolment of all children in primary schools:** The second aspect or problem pertains to secure enrolment of all children in the age group of 6–14. The government has taken up several steps for the realization of this goal, such as:

(i) Creating awareness in parents/guardians

(ii) Improving the condition of schools

(iii) Providing mid-day meals to children

(iv) Providing free textbooks to children belonging to scheduled castes/tribes

(v) Providing children free meals and school dress

For the realization of these goals, the following measures can prove to be more effective:

(i) The law on compulsory and free education should be passed and enforced strictly.

(ii) To make lower primary schools within 1 km in radius and upper primary schools within 2–3 km radius. To allow civic amenities to people only when they get their children admitted to school, such as issue of ration card.

(iii) Teachers be given the responsibility to motivate parents, to send their wards to school, by personal contact.

(iv) Financial aid should be given, not on the basis of caste, but on the basis of economic status, whatever caste or religion they may belong to.

(v) Expansion of education is the best way to eradicate backwardness from the society. Therefore, compulsory and free pre-primary education and adult education should be made popular to the utmost extent.

3. **To retain students in schools:** The third aspect belongs to the retention of children in school. In this respect, the government has undertaken several steps. The following ensures can prove to be still more effective in this respect:

(i) Operation Blackboard should be implemented honestly in order to improve the condition of schools. A code of conduct should be formulated for teachers and their unions, and the liabilities of teachers should be specified.

(ii) The curriculum should be limited and made interesting, and the burden of the bag should be reduced.

(iii) Adult education should be given necessary momentum in order to eradicate backwardness from the society. Suitable changes should be adopted in economic policies for eradication of poverty.

(iv) The responsibility for controlling primary schools and working teachers lies on local bodies, so vigilance should be carried on their work from time to time.

4. **To help children clear primary classes' examination:** The fourth and final aspect is to make children complete their primary education within the given time frame. The government has taken several steps in this direction. For eradication of this problem, the following steps should be undertaken:

(i) The curriculum for primary education should be constructed keeping general children in view. At upper primary level, compulsory study of three languages should be replaced with the study of only mother tongue.

(ii) The condition of primary schools should be improved. Their shortcomings should be removed and teachers' liability should be specified.

(iii) The awareness programme for parents should be given more emphasis.

(iv) Suitable policies should be adopted for children, where they should be explained the importance of education, their problems should be understood and tackled affectionately, and they should be motivated to study.

5.3.1 Objectives of Primary Education

The objectives of primary education are as follows:

- It enables children to adjust with their environment.
- It cultivates the spirit of mutual goodwill and cooperation.
- It effects physical and mental development.
- It cultivates the ability of self-expression by language, art and music etc.
- It makes children self-dependent.
- It cultivates citizenship traits and morality in children.

The Kothari Commission remarked that the aim of primary education in India was to enable children to face the future life situations by giving them physical and mental training, and by making them useful citizens.

The objectives of primary education in India seem to be somewhat vague. In fact, in the absence of clear specification of objectives, it is difficult, if not impossible, to run the educational system efficiently.

NCERT, in its document titled 'The Curriculum for the Ten-Year School', published in 1975, has mentioned that primary education aims at:

- Cultivating respect for national symbols (such as the national flag and the national anthem) and democratic laws and institutions
- Acquainting them with the blended culture of India, and teaching them how to oppose untouchability, casteism and communalism
- Imparting them the knowledge of first language (mother tongue) for communication with others
- Providing ability in addition, subtraction, multiplication and division solution of practical problems

- Teaching scientific inquiry method and explaining the importance of science and technology
- Cultivating healthy attitude towards human labour
- Cultivating the habits of cleanliness and healthy life
- Enhancing interest in goodness and beauty
- Cultivating the spirit of cooperation with others
- Cultivating character and desirable traits of personality (such as initiative, leadership, mercy, honesty and others)
- Cultivating the ability of self-expression by creative activities
- Cultivating the habit of self-study

5.3.2 Curriculum of Primary Education

Curriculum implies the group of all those activities which teachers and students hold together for the realization of educational aims.

Significance of curriculum

Curriculum occupies a special place in the modern educational system. It is the basis that makes it possible to properly organize the teaching–learning process in educational institutions. The curriculum is constructed chiefly on the basis of educational aims. It is essential that the curriculum for any level of education be in conformity with the specified goals or aims for that level.

Shortcomings

The present curriculum of primary education has failed to realize its educational aims. Following are the causes responsible for it:

1. It has become irrelevant in the present time.
2. As the curriculum has become very rigid, it is incapable to be molded as per the local needs.
3. In it, more emphasis is laid on bookish knowledge and rote-learning.
4. It has failed to realize all-round development of students.
5. This curriculum appears to be narrow, lifeless, uninteresting, useless and impracticable.

The curriculum for primary level should include such activities which can cultivate students' abilities and willingness to work in cooperation.

The Kothari Commission recommended integrated approach at the primary level. The Commission brought out the shortcomings of this curriculum in the following points:

1. Primary education has become only bookish.
2. It has failed to meet the needs and aspirations of life.
3. It is not as per the country's needs and circumstances. There is need to bring in effect the extensive amendment to existing laws in order to bring about social, economic, cultural and political changes, and to attain national goals and ideals.

'Integrated approach' implies the following:

1. To accept the entire primary education as a unit and then impart it to students.
2. To divide the entire curriculum of all subjects at primary level into small units and arrange them in a sequence.

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3. Students should be allowed to complete these units one after another as per their interest, aptitude, capability and ability, and at their own pace.

According to Kothari Commission, the following would be the benefits of this approach:

1. Both good and average students will be able to proceed at their own paces.
2. The problem of wastage and stagnation, which is very acute at the primary level, can be eradicated by implementing integrated curriculum.

The Kothari Commission had also prepared an outline of restructured curriculum. On its recommendation, the Government of India announced National Education Policy, 1986. For reform of curriculum at school level, the Ministry of Education constituted a specialist committee or curriculum committee. This committee prepared an approach paper for reform in the curriculum, which was considered in the National Conference on Curriculum in 1975. Later, NCERT published a document titled 'The Curriculum for Ten-Year School: A Framework' in 1975. This document contained two important points:

1. The curriculum was described as a set of carefully prepared educational experiences of all types which are meant to be given to students.
2. It was explained that the curriculum should be related to:
   (i) The general aims of education for a particular level or class.
   (ii) The teaching objectives of the subjects.
   (iii) The course of studies and allocation of time.
   (iv) The teaching–learning experiences.
   (v) The teaching aids, evaluation of learning outcomes, and feedback of students, teachers and guardians.

In 1977, a committee was constituted under the chairmanship of Ishwar Bhai Patel, called 'Ten-Year School Curriculum Review Committee'. This Committee, also known as Patel Committee, reviewed the curriculum for primary education and emphasized the following points:

1. The curriculum should have the elements of realism and flexibility.
2. There should not be any rigid timetable at the lower primary level.
3. The duration of study can be 2.5–3 hours.
4. The academic session should be determined as per the local needs. Students should not be given any homework.
5. Self-study should be provided in the school itself in the form of supervised study.
6. Only one book should be specified for classes I and II, that of language.
7. In classes III, IV and V, there can be three books; on language, mathematics and environmental study.
8. The need for teacher guides and teaching aids should be emphasized.

At the upper primary level, the Committee expressed the following views:

1. The timetable should be formal.
2. There should be the provision of self-study in place of homework.
3. Effort should be made towards reducing the number of textbooks, reducing the number of pages in them, and to make the language of books easy and comprehensible.

NCERT Council made the following efforts:

1. It constituted a working group in 1983 for appraisal of the curriculum.
2. It conducted several researches pertaining to different aspects of the curriculum.
3. It laid stress on the need for national curriculum based on common scheme of studies for primary education.
4. It constituted a steering committee in 1984 for construction of national curriculum.
5. In 1985, it held a national seminar and four regional seminars.

On the basis of the above mental exercise, the Council prepared the National Curriculum Framework, published in 1985. It emphasized on the following points:

1. Equity
2. National identity
3. Scientific temper
4. Art and creativity
5. Explosion of information and technology to cope with
6. Interface between work and education
7. Value education and socio-cultural factors, such as environment, resources and population
8. Centrality of the learner
9. Professional role of the school
10. Focus on learning

Continuous efforts are being made for change in primary education curriculum. National Curriculum Framework (NCF) can be termed as a step in the direction of creating a national system of education. Though it has a common scheme of studies, yet there is much flexibility and freedom in content and learning experiences. This is the reason that the outlines of the curriculum have been called 'Core Curriculum'. In 1986, the Indian Parliament announced National Education Policy, so NCERT prepared new curricula for different classes of upper primary level as per the provisions of this policy.

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5.3.3 Development of Primary Education in India

Primary education in India is as old as its history and civilization. We can see its impressions even in the Vedic period. In the vedic period the primary education used to start at home. The father used to provide the child 'boy or girl' the knowledge of family tradition, alphabets, grammar and maxims important for further learning and life. In the Buddhist period the primary education was imparted in 'mathas' or 'viharas' by the expert teachers called as 'Bikhu'. In the medieval period, the system of primary education was established by kings, nobles and rich in the form of 'Maktabs'. These institutions were available in large number, almost in every village. The missionaries from western countries established primary schools of western standards in various parts of India. In colonial time the British government made tremendous effort to standardize and popularize primary education throughout the country.

In 1698, by an order of the British Government, the East India Company was given the right to expand and spread education in India. As a result, the Christian missionaries set up English medium schools at many places with the financial aid given by the Company. The Indians too set up *pathshalas* and *maktabs* at many places.

In 1813, the British Parliament issued a charter to the Company and passed three orders regarding the provision of education in India for the first time:

(i) The Christian missionaries of any country be allowed to come to India and spread religion and education.

(ii) It is the responsibility of the Company to provide education in the Company-ruled territories.

(iii) The Company should spend one lakh rupees per annum for this purpose.

In 1859, the government imposed the primary education cess and the amount thus collected was used for the development of primary education in India. In 1882, Indian Education Commission (Hunter Commission) was appointed to give recommendations on the Indian education system. On the basis of the Commission's recommendations, the responsibility of primary education was assigned to local agencies, which started to make efforts for the expansion of primary education. In 1881–82, the number of primary schools was 82,916 with an enrolment of 20, 61, 541 students in them, which increased to 93,604 and 30, 76, 671 in 1901–02; though the financial aid given to these local agencies was very less.

In 1937, autonomous administration was installed in states. The same year, M.K. Gandhi presented his National Education Planning, which proposed to provide free and compulsory education for children in the age group of 6–14. In the Plan, teaching of mother tongue and craft education was made the basis of curriculum. In those days, primary education signified the basic or elementary education imparted from classes I to VIII.

With the passage of time, this education was divided into two parts:

(i) Lower primary education (from classes I to V).

(ii) Upper primary education (from classes VI to VIII).

Article 45 of the Constitution of India declared that within 10 years of its enforcement, the goal of free and compulsory education for all children up to the age of 14 years should be achieved (education from classes I to VIII).

At present, National Education Policy (1986) is functional, with 10+2+3 educational structure. The first 10-year core curriculum is divided into three stages:

(i) Primary from classes I to V

(ii) Upper primary from classes VI to VIII

(iii) Secondary from classes IX to X

In the post-Independence period the system of primary education got tremendous overhauling due to the efforts of central and state governments. The recommendations of various committees and commission starting from the Tarachand Committee to the NCF, 2005, have contributed a lot in changing the face of primary education in India. Still, this stratum of education is facing lots of problem in various regions of this vast country. The first and foremost among them is the problem of making this education available to all in a cost-effective, qualitative and usable manner. These dimensions of problem are congregated under the head of 'Universalization of Primary Education'. This is one of the oldest problems of primary education in India which still prevails and needs attention of all the stake holders of the system of education starting from the government to the non-governmental organizations (NGOs) and philanthropic societies run under Corporate Social Responsibility.

5.3.4 Meaning of Universalization of Primary Education

The constitution of India provides for primary education to all the citizens of India vide the Article 45 of the Directives Principles of state policy. 'The state shall endeavour to provide within a period of ten years from the commencement of this Constitution for free and compulsory education for all children until they complete the age of 14 years.' This provision though not mandatory in nature but gives a direction to the governments to effort for providing qualitative primary education to all the citizen of the country. The term universal primary education is also known as Universalization of Primary Education.

There are three components, viz., Universal Provision, Universal Enrolment and Universal Retention. It means the facility of primary education should be available to each child or the country within the radius of one kilometre as per the provisions of the Right of Children to Free and Compulsory Education Act, popularly known as RTE, 2009. All the students who have attained the age for entering to such schools should be enrolled in such schools. This is known as universal enrolment. On the third stage, all the students who have taken admission in a primary school should complete their education. This is termed as Universal Retention. The completion of the cycle of universal provision, enrolment and retention is known as Universalization of Primary Education.

The RTE Act, 2009, provides for the:

(i) Right of children to free and compulsory education till completion of elementary education in a neighbourhood school.

(ii) It clarifies that 'compulsory education' means obligation of the appropriate government to provide free elementary education and ensure compulsory admission, attendance and completion of elementary education to every child in the six to fourteen age group. 'Free' means that no child shall be liable to pay any kind of fee or charges or expenses which may prevent him or her from pursuing and completing elementary education.

(iii) It makes provisions for a non-admitted child to be admitted to an age appropriate class.

(iv) It specifies the duties and responsibilities of appropriate Governments, local authority and parents in providing free and compulsory education, and sharing of financial and other responsibilities between the Central and State Governments.

(v) It lays down the norms and standards relating inter alia to Pupil Teacher Ratios (PTRs), buildings and infrastructure, school-working days, teacher-working hours.

(vi) It provides for rational deployment of teachers by ensuring that the specified pupil teacher ratio is maintained for each school, rather than just as an average for the State or District or Block, thus ensuring that there is no urban-rural imbalance in teacher postings. It also provides for prohibition of deployment of teachers for non-educational work, other than decennial census, elections to local authority, state legislatures and parliament, and disaster relief.

(vii) It provides for appointment of appropriately trained teachers, i.e. teachers with the requisite entry and academic qualifications.

(viii) It prohibits (a) physical punishment and mental harassment; (b) screening procedures for admission of children; (c) capitation fee; (d) private tuition by teachers and (e) running of schools without recognition.

(ix) It provides for development of curriculum in consonance with the values enshrined in the Constitution, and which would ensure the all-round development of the child, building on the child's knowledge, potentiality and talent and making the child free of fear, trauma and anxiety through a system of child friendly and child centred learning.

The existing programmes of teacher education at primary and secondary stages are generally based upon the teacher education curriculum framework brought out by the NCTE in 1978. There was another attempt to revise the curriculum in 1988. Most of the institutions now conduct programmes and courses which were revised prior to 1988 document. The developments and changes over the last two decades require a fresh look at the teacher education. The feeling has been echoed by sensitive and concerned teachers and teacher educators. The establishment of the NCTE as a statutory body in 1995 has brought this issue at the centre-stage. Consequently, NCTE began the process of nation-wide consultations to evolve a strategy to develop a new curriculum framework on teacher education. After several consultations, a discussion document was developed and published in September 1996.

5.3.5 Need and Importance of Universalization of Primary Education

As mentioned earlier, primary education is the back bone of secondary, senior secondary and higher education. If the three steps in Universalization of Primary Education viz. Universal Provision, Universal Enrolment and Universal Retention are achieved; the country would undoubtedly serge leaps and bounds on the path of all-round success and development.

On international scenario, universalization of primary education has found place in the United Nation's Millennium Development Goals. Currently, there are more than 75 million children around the world of primary school age who are not in school. Out of these 80 millions are in India alone as per the SSA data in 2009. The Right to Education Act, 2009, has further intensified the movement of universalization of primary education by ensuring schools to all children with one kilometer radius from their residence.

After achieving all the three steps of the universalization of primary education; the question of quality comes up. With quality the success of quantities achievements remains futile. Recently, 'Pratham', a renowned NGO engaged in the task of achieving universalization of primary education, has come up with disappointing results of its survey of government schools. This indicates at the need of quality improvement at the primary school level. The concern of quality location of school, medium of instruction, localization of curriculum, gender equality and cost of education are several other issues which are needed to be addressed as early as possible.

5.3.6 Schemes for Universalization of Primary Education

Primary education is the basic education that ensures success, growth and development of the further stages of education. In any country the number of aspirants of primary education happens to be the greater than the other stages of education. Therefore, providing primary education happens to be one of the most challenging tasks of the government of India. Looking at the history of development of primary education in India, we find that numerous efforts were made at various levels to ensure the provision of primary education to all the children of the country since the establishment of formal system of education in the country.

Underlining the importance of primary education to all, Gopal Krishna Gokhle had voiced the plea of 'Free and Compulsory Education to all' in the Imperial Legislative Council of Bombay in 1906. However, in 1917, Vithal Bhai Patel got the 'Compulsory Education Bill' (Popularly known as Patel Act) passed in the Legislative Council of Bombay. In 1930, the 'Compulsory Education Act' was added in the Statute Book of all British Provinces in India. The idea of providing free and compulsory education had got place in the list of fundamental rights in the constitution of free India. But, notably due to lack of sufficient funds the constituent assembly included the provision in form of Article 45 in the Directive Principles of State Policy.

The government of India has endeavored meticulously to ensure the achievement of universal provision of primary education through various schemes from time to time at central as well as at state level. Results of these schemes have been encouraging but not satisfying due the large number of out of school and dropout children in the country. A look at the data of the development of literacy rate in India since 1951 till 2001 endorses the fact.

Table 5.1 Literacy Rate – India (1951-2001)

S No.	Year	Persons	Male	Female
1.	1951	18.33	27.16	08.86
2.	1961	28.30	40.40	15.35
3.	1971	34.45	45.96	21.97
4.	1981	43.57	56.38	29.76
5.	1991	52.21	64.13	39.29
6.	2001	65.38	78.85	54.16

Source: National Literacy Mission, Govt. of India New Delhi.

These schemes have undoubtedly been instrumental for kindling the light of education in the lives of millions but there is much to be done even now. A general introduction of some of the schemes of universalization of primary education is mentioned hereunder:

(i) Non formal education

The scheme was introduced in 1979-80 for the children between 6 and 14 years of age who were devoid of formal schooling. The revised scheme covered all the unserved habitations throughout the country where there are no learning centers within a radius of 1Km. It was a part of overall national programme frame work for universalization of elementary education.

National Literacy Mission (MLM)

NLM was launched in 1988 with an aim of attaining a sustainable threshold literacy level of 75 per cent by 2005. The mission seeks to achieve this goal by imparting functional literacy to non-literates in the age-group of 15-35. In order to ensure that the learners make a smooth transition from guided learning to self- learning, the post

Literacy Campaigns (Continuing Education Programmes) were launched after the basic phase. These included life long learning opportunity through a host of programmes viz. income-generating programme, quality of life improvement programme, and Individual interest promotion programmes..

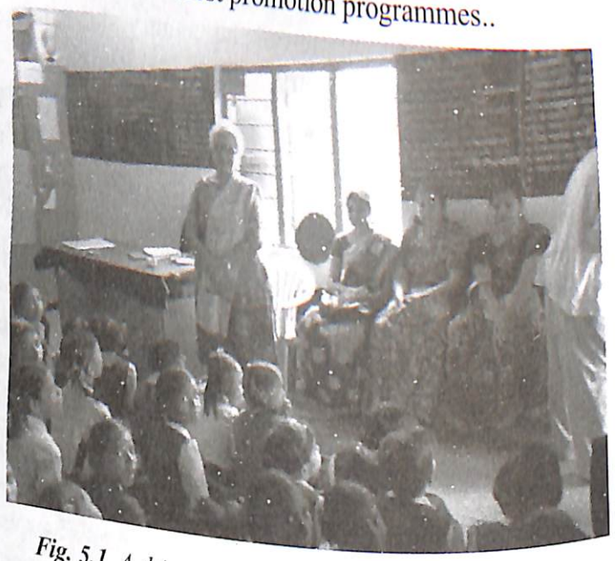


Fig. 5.1 A drive under the National Literacy Mission

National Programme for nutritional support to primary education

The scheme commonly known as Mid-Day Meals Scheme was launched on August 15, 1995. Along with the provision of complete and nutritive diet, the scheme also aimed at improving enrolment, attendance and retention of primary school students. Under the scheme cooked meals or processed food is provided to the children studying in all government, local bodies and government-aided schools.

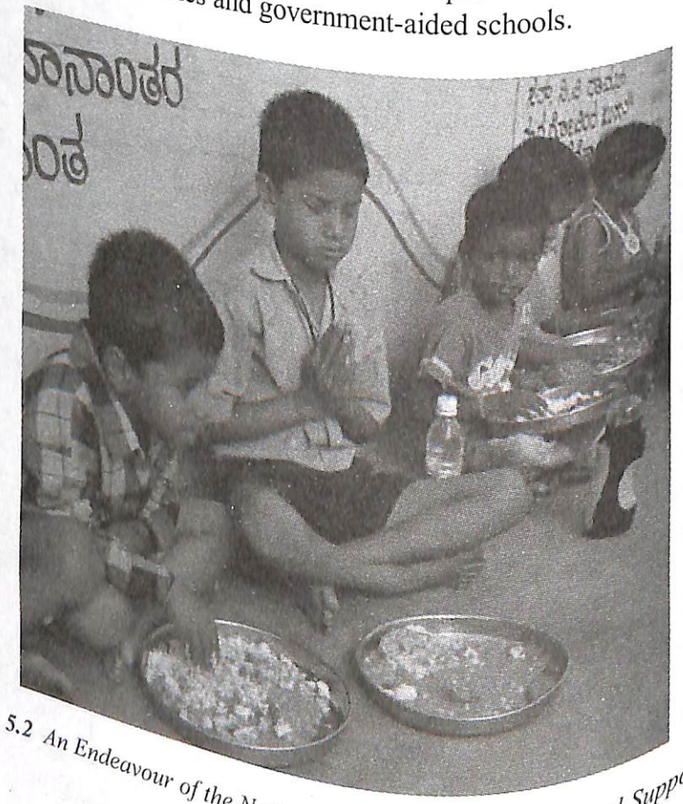


Fig. 5.2 An Endeavour of the National Programme for Nutritional Support to Primary Education

District primary education programme

DPEP was launched in November 1994 as a major initiative to achieve the objective of Universalization of Primary Education (UPE). The programme was implemented through state level registered societies with objectives of:

- Providing access to primary education for all children
- Reducing primary drop out rate to less than 10 per cent
- Increasing learning achievement of primary school students by 25 per cent
- Reducing the gender and social gap to less then 5 per cent



Fig. 5.3 A Class Running under District Primary Education Programme

Lok Jumbish

Lok Jumbish was an innovative project to evade illiteracy through people's active participation. It was launched in Rajasthan with assistance from Swadesh International Development Authority (SIDA) to achieve Education for All (EFA) by the year 2000. The programme was funded by SIDA, government of India and government. of Rajasthan in 3:2:1 ratio. The third phase ended in June 2004 was assisted by the Development for International Development (DFID), United Kingdom.

Mahila Samakhya

This Programme of Education for Women's Equality was a concrete programme for the education and empowerment of women in rural areas, particularly of women from socially and economically marginalized groups. It was being implemented in 9,000 villages of 53 districts spread in 10 states. Mahila Sanghas were established as the nodal points where all activities were planed and provide the space where women could meet, be together and discuss their problems. The funds earmarked for the Sangh could be deposited in a bank or post office account to be used collectively by the women folk for a period up-to three years. Hence, this was a scheme of women empowerment through education.

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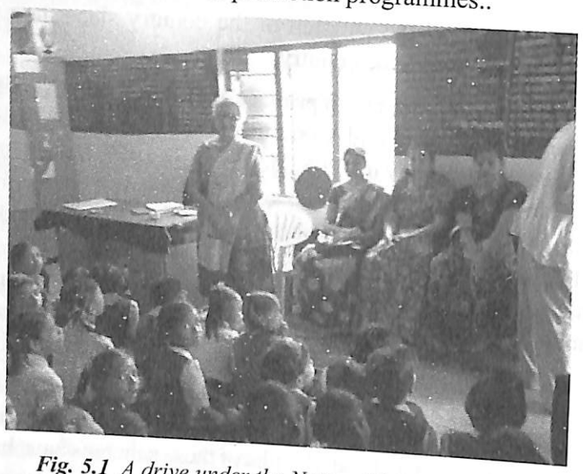


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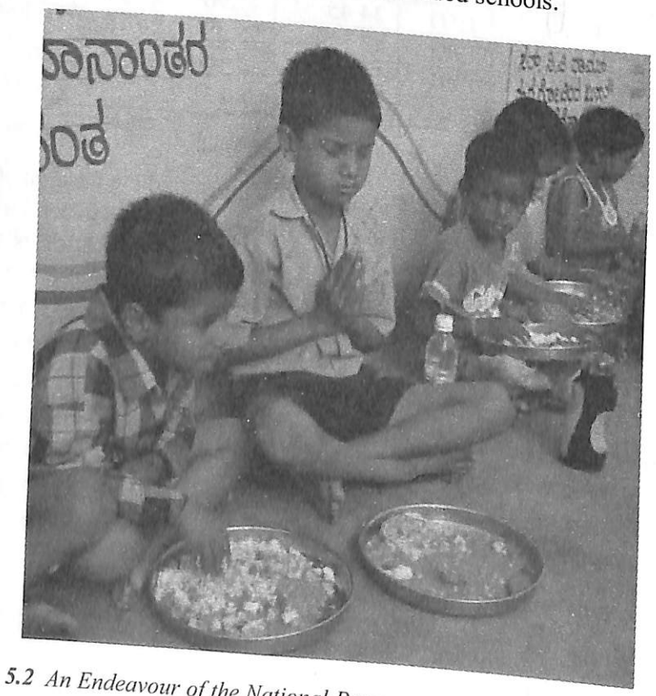


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Fig. 5.4 A Mahila Samakhya Gathering

Janshala

This programme was a collective effort of the Government of India and five UN agencies – UNDP, UNICEF, UNESCO, ILO and UNFPA to provide programme support to the ongoing efforts towards achieving UEE. It was a community based programme, which aims at making primary education accessible and effective. It was centered on the girls and children in deprived communities, marginalized groups, SC/STs, minorities, working children and children with specific needs.

5.3.7 Operation Blackboard

Operation Blackboard was a centrally-sponsored programme launched in 1987 in pursuance of National Policy of Education, 1986, to provide the bare minimum crucial facilities to all primary schools in the country. Under the scheme provision of at least two reasonably large rooms with at least two teachers and necessary Teaching-Learning Materials was made essential for every existing primary school. The panel of experts in framing the NPE, 1986, experienced that one of the biggest obstacle in the universalization of primary education is severe dearth of essential equipment in the existing primary schools. This condition enhanced enthusiasm in teachers as well as students to continue or excel in primary education.

During 1993-94 the scheme was extended to cover upper primary schools also. It provided for three rooms and an additional teacher. The comprehensive scheme of Operation Blackboard (OB) the provision of amenities was extended to Scheduled Class, Scheduled Tribes and tribal areas. Broadening the parameters of facilities, the revised scheme provided three teachers and three rooms wherever enrolment extended more than 100 in the primary school. After the primary classes, at least one room was to be provided for each class or section. Along with the extra classrooms; a headmaster-cum-office room, separate toilet facilities for girls and boys and essential teaching learning equipments, including a library was also recommended. The construction of buildings was to be done by using innovative designs suitable to the local conditions.

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To ensure quality improvement through the operationalization of Operation Blackboard it was decided that state governments will take care of repair or replacement of the impaired or damaged teaching-learning equipments (TLMS). Enough flexibility was provided for the purchase of TLMs relevant to the curriculum and the local needs. A contingency grant for replenishment of items, consumable and minor repairs and incident expenditures was also recommended.

For qualitative development of primary education and optimum use of the Teaching Learning Materials, the existing teachers of primary schools were planned to be trained in using the teaching materials under a specially designed teacher training programme. To enhance admission and retention of girls in primary education, it was decided that at least 50 per cent of the teachers appointed will be women. Funds for the appointment of additional teachers will be borne by the Central Government. Implementation and management of the scheme was done through state governments. In 2002-03, this scheme was subsumed in Sarva Shiksha Abhiyan.

Evaluating the success and achievements of the Operation Blackboard, the Implementation Report of the Eight Five Year Plan (Volume II, Unit 3, Section III, viz. Achievements during the eighth plan period); it is mentioned that 'As many as 5.23 lakh schools have been provided with books and teaching equipment worth ₹ 10,000 each, 1.47 lakh single teacher schools a second teacher and the construction of 1.74 lakh classrooms undertaken. The scheme was extended to cover upper primary schools and, with Central assistance, 47,000 schools have been allowed to purchase teaching-learning materials worth ₹ 40,000 each (₹ 50,000 for schools in tribal areas) and 33,600 posts have been created for adding a third teacher in schools with enrolment exceeding 100. In the Eighth Plan, the expenditure on Operation Blackboard is likely to be ₹ 816.26 crore against the outlay of ₹ 279 crore. About 4.5 lakh teachers have undergone special orientation for the use of teaching materials provided under the Operation Blackboard Scheme. This training programme was called the Special Orientation of Primary Teachers (SOPT) during the Eighth Plan'.

5.3.8 Sarv Shiksha Abhiyan (SSA)

Sarv Shiksha Abhiyan (SSA) was launched by the government of India in the year 2000 to achieve Universalization of Elementary Education (UEE) in a time bound manner. The need of such programme was being felt since the 86th amendment to the Constitution providing free and compulsory Education to the all the children in India between 6 and 14 years age group as a Fundamental Right.

This programme was evolved from the recommendations of State Education Ministers Conference held in October, 1988, to pursue Universal Elementary Education as a mission. Objectives of the programme included admission of all children between 6 and 14 yrs of age to schools under Education Guarantee Scheme by 2003. Focus on elementary education of satisfactory quality with emphasis on education for life was ensured. The programme also aimed at bridging all gender and social category gaps at primary stage by 2007 and at elementary education level by 2010.



Fig. 5.5 A Sarva Shiksha Abhiyan Society in Action

SSA is the flagship programme being implemented in partnership with state governments to cover the entire country and address the needs of 192 million children in 1.1 million habitats with the following objectives:

- To open new schools in the areas without them and to expand existing school infrastructure.
- To address the problem of inadequate teachers and provide training for existing teachers.
- To provide quality elementary education including life skills with a special focus on the education of girls, children with special needs, scheduled casts, scheduled tribes and tribal children as well.
- To ensure and strengthen school facilities and infrastructure through provision of additional class rooms, toilets, drinking water, maintenance grant and school improvement grants.
- To provide grants for developing teaching-learning materials and strengthening of the academic support structure at a cluster, block and district level.

The issues and challenges underlined in the SSA are discussed in the Implementation Report of the Eight Five Year Plan (Volume II, Unit 3, Introduction section) vide the following paragraphs: 'The strategy of educational development during the next decade of planning takes into account various emerging factors like (i) the national goal of providing primary education as a universal basic service, (ii) the Supreme Court judgment declaring education to be a fundamental right for children up-to 14 years of age, (iii) the need to operationalize programmes through Panchayati Raj Institutions (PRIs) and Urban Local Bodies (ULBs), (iv) the legal embargo on child-labour, (v) the provisions of the Persons with Disabilities Act, 1995, and (vi) heightened awareness of human rights violations in respect of women, children and persons from disadvantaged sections of society. It is also realized that a large number of out-of- school children, who figure neither in school enrolments nor in the calculations of identifiable child-labour, are to be provided access to schooling.

It is equally necessary that the problem of universal elementary education and literacy is tackled through a strong social movement with clearly perceived goals and involving the State and Central Governments, Panchayati Raj Institutions, Urban Local Bodies, voluntary agencies, social action groups, the media and every supportive element in society'.

Check Your Progress

4. For which areas is the Constitution of India a guiding force?
5. What is the role of the central government in the field of education?
6. What is meant by the universalization of primary education?

5.4 REGIONAL IMBALANCES IN EDUCATION

India is a vast country. Its vast size, numerous political divisions and varied socio, cultural as well as economic status makes it a country of differences. This difference is vividly apparent in the heterogeneous spread of education at various levels. There are several states in India who are very rich as far as education standards are concerned, whereas there are others who are striving even for the universal provision of education to all the aspirants in the state. This condition of imbalance of academic facilities and educated persons in various states of the country is termed as the regional imbalance in education.

Several states of India particularly Kerala, Gujarat, Himachal Pradesh, and Karnataka are good at the track of education whereas few states like Uttar Pradesh, Bihar, Rajasthan, Madhya Pradesh, Jharkhand, and Chhatisgarh are backward on this scale. On one hand Kerala is at the top of literacy scale on the other hand the states of Bihar and Uttar Pradesh are at the bottom. A long list of states can be made who are fall in between these two extremes and have not been successful to serge ahead on the educational scale. There are varied reasons of this regional imbalance which include economic condition, social structure, academic infrastructure, size of population, resources available and so on. The will power of the governments of particular states also matters a lot in the up-gradation of the educational standards. Several common factors influencing the academic status of a particular region are listed hereunder:

- Size of population
- Availability of academic infrastructure
- Budgetary Expenditure on education
- Educational policy of the state or local bodies.
- Social inequality between boys and girls
- Drastic concerns of casts and untouchability
- Apathy of parents towards education of their children
- Unavailability of suitably qualified teachers
- Accessibility of schools from vicinal locality

Due to the aforementioned reasons of the severe regional imbalances in education the enrolment of primary students varies widely from one region to the other. For example the educational statistics of the Department of Education, Ministry of Human Resource Development, Government of India for the year 2000-2001 indicated that the enrolment ratio of primary standard of the state of Gujarat was as high as 126.16. On the other hand, the same was as low as 65.69 in the Uttar Pradesh. A table mentioned in the report will be helpful to understand the regional imbalance in the enrolment of primary education:

Table 5.2 Enrolment Ratio of Five States in the Year 2000-2001

S. No.	Name of the state	Enrolment ratio from I to V	Enrolment ratio from VI to VII
1	Gujarat	126.16	66.51
2	Madhya Pradesh	111.42	58.78
3	Andhra Pradesh	104.07	48.95
4	Uttar Pradesh	65.69	37.42
5	Bihar	79.87	31.29

The data in the table is evident that there exists a severe imbalance in educational opportunities, status and standards of education in various parts of the country. Several commissions including the Kothari Commission (1964-66) and National Policy of Education (1986) have put their attention towards this condition and suggested innovative measures to ensure equalization of educational opportunities in all parts of country and to all citizens of the nation. Some of these are listed below:

- Preparing a comprehensive plan for enrolment of all children of admission age.
- Provision of sufficient funds for primary education with the local bodies.
- Counseling parents about the importance of school education for their wards.
- Launching campaigns for promoting education for girls, scheduled casts and scheduled tribes children.
- Ensuring existence of schools with adequate facilities within one kilometer radius of all localities.
- Ensuring availability of essential teaching-learning aids in all schools.
- Appointment of trained teachers in all primary schools or providing training to the working teachers.
- Appointing at least 50% female teachers at primary level to promote girl education.
- Construction of washroom facilities separately for boys and girls in all schools.
- Launching special drives for enrolling out of school children of appropriate age.
- Providing incentives, nutritious food, uniform and stationary to poor children in primary schools.
- Enhancing the role of central government in planning and funding the schemes of universalization of primary and elementary education.
- Inviting private sector, corporate and non-governmental organizations (NGOs) in the task of ensuring quality education to the children of particular areas.

As a matter of fact most of the above listed measures are being adopted by various states to achieve equalization of educational opportunities to all and perform better on the national scale of education. If all the states could implement the mentioned measures on priority basis; the regional imbalance in education would be soon a subject of past.

5.4.1 Developments in Recent Years

Another serious challenge is the presence of teachers without professional qualifications approved by the National Council of Teacher Education (NCTE), as is required under the RTE Act. There are about 8.1 lakh untrained teachers in the country with four States—Bihar, UP, Jharkhand and West Bengal—accounting for 72 per cent of them.

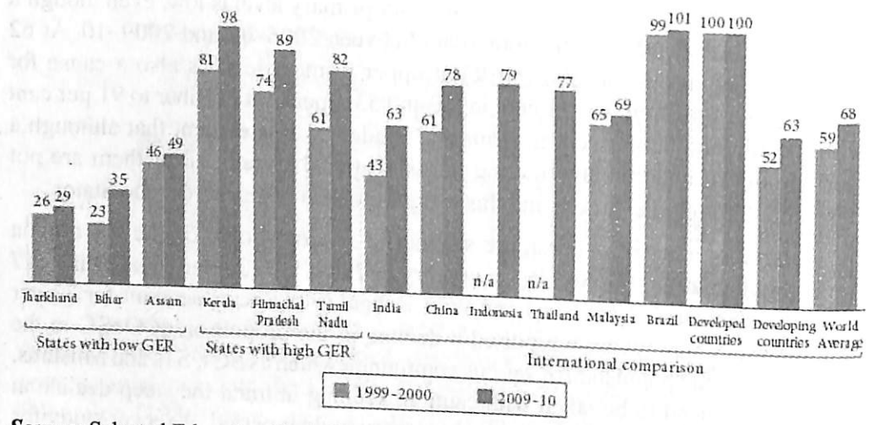
The gross enrolment ratio (GER) at upper primary level is low, even though it improved by 11.8 per cent in the four years between 2006–07 and 2009–10. At 62 per cent the net enrolment ratio (NER) at upper primary level is also a cause for concern. This varies from 47 per cent in UP and 53.1 per cent in Bihar to 91 per cent in Tamil Nadu and 83 per cent in Himachal Pradesh.4 It is evident that although a larger number of children are entering the educational system, all of them are not progressing through the system and this progression is uneven across the States.

A large number of children are still out-of-school (OoS). Of the 8.1 million out-of-school children (OoSC) in the country in 2009, UP (34 per cent), Bihar (17 per cent), Rajasthan (12 per cent) and West Bengal (9 per cent) account for 72 per cent.5 Although surveys have reported a decline in the proportion of OoSC to the corresponding child population of various communities such as SCs, STs and Muslims, these estimates need to be taken with caution, keeping in mind the steep decline in absolute numbers of OoSC reported in the corresponding period. A recent study for rural India places the proportion of children not enrolled in schools at 3.5 per cent. However, in a few States like Rajasthan and UP, the percentage of OoS girls in the age group of 11–14 years is as high as 8.9 per cent and 9.7 per cent, respectively.

The mid day meal scheme (MDMS) covered 7.18 crore primary school children and 3.36 crore upper primary school children in 2010–11. The coverage of children in the States of Bihar (43 per cent), UP (57 per cent) and Jharkhand (58 per cent) is below the national average of 72 per cent, whereas it is well above the national average in Chhattisgarh (83 per cent) and Odisha (82 per cent). Based on the Annual Work Plan and Budget of the States/UTs for the year 2012–13, the district-wise performance of the MDMS in all the States/UTs has been analysed and the poor performing districts (144) have been identified for focused attention. Of the poor performing districts, 17 are in areas affected by the Left Wing Extremism (LWE); 11 in the North Eastern States (Tripura—3, Meghalaya—4, Assam—4); 17 in tribal districts, and 13 in the hilly areas (Uttarakhand—4, J&K—9).

GERs at the secondary (Class IX–X) and senior secondary (Class XI– XII) levels are 62.7 per cent and 35.9 per cent, respectively, leading to a combined GER for Class IX–XII at a considerably low 49.3 per cent. The significant dip in GERs from secondary to senior secondary level for all categories is driven by a number of factors including general lack of access, paucity of public schools, high cost of private senior secondary education and poor quality of education, along with the very important factor of high opportunity cost of deferred entry into the workforce. India's GER at the secondary level is close to that of the average for all developing countries (63 per cent), but substantially lower than that of emerging economies like China, Indonesia, Thailand and Brazil.

Within the relatively low GER at the secondary level, there are wide regional and inter-State variations. Among the major States, secondary level GERs are as low as 29 per cent in Jharkhand and 35 per cent in Bihar and as high as 89 per cent in Himachal Pradesh and 98 per cent in Kerala, as compared to the national level (62.7 per cent). At the Senior Secondary level, the GER ranges from being very low at 6.5 per cent in Jharkhand and 13 per cent in Assam and quite high at 60 per cent in Haryana and 69 per cent in Himachal Pradesh. In addition, in some States like Rajasthan and MP, the gender gap in GER is as wide as 20 per cent.



Source: Selected Education Statistics, Ministry of HRD, 2009–10, EFA-GMR-2011 and UIS.

Fig. 5.6 *GER for Secondary Education: By States/Select Countries (High/Low GER States and International Comparisons)*

Even though GER in higher education at the national level is 18 per cent, there are wide inter-State variations. Delhi, Chandigarh and Puducherry, which attract a large number of students from outside their States, have GERs exceeding 30 per cent while States like Bihar, Jharkhand, Assam, Rajasthan, Odisha and West Bengal have significantly lower GERs.

Check Your Progress

7. Name five schemes run by the Government of India for achieving universalization of primary education.
8. When and why was Operation Blackboard launched?
9. What is meant by regional imbalance in education?

5.5 QUALITATIVE DEVELOPMENT OF PRIMARY AND SECONDARY EDUCATION

There have been numerous efforts to ensue the reach of primary and elementary education to the all the eligible children of the country. These efforts have yielded encouraging outcomes in many parts of the nation. Fortunately, a number of corporate houses and non-governmental organizations (NGOs) have joined hands with the government in ensuring primary education to maximum number of children in various parts with the help of state governments. After universal provision, universal enrolment and universal retention also, there lies another big problem which many a times dissipates the very purpose of education. This is the issue of qualitative development of primary and secondary education in the country.

The concept of quality in school education means the achievements of the desired learning objectives at the level of mastery. The definition of quality education as per the International conference on improvement of quality of secondary education is the education that is relevant and innovative in its objectives, content, means and processes. In our country a minimum level of learning is set to ensure quality in education. The same has been stressed upon in the Right of Children for Free and Compulsory Education Act (RTE), 2009. Hence, the concept of quality is a matter of concern in Indian education.

In order to ensure qualitative improvement in Indian education the National Curriculum Framework, 2005, has suggested basic reforms in pursuance of quality. The following suggestions of the NCF, 2005, are especially quotable:

- The school curriculum should be wide-ranging and flexible.
- The syllabi and textbooks should be based upon redefined subject matter to enhance pedagogical space of the students.
- Curriculum should be entwined around the needs and surroundings of rural and marginalized children.
- Re-organization of transaction and evaluation strategies to make them democratic, continuous and comprehensive.
- To provide flexibility in subject choice to make education student friendly.

Apart from the initiatives mentioned in the NCF, 2005, there have been efforts of ensuring qualitative learning in several policies and programmes of primary and secondary education. For example, National Policy of Education, 1986, the laid stress on the need for a radical reconstruction of the education system, to improve its quality at all stages, and gave much greater attention to science and technology, the cultivation of moral values and a closer relation between education and the life of the people. The policy indicated at a National System of Education to provide education of a comparable quality to all students irrespective of caste, creed, location or sex. It urged to take effective measures such as the 'Common School System' recommended in the 1968 Policy.

Along with, the Central government and various state governments have endeavoured to ensure quality education at primary and secondary standards. These include Scheme for Universal Access and Quality at the Secondary Stage, a centrally-assisted programme known as SUCCESS. The programme aimed at universalizing quality education with focus on science and maths. 'Roopantar', a scheme by the government of Delhi, aims at providing comfortable learning environment to students. The Quality Council of India is the national accreditation body provides a framework for the effective management and delivery of holistic education programme aimed at overall development of students. The system of continuous and comprehensive evaluation (CCE) of students' achievements is also an apt step towards ensuring quality in education.

Check Your Progress

10. Name some of the schemes for ensuring quality improvement in education.

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5.6 SUMMARY

In this unit, you have learnt that:

- The history of primary education in India is as old as its civilization. It has been there since the Vedic period. It existed in the Buddhist and Medieval period as well with contemporary modifications.
- The missionaries from Western countries established primary schools of Western standards in various parts of India. These were regularized by the British government to give them a standardized format on the line of the English education.
- After Independence, the government of free India worked meticulously in the light of the constitutions provisions for the universalization of primary as well as elementary education.
- The Kothari Commission (1964-66), National Policy of Education, 1968, Programme of Action, 1992, and National Curriculum Framework, 2005, did a lot to ensure the provision of quality education to the masses of this vast country.
- Education is like a touchstone to change the course of life of an individual.
- The Constitution of India contains as many as 34 provisions related to education. These provisions are in the form of articles, entries, rights to special categories, admission norms, language and special provisions. These provisions are being followed by the government in as areas of school plant such as the structure, management, curriculum, syllabi, special provisions and features of education.
- Article 45 of the directive principles of the state policy provide for universalization of education. The term universalization, in this context, means universal provision, universal enrolment and universal retention of students in schools till the completion of their education. To implement this directive of the Constitution Central and state governments have launched several schemes. The prominent among them are Non-Formal Education, National Literacy Mission, National Programme for Nutritional Support to Primary Education, District Primary Education Programme, Lok Jumbish, Mahila Samakhya, Janshala, Operation Blackboard and Sarv Shiksha Abhiyan (SSA).
- Among the schemes of universalization of education, two centrally-sponsored schemes, viz., Operation Blackboard (OB) and Sarv Shiksha Abhiyan (SSA) are more important due to their nature of objectives and mode of operationalization.
- Operation Blackboard was a centrally-sponsored programme launched in 1987 in pursuance of National Policy of Education, 1986. It aimed at providing the bare minimum crucial facilities to all primary schools in the country especially in the academically backward areas.
- Under the scheme, provision of at least two reasonably large rooms with at least two teachers and essential Teaching-Learning Materials was made essential for every existing primary school.
- During 1993-94 the scheme was extended to cover upper primary schools also by providing at least one room for each extra class.

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- Along with the extra classrooms; a headmaster-cum-office room, separate toilets for girls and boys and library room were also recommended. The responsibility for repair or replacement of the impaired teaching-learning equipments was given to the state governments. In 2002-03 this scheme was subsumed in the Sarva Shiksha Abhiyan.
- The other plan Sarv Shiksha Abhiyan (SSA) was also launched by the central government in the year 2000 to achieve Universalization of Elementary Education (UEE). The need of such programme was felt due to the 86th amendment to the Constitution, which aimed at providing free and compulsory education to the all the children in India between 6-14 years age group as a Fundamental Right.
- The SSA was implemented in partnership with state governments to fulfill the needs of 192 million children in 1.1 million habitats. Its objectives included to open new schools and expand existing school infrastructure, to enhance appointment of inadequate number of teachers and provide training for existing teachers, to provide quality education particularly for girls, children with special needs, scheduled casts, scheduled tribes and tribal children, to strengthen school facilities and infrastructure and to provide grants for developing teaching-learning materials. Results of these two schemes were very positive and encouraging.
- All such schemes were planned and executed to ensure universal quality education to all children of school age but due to the vast size, political divisions, varied socio-cultural and economic standards the goal of universal provision of education is still unfulfilled.
- There are several regions of India which have good academic progress, but many others are lagging far behind even from the national standards. This condition of imbalance of academic facilities in various states is termed as the regional imbalance in education.
- This imbalance is due to several common factors such as size of population, availability of infrastructure, poor economic condition, insufficient expenditure on education, social inequality between boys and girls, untouchability, indifference of parents towards education and non-qualified teachers.
- The educational statistics of the Department of Education, MHRD, (2000-2001) indicated that the enrolment ratio of primary standard of Gujarat was 126.16 whereas the same was 65.69 in Uttar Pradesh. This imbalance can be curbed by preparing a comprehensive plan for enrolment of all children of admission age along with several other measures.
- Along with the quantity the quality of education also is important to get desired results out of the schemes and programmes being run by various governments.
- The concept of quality in school education means the achievements of the desired learning objectives at the level of mastery.
- To ensure qualitative improvement in Indian education the National Curriculum Framework, 2005 has suggested several ways including making school curriculum wide and flexible, enhancing pedagogical space of the students, framing curriculum around the needs and surroundings of children, reframing the transaction and evaluation strategies and providing flexibility in subject choice to make education student friendly.

- Apart from the NCF, several government programmes such as the Scheme for Universal Access and Quality at the Secondary Stage (SUCCESS), 'Roopantar', a scheme by the government of Delhi, the Quality Council of India and the system of continuous and comprehensive evaluation (CCE) also are playing well in ensuring quality education for students in the country.

5.7 KEY TERMS

- **Primary education:** The first stage of compulsory education
- **National Literacy Mission:** The National Literacy Mission Programme is an Indian programme which aims to make 80 million adults in the age group of 15 - 35 literate over an eighty year period
- **Lok Jumbish:** An innovative project to evade illiteracy through people's active participation
- **UNICEF:** An agency of the United Nations established in 1946 to help governments (esp. in developing countries) improve the health and education of children and their mothers
- **UNDP:** A global development network. It advocates for change and connects countries to knowledge, experience and resources to help people build a better life
- **UNFPA:** An international development agency that promotes the right of every woman, man and child to enjoy a life of health and equal opportunity
- **ILO:** One of the oldest components of the UN system of specialized agencies and has been involved over the years in appraising and seeking to improve and regulate conditions for seafarers

5.8 ANSWERS TO 'CHECK YOUR PROGRESS'

1. The union list has 97 subjects and only six are related to education. These six are:

   (i) Entry 13 (ii) Entry 62 (iii) entry 63 (iv) Entry 64 (v) Entry 65 (vi) Entry 66.
2. Article 29 and 30 of the constitution provides that those having a distinct language, script or culture of their own shall have the right to conserve the same.
3. Article 21A was added in the Constitution as the 86th amendment, in the year 2002. It says that – 'The State shall provide free and compulsory education to all children of the age of six to fourteen years.
4. The Constitution of India is a guiding force for central as well as state governments in the areas of the structure, management, curriculum, syllabi and special provisions of education in India.
5. The central government is responsible for planning of education, funding of schemes and establishment as well as management of the institutions of higher education throughout the country. Special schemes and drives like Operation Blackboard, Sarv Shiksha Abhiyan are also conducted by the centre. The central government bears the responsibility of liaisoning with international organizations such as UNESCO and UNICEF.
6. Universalization of education is an internationally accepted term for the steps of providing education to all aspirants. These steps are Universal Provision, Universal Enrolment and Universal Retention.
7. Five schemes run by the Government of India for achieving Universalization of Primary Education are: National Literacy Mission, National Programme for Nutritional Support to Primary Education, District Primary Education Programme, Operation Blackboard and Sarv Shiksha Abhiyan are five prominent schemes to achieve universalization of primary/elementary education.
8. Operation Blackboard was a centrally sponsored programme launched in 1987 to provide minimum crucial facilities to all primary schools in the country. Under the scheme provision was made to provide at least two large rooms with two teachers and essential Teaching-Learning Materials. In 1993-94 the scheme was extended to cover upper primary schools also. Along with the extra classrooms; a headmaster-cum-office room, separate toilets for girls and boys and library room were also recommended. This scheme was subsumed in Sarva Shiksha Abhiyan in 2002-03.
9. Regional imbalance in education means the difference in educational opportunities, enrolment and rate of retention in various regions of the country. In other words the condition of imbalance of academic facilities in various states is termed as the regional imbalance in education.
10. Central and state governments have launched several schemes to upgrade quality of education at various levels. Few of these are the Scheme for Universal Access and Quality at the Secondary Stage (SUCCESS), 'Roopantar', a scheme by the government of Delhi, the Quality Council of India and the system of continuous and comprehensive evaluation (CCE).

5.9 QUESTIONS AND EXERCISES

Short-Answer Questions

1. What entries, related to education, in the union list, state list and concurrent list?
2. What are the provisions of Article 28 that are related to minority communities?
3. List the objectives of the District Primary Education Programme.
4. What are the objectives of Sarv Shiksha Abhiyan?

Long-Answer Questions

1. Give a list of provisions, since the implementation of the Constitution in 1950 till the inclusion of Article 21A in 2002, after the 86th Amendment in the Constitution.
2. Write a note on the implication of the Constitutional Provisions on Education.
3. Discuss the schemes for universalization of primary education.
4. Explain the salient features of Operation Blackboard.
5. Describe the effects of regional imbalances in education.
6. What qualitative development has taken place in primary and secondary education in India?

5.10 FURTHER READING

National Curriculum Framework. (2005). New Delhi: NCERT.

Model Curriculum by UGC. (2003). New Delhi: University Grants Commission.

Bhatnagar, Suresh. (2004). *Education in India.* Meerut: Loyal Book Depot.

Nayak, B.K. (2010). *Education in Emerging Indian Society.* New Delhi: Axis Publications.

Lal Raman Bihari. (2004). *Bhartiya Shiksha ka Vikas avm uski Samasyen.* Meerut: Rastogi Publications.

Samuel, Ravi S. (2011). *A Comprehensive Study of Education.* New Delhi: PHI Learning Private Limited.

Ghose, Sunanda. (2009). *Education in Emerging Indian Society - The Challenge and Issues.* New Delhi: PHI Learning Private Limited.

Chetana and Sonal. (2010). *System and Issues in Indian Education.* Faridabad: Balaji Publication.

UNIT 6 VOCATIONALIZATION OF EDUCATION

Structure

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  6.2.1 Need and Importance of Vocational Education
  6.2.2 Impediments in Vocational Education
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6.0 INTRODUCTION

In the previous unit, you studied about the problems of primary and secondary education.

Vocational preparation through education is one of the oldest practices in the field of education. In India, knowledge and skills of sixty-four types of arts was included in the curriculum since the Vedic ages. Later in Buddhist and Medieval periods also vocational education and training remained among the main stream of education at a higher stage. The British gave a standardized and widespread touch to the vocational education by attaching it with the popular professions of the time.

Today, the concept of vocational education has become as an inevitable component of education; particularly at higher and senior secondary stage. All the commissions and policy makers have put considerable attention to ensure a practical and functional system of vocational education so that students could be helped for vocational selection and success at appropriate age. The efforts of National Policy of Education, 1986 and National Curriculum Framework, 2005 are especially appreciable in this direction.

6.1 UNIT OBJECTIVES

After going through this unit, you will be able to:

- Interpret the concept and scope of vocation
- Analyse the relationship between vocation and education
- State the importance of vocational education at the senior secondary stage

- Discuss the steps suggested in the National Policy of Education, 1986, regarding the vocationalization of secondary education.
- Describe the innovative tools and techniques being adopted for vocationalization of education.

6.2 THE CONCEPT AND SCOPE OF VOCATION

The term vocation has been derived from a Latin term 'vocare' which means 'to call'. Traditionally, this word was used in religious discusses but with the change of time this term came to be used for an occupation to which a person is specially drawn or for which he or she is suited, trained, or qualified. The dictionary meaning of vocation is designation or appointment to a particular state, business or profession.

There are two more words which seem to be similar to vocation in meaning and purpose. These are occupation and profession, but minute differences among the dictionary meanings of these terms differentiate them thinly. Accordingly, occupation is any job or earning activity accepted by an individual out of one's natural choice of family traditions. Such as farmers, tanners, goldsmith, carpenters, cobblers and artisans are the jobs which are adopted by many as family tradition. On the other hand, vocation is the earning activity for which an individual needs special training and preparation.

Vocational education is a conditional activity; it is conditioned by highly varying circumstances which prompt its need and its existence. It emphasizes on preparation for jobs and careers in diversified vocational or professional workers and entrepreneurs. The meaning attached to the word 'vocation' is of great significance in defining the term vocational education. In other words, vocational education is the education or training of workers. The origin of vocational education may be traced to the early apprenticeship training practices. This concept implies that any kind of education or training in which a worker participates is vocational education. It also suggested that humans have dissimilar abilities and the persons having neither the capacity nor the desire to study the traditional curriculum be prevailed upon to opt for vocational trades more adapted to their taste and abilities.

6.2.1 Need and Importance of Vocational Education

Vocational education prepares an individual for choosing, entering and pursuing successfully the vocation of one's choice. In this sense, vocational education helps an individual in selecting his occupation which is a developmental process taking place over a period of years. It ends in a compromise between interests, capacities, values and opportunities which are available.

In individual terms, provision of vocational education prevents maladjustment and dissatisfaction in the process of occupational choice and pursuance. It is essential that vocational guidance facility is made available to each and every individual so that each individual gets the vocation of one's choice, needs and capability. Such provision prevents maladjustment and dissatisfaction in people's lives.

On the social and national terms, vocational education ensures efficient use of available manpower. Vocational education aims at efficient use of manpower and greater economy in the execution of work in industry, business and government. To achieve this objective vocational education enables people to discover information about their abilities interests, needs, ambitions, limitations and their causes.

Importance of vocationalization

(i) **Employment:** Vocationalized education gives a capacity to earn ones living and makes the individual self-dependent. This to a great extent solves the problem of unemployment.

(ii) **Economic development:** Due to lack of vocational education, India has not been able to exploit its resources. Vocationalized education creates the trait of productiveness: 'the individual'; who may learn how to exploit the natural resources intelligently. This may ultimately lead to the economic prosperity of the nation.

(iii) **Creating a spirit of self-dependence:** Vocationalized education creates a spirit of self-dependence in the individual. Through this education, he begins to earn even during his school or college career. Thus ultimately he becomes a useful member of the society.

(iv) **Dignity of labour:** As one has to do some manual work for learning some vocational skills, it develops a sense of dignity of labour in the individual, not possible in purely general and academic education where the creative side is ignored.

6.2.2 Impediments in Vocational Education

Kothari Commission observed that in India only 9 per cent of the students are able to get education through vocationalized curriculum. In comparison to other countries, this percentage is very low. The following may be the causes of this low percentage:

(i) The government has not taken up the problem of vocationalization of education with due seriousness.

(ii) Lack of teachers for imparting instruction according to the vocationalized aspects incorporated in the general curriculum.

(iii) As Education Department of the Government has not been able to receive guidance for determining the exact nature of the vocationalized curriculum, the vocationalized education programmes could not be formulated according to the social and national needs.

(iv) Due to lack of necessary facilities in schools and training colleges, laboratories and workshops have not been satisfactorily organized and the required number of trained teachers is not available.

(v) The schools and colleges neglected altogether the programme pertaining to physical work and social service.

(vi) There has been a lack of cooperation between labour, industries and education departments of the government. No department wholly took the responsibility of vocationalized education on its own.

(vii) The public remained altogether indifferent to vocationalized education as its utility has not been fully explained to people.

CHECK YOUR PROGRESS

1. Name the two words which are similar to vocation in meaning and purpose.
2. How does vocational education help an individual?
3. List some of the impediments in vocational education.

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6.3 VOCATIONAL EDUCATION AT THE +2 STAGE

Man is a product of his environment and inherent aptitudes. Along with, the nature of his career patterns is also determined by the individual's socio-economic level, mental ability and personality characteristic to which one is exposed to. There are several stages of vocational maturity in individuals till one actually reaches the stage of vocational selection. These stages are differently named by different specialists. R. Super (1957) has listed six stages of vocational maturity though (Buehler 1967) has reduced them to five. Of these, only two to three are relevant as far as vocational education at senior secondary stage is concerned. According to Super, these are crystallization stage, (14-18 years) and specification stage, (18-21 years). On the other hand, the stages mentioned by Buehler are more realistic in a sense that these are further divided into sub-stages. These are growth stage (from birth to 14 years) and exploratory (from 15 to 24 years). The second stage is sub-divided into (i) fantasy stage and (ii) realistic stage. This description is evident that +2 or senior secondary stage is most relevant for providing actual or concrete vocational education to students. The prominent functions of vocational education at the higher secondary stage may be listed as follows:

- To carry forward the vocational information being provided at the earlier stages more intensively and vigorously.
- To make students correlate their studies to the vocations related to them.
- To motivate students undertake a comprehensive study of the careers on the lines they would like to pursue. They may be made to talk to the professionals already employed in those fields.
- To encourage students acquaint themselves with the prospect for higher education and the scholarships, stipends, grants or fellowship available to pursue them.
- To make students aware of the opportunities open to them after the vocational training is over.

6.3.1 Vocationalization of Secondary +2 Level Education

In India, the vocational subjects should be given a place in the curriculum of general subjects so that the students become more competent to earn their livelihood after completing the general education. Vocationalization of education means to make a student self-dependent in life. Vocationalization, does not mean only to impart vocational education. It should be organized according to the individual aptitude of the students. A good vocational capacity may be developed in the child, after ascertaining his various aptitudes and interests. According to the recommendation of Secondary Education Commission, many multipurpose schools were established that include education in various vocational subjects along with education in general subjects. The Kothari Commission emphasized work-experience in education. This type of education promotes the all-sided development of the individual.

Vocational education has been defined by UNESCO as: 'Comprehensive term embracing those aspects of the educational process involving, in addition to general education, the study of technologies and related sciences, and the acquisition of practical skills, attitudes, understandings and knowledge relating to occupations in the various sectors of economic and social life. Such an education would be an integral part of general education and a means of preparing for an occupational field and as aspect of continuing education.'

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Vocational education is education given to an individual to prepare him for a successful social living by enabling him to realize his own potential within the framework of economic development to which the individual contributes. Vocationalization means learning of a skill or a range of skills through study of technologies, related sciences or other practical work. Vocationalization of higher secondary education aims at increasing the employment potential of the people through education for self-employment, with emphasis on agricultural and related occupations, including cottage and agro industries, and through preparation for specific competencies in different vocations. Thus, we can say that vocationalization means vocation-oriented education i.e., to provide the knowledge of necessary techniques and technologies related to different aspects of economic and social life, and to teach different skills in a practical manner. The sense of vocationalization of education is not limited to only providing vocational education, but is to effect all-round development through vocational education. Education Commission (1964–66) emphasized on vocationalization at +2 level in the 10+2+3 educational structure.

As discussed earlier, Adiseshiah Committee recommended that there should be two streams or spectrums after general education of class X: (a) general education spectrum, and (b) vocational education spectrum. In vocational stream, students should be taught some skill(s) related to technology, science, agriculture or other practical work. Vocationalization will put an end to the mad rush for entrance into Universities, and the consequent deterioration in the standard of education.

Participating and cooperative agencies

The following agencies will cooperate in implementation of vocational curriculum at +2 level of secondary education:

(i) All India Vocational Education Council
(ii) Human Resource Development Ministry
(iii) NCERT
(iv) Regional training boards

Recommendations on vocationalization of secondary education

The recommendations of various committees and commissions on vocationalization of secondary education have been discussed below.

(i) **Secondary Education Commission (1952–53):** It recommended the incorporation of vocational courses in the secondary school curriculum as follows:
   (a) Multipurpose schools should be established. The current secondary schools should be gradually converted into multipurpose schools. Till then vocational courses should be taught in them according to the varying interests of students. The whole curriculum needs to be sub-divided into seven parts. Every student should study at least one of these parts according to his interest. Each student should study some vocational subject to develop a sense of respect for manual work. The commission emphasized the need of educational and vocational guidance services in each school.
   (b) Each student should be given an opportunity to do some productive work in the school. The courses should be diversified to make alternatives available for the students.
   (c) The student should be given theoretical knowledge and practical training in agriculture. Such vocations as gardening, animal husbandry, veterinary

science and bee-keeping etc., may be encouraged in schools. These vocations are considered more useful for rural children; rural school should function as a community centre also.

(d) Technical education should be provided in secondary schools. The student may choose some technical subject as his hobby. Some industrial tax may also be levied for acquiring some funds for technical education. The Central Government should annually give financial grant to state governments. A federal board for technical education should be established. Multipurpose schools should be opened at some places.

(ii) University Commission (1948–49): It emphasized the need of establishing rural universities for teaching agriculture and allied subjects. It also recommended for making more progressive medical education, teachers' training and education in law.

(iii) Kothari Commission (1964–66): It emphasized the utility of vocational education and gave the following suggestions:

(a) Secondary education must be vocationalized according to the means available.

(b) Vocational education should be sub-divided into the following stages according to the curriculum:

- ***Junior secondary stage:*** The students who have passed seventh or eighth class should be admitted in Industrial Training Institutes (ITIs). The admission age should be reduced to 14 years of age. This may also benefit the primary school passed student. Part-time education should be arranged for industrial training to benefit those children who are mostly engaged in domestic work. The students should be given training in agriculture and domestic science.
- ***Higher secondary stage:*** Polytechnical institutions should be established for those students who have passed secondary school classes. Part-time training or correspondence courses may also be arranged for such students. In health, commerce, administration and small industries varying courses of six months to three years duration should be instituted.

(c) Separate committee and sub-committees should be organized within the jurisdiction of the education department for giving training in their respective vocation. These committees will look after part-time training and correspondence courses in their respective areas. First of all, the man-power available for the various vocations should be ascertained. Then the training for the same should be organized. The firms which may absorb the trained hands should also be consulted about the trained hands that they would require.

(d) The central government should give adequate financial assistance to the various states for vocational and technical education. In USA, it was due to the federal assistance that secondary education could be vocationalized; this practice should be adopted in India.

(e) The current facilities for vocational and technical education should be further extended. The training of workmen should be grouped into two parts—semi-skilled and skilled. The number of vocational and technical institutions should be increased. The private and state trade schools should be encouraged by giving financial help.

(f) People have no interest in vocational curriculum as they do not understand its utility. The government should try to create interest in the people for vocational and technical training. Vocational courses should be made more interesting. Vocational Guidance Committees should be organized in schools to give psychological vocational guidance to the students.

National Review Committee on Vocationalization

National Review Committee (1978) has given the following recommendations for making vocationalization of education successful:

(i) There should be no rigid streaming of courses in the general education and vocationalized education spectra. The student should be free to offer either the general education or vocationalized courses, or a mix of the two, particularly in relation to the vocational courses as agriculture, and related vocations and other general sciences. There should be in-built elasticity in the choice of the general education or vocationalized subjects.

(ii) Learning must be based on work. It must be either through the Socially Useful Productive Work (SUPW) or through vocationalized courses.

(iii) Vocational courses should be provided in agricultural and related rural occupational areas and in managerial, commercial, health and para-medical vocations and not industrial and engineering occupations.

(iv) Books should be written on a priority basis to suit local conditions and make available to the schools, in order to impart instruction in vocational courses, in agricultural and related subjects.

(v) Semester pattern and credit system may also be introduced in higher secondary classes. Suitable steps may be undertaken for the orientation of teachers in this connection.

(vi) To begin with, teachers with postgraduate qualifications need not be insisted. Persons who have had actual experience of on-the-job may be fruitfully utilized to teach vocational courses. Part-time teachers may also be appointed, wherever necessary.

(vii) Both pre-service and in-service teacher education should be organized, in collaboration with Colleges of Education, SCERTs, NCERT, Agricultural Universities, and ICAR.

(viii) A vocational survey of the area-metropolitan, block, taluk, district or state should be undertaken.

(ix) As little or no vocationalized education facilities are readily available for rural students, so new schools should be constructed in rural areas and should be adequately equipped.

(x) Shift system should be introduced, wherever feasible.

(xi) Apprenticeship facilities should be extended to all the students who complete education in vocational streams if they desire to benefit from such training.

(xii) Vocationally qualified persons should be preferred to graduates and be entitled to the pay scales available to the graduates as long as the job performed are the same or of similar level.

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(xiii) A National Council of Vocational Education should be set up.

(xiv) At the State level, State Council for Vocational Education be created and should function under the general guidance of the National Council of Vocational Education.

(xv) The vocalionalization of education must be supported by the local community and other agencies, such as panchayat, unions, agricultural cooperatives, Small-scale Industries Corporation, Khadi and Village Industry Commission, local branches of nationalized and other banks, etc.

6.3.2 Issues of Vocationalization of Secondary Education

The issues related to vocationalization of secondary education are discussed in this section.

(i) **Problem of qualitative improvement:** While India has made quantitative improvement in technical and vocational education, we have not yet paid adequate attention to its qualitative side. Many technical and vocational institutions are being run in a very bad condition. There are no good workshops, laboratories, libraries and buildings. Well trained teachers are very few.

Remedy: Technical and vocational institutions which do not fulfil the minimum conditions should be closed. Those schools that are well managed and organized should be given adequate financial assistance for organizing good workshops, laboratories and libraries. They should have close relationship with the relevant local industries. The trainees should be sent to these industries to obtain some practical experience.

(ii) **Problem of creating favourable attitude towards manual work:** In India, a labourer does not get that respect in the society that a teacher, advocate or doctor does. Hence, trainees in technical and vocational institutions do not like to engage themselves in those operations which require manual work. They do not get adequate practical experience. Technical and vocational institutions do not produce good skilled workers. No reform in technical and vocational education will yield the expected result unless this situation is changed.

Remedy: Opportunities should be given to students and teachers in schools, colleges and universities for doing various types of creative manual work. Workshops should be organized to give enough practical experience to each trainee.

(iii) **Problem of defective curriculum:** The following defects are found in the curriculum of technical and vocational institutions:

(a) It does not fulfil the local needs. For example, in the agriculturally predominant area, agriculture is not given a prominent place in the curriculum.

(b) It lacks productivity.

(c) It does not develop sense of honour in a manual work.

(d) It lacks variety and does not have other purposes that should be a special feature of a technical institution.

Remedy: It should be estimated as to how many teachers and guides are required for a particular stage in technical and vocational education. The arrangement for the equipment should be made on the basis of this estimate. The teachers and guides should be given attractive salaries and other facilities. The four regional committees should take the responsibility of doing the needful in this matter.

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(iv) **Problem of common medium of instruction:** The mother tongue has been accepted as the medium of instruction in India up to the secondary state. After passing this stage, when a student takes admission in some technical institution, he is given training in English. This creates a great difficulty for the trainee and many capable students lag behind.

Remedy: Regional languages should be accepted as the medium of instruction in the technical and vocational institutions. The trainee should not be compelled to acquire proficiency in English, unless he himself insists on the same. Before making regional languages the medium of instruction, it is necessary to produce standard books in regional languages in the various areas of technical and vocational education. The teachers and guides of technical and vocational institutions should be so trained that they may be able to impart training through the medium of the regional language concerned.

(v) **Problem of administration and control:** The Education Ministry of Government of India is not responsible for technical and vocational education in the states. In states, separate departments of the education, at some places two departments together, carry the responsibility for this education. At certain places, labour department, industry, or agriculture department is made responsible for education. In some states, a university is entrusted with the state's responsibility related to education. This situation has created the problem of administration and control.

Remedy: Many problems of technical and vocational education will be automatically resolved by solving the problem of its administration and control. The Education Ministry of the Government of India should take up the responsibility of technical and vocational education in the same way as it looks after general education. A council of technical and vocational education may also be organized for looking after the various implied issues. The setting up of such a council should be done both at the Central and State levels. This will bring in a uniformity in administration and control of technical and vocational education.

(vi) **Problem relating to research:** The Government of India has emphasized the problem of research in technical and vocational education in the various Five-Year Plans, but have not yet succeeded in making researches that makes profitable use India's full manpower. In many European countries and in USA, there is a lack of adequate manpower because of thin population. So in place of manpower, they use machines as substitutes. But Indian condition is entirely different as it still manufactures such machines which may be used as substitutes for manpower, a major portion of its manpower lies idle and unemployed.

Remedy: The research work in the field of technical and vocational education should be carried out according to the needs and conditions in the country. The government should set up various types of experimental laboratories and research centres.

(vii) **Problem of post-technical education and training:** After getting the training, if the trainee remains unemployed for some time, he forgets all that he has learned in the technical field concerned. And those who are luckily enough to get some employment, continue working for years according to the old methods. They do not get any chance for acquainting themselves with the latest devices and techniques.

Remedy: The problem of post-education training may be solved through any of the following measures:

(a) *Correspondence courses:* These may be organized for those workers who need enough orientation in latest theoretical principles. For in-service workers, this is a good device. They already continue their workshop practices. So for 15 or 20 days, they may be invited at a certain centre for reorientation.

(b) *Part-time courses:* These develop the theoretical knowledge and skill of the in-service workers. But the part-time courses may be possible only at some technical institution. Morning or evening classes may be arranged for this purpose.

(c) *Close contact:* According to the recommendations of Kothari Commission, in-service training may be arranged by establishing a close relationship between the technical institution and the concerned industries. This arrangement is likely to benefit both the in-service workers and the trainees.

(d) *Short-term courses:* The in-service workers are invited to attend certain courses for two or three weeks at some technical institution. This programme may be conveniently arranged during the holidays of some relevant industries.

(e) *Refreshers courses:* The in-service workers may be trained in latest techniques and devices. This may be arranged at some technical education centre.

(viii) **Problem of modernization of technology:** Technology has been modernized in USA, and other Western countries. Blindly following their method has created the following problems in India:

(a) By modernization we have begun to understand Westernization. As our needs are different from the Western ones, so we have to modernize the technology according to our Indian needs.

(b) The technology dependent upon the invested capital is creating a misunderstanding between the labourers and the owner. The one is the exploiter and the other is the exploited. So a gap is being created between the two.

(c) Under the influence of modernization, the Indian social values and circumstances are forgotten. This has an adverse impact on the society.

Remedy: The technologies should be modernized in such a way as to obtain the maximum production by using the minimum manpower, capital and raw materials. The manpower should be properly utilized and the maximum number of people should get employment. The difference of rich and poor, owner and labourer, and the exploiter and the exploited, should be eliminated.

(ix) **Problem of coordination between training facilities and job opportunities:** Through its Five-Year Plans, India has developed opportunities for technical and vocational education. But the development of these opportunities has created the problems of unemployment, especially for the technical hands.

Remedy: An estimate of the manpower needed for the various areas should be made for obtaining a balance and coordination between the technical facilities and job opportunities. According to this estimate, technical and vocational education should be given to a few selected persons. The technical and vocational institutions should be closely related to the relevant industries, as it is in these industries that the trained hands are to be employed. Its programme should be prepared by the various states according to their own specific needs.

The existing educational system aims exclusively at passing the examination, and thus it fails to bring about the mental and moral development of the individual. It fails to aid and guide teachers as well as famous educational institutions. It is stated in the report of Secondary Education Commission that the importance of modern education lies not merely in the intellectual development of students, but also in the emotional, social, mental and physical development. Social adjustment and other aspects of life are also important. As a whole, education should aim at the comprehensive development of personality.

6.3.3 Medium of Instruction

The language policy of the government has created an undesirable situation before secondary education. The language policy was initiated by Mudaliar Commission. It recommended that at lower and higher secondary levels, students should study two languages.

Kothari Commission amended the above recommendation and said that students should study three languages at lower secondary level and two languages at senior secondary level. The Government of India laid down the views of these two commissions as the 'three-language formula'. The National Education Policy explained that it is compulsory for students to study three languages. This situation was as follows:

(i) **In Hindi-speaking states:** Hindi, English and a modern Indian language which can include any South Indian language.

(ii) **Non-Hindi speaking states:** Hindi, regional language and English.

The Mudaliar Commission and Kothari Commission made it compulsory for students to study three languages and seven subjects. Thus, the total number of subjects rose to 10. The fact remains that students in secondary level are in the age group of 11–17. It is clear that the curriculum with 10 subjects is quite burdensome. Therefore, there is need to reduce the number of languages as well as other subjects.

Remedy: Keeping the age and needs of secondary education students, it is quite necessary for them to study two languages. The study of three languages has evil consequences as follows:

(i) They half-heartedly study the three languages.

(ii) They pay less attention to other subjects.

(iii) Both these situations are not in their interests. The study of two languages should be specified as follows:

(a) *In Hindi-speaking states:* Hindi and a modern Indian language.

(b) *In non-Hindi speaking states:* Mother tongue and Hindi.

In addition to the above, the following steps should be taken:

(i) The number of social sciences should be reduced.

(ii) The school atmosphere should be improved upon.

(iii) The educational administrative structure should be reformed.

Check Your Progress

4. What do you understand by the term vocationalization?
5. Name the agencies that play a significant role in the implementation of vocational curriculum at +2 level of secondary education.
6. What was the recommendation of the University Commission (1948–49) on vocationalization of secondary education?

6.4 THE CONCEPT OF VOCATIONAL EDUCATION IN THE NATIONAL POLICY OF EDUCATION, 1986

The National Policy of Education, 1986, is a comprehensive document from educational planning and renovation point of view. The concept of vocational education is discussed in the part V of the policy document. The text of the document is presented hereunder for the learners' perusal.

Vocationalization: The introduction of systematic, well planned and rigorously implemented programmes of vocational education is crucial in the proposed educational reorganization. These elements are meant to develop a healthy attitude amongst students towards work and life, to enhance individual employability, to reduce the miss-match between the demand and supply of skilled manpower, and to provide an alternative for those intending to pursue higher education without particular interest or purpose. Efforts will be made to provide children at the higher secondary level with generic vocational courses which cut across several occupational fields and which are not occupation specific.

Vocational education will also be a distinct stream, intended to prepare students for identified occupations spanning several areas of activity. These courses will ordinarily be provided after the secondary stage, but keeping the scheme flexible, they may also be made available after class VIII.

Health planning and health service management should optimally interlock with the education and training of appropriate categories of health manpower through health-related vocational courses. Health education at the primary and middle levels will ensure the commitment of the individual to family and community health, and lead to health-related vocational courses at the +2 stage of higher secondary education. Efforts will be made to devise similar vocational courses based on Agriculture, Marketing, Social Services, etc. An emphasis in vocational education will also be on development of attitudes, knowledge, and skills for entrepreneurship and self-employment.

The establishment of vocational courses or institutions will be the responsibility of the Government as well as employers in the public and private sectors; the Government will, however, take special steps to cater to the needs of women, rural and tribal students and the deprived sections of society. Appropriate programmes will also be started for the handicapped.

Graduates of vocational courses will be given opportunities, under predetermined conditions, for professional growth, career improvement and lateral entry into courses of general, technical and professional education through appropriate bridge courses.

Non-formal, flexible and need-based vocational programmes will also be made available to neo-literates, youth who have completed primary education, school drop-outs, persons engaged in work and unemployed or partially employed persons. Special attention in this regard will be given to women.

Tertiary level courses will be organized for the young who graduate from the higher secondary courses of the academic stream and may also require vocational courses.

It was proposed that vocational courses cover 10 per cent of higher secondary students by 1995 and 25 per cent by 2000. Steps would be taken to see that a substantial majority of the products of vocational courses are employed or become self-employed. Review of the courses offered would be regularly undertaken. Government would also review its recruitment policy to encourage diversification at the secondary level.

Highlights of the vocationalization policy of the NPE, 1986:

The vocationalization policy mentioned in the National Policy of Education, 1986, can be summarized as:

- Introduction of systematic, well planned and rigorously implemented programmes of vocational education.
- Provision of the generic vocational courses for children at the higher secondary level which cut across several occupational fields.
- Interlocking of health service management with the education and training through health-related vocational courses.
- Taking special steps to cater to the needs of women, handicapped, children of deprived sections of society, rural and tribal students.
- To provide students of senior secondary stage with opportunities under predetermined conditions for their professional growth, career improvement and lateral entry into courses of general, technical and professional education through appropriate bridge courses.
- To provide non-formal, flexible and need-based vocational programmes to neo-literates, youth who have completed primary education, school drop-outs, persons engaged in work and unemployed or partially employed persons.
- Organizing tertiary level courses for the young who graduate from the higher secondary courses of the academic stream.
- Taking steps to ensure employment or self-employment for a substantial majority of the passed outs of vocational courses.
- Review of the courses on a regular basis as per the recruitment policy of the government to encourage diversification at the secondary level.

6.4.1 Innovations in Vocational Education

With the advancement of time and changes in the employment scenario, innovations in vocational education become a must. For example, National Curriculum Framework (NCF), 2005, has suggested including distinct areas in the curriculum right from the elementary stage to enable students to develop basic vocational skills. As per the recommendations, craft mapping should be conducted to identify zones where vocational training in craft forms involving local craft persons can be made available to children. The NCF suggests that the senior secondary stage may be the end of students' formal education, leading to the world of work and employment.

Suggesting innovative ideas to enhance vocational selection and success of passed out senior secondary students, the NCF mentions that a few boards also encourage students to choose an optional course from a range that includes economics, music and cookery. Such options could be increased, and the possibilities of substituting the more traditional disciplines with these options could also be considered. Vocational options could also be introduced. Many such vocational options may arise from the world of productive work in the local community. For example, auto maintenance in garages, tailoring and paramedical services offer possibilities for collaboration to create meaningful vocational courses.

In continuation with the innovative ideas in vocational education the NCF, 2005, further adds that work-centred education implies that the knowledge base, social insights and skills of children in relation to their habitat, natural resources and livelihood can be turned into a source of their dignity and strength in the school system. It is to be recognized as a meaningful and contextual entry point for organizing the curricular experience in the school. In this sense, the experiential base can be further developed through more evolved forms of work in the school, including social engagement.

Along with the innovative ideas expressed in the National Curriculum Framework, 2005, there are several other ideas being implemented at various stages of school and after school education. For example, Maruti Suzuki, the largest automobile manufacturing company in India as started patronizing several programmes of vocational education and training at different stages. Under this scheme the company helps industrial training institutes and polytechnic institutes to update their syllabi and provide appropriate faculty to deliver required skills included in the curriculum.

Check Your Progress

7. What has been the recommendation of National Curriculum Framework (NCF), 2005, in terms of innovation in vocational education?
8. According to the National Policy of Education, 1986, what role is the government expected to play in vocationalization of education.

Did You Know

The College of Vocational Education in Delhi is among the pioneering institutions in the country to offer vocational education, bridging gap between traditional university education and the changing socio-economic environment.

6.5 THE CONCEPT OF THE COMMUNITY COLLEGE SYSTEM

The community college is an alternative system of education, which is aimed at the empowerment of the disadvantaged and the underprivileged (urban poor, rural poor, tribal poor and women) through appropriate skills development leading to gainful employment in collaboration with the local industry and the community and achieve skills for employment and self employability of the above sections of people in the society. The community college is an innovative educational alternative that is rooted in the community providing holistic education and eligibility for employment to the disadvantaged.

The vision of the community college is to be of the community, for the community and by the community and to produce responsible citizens. The community college promotes job oriented, work related, skill - based and life coping education.

The community college initiative is in conformity with the Indian political will that prioritizes in education, primary education, information technology education and vocational education.

The key words of the community college system are access, flexibility in curriculum and teaching methodology, cost effectiveness and equal opportunity in collaboration with industrial, commercial and service sectors of the local area and responding to the social needs and issues of the local community, internship and job placement within the local area, promotion of self employment and small business development, declaration of competence and eligibility for employment.

6.5.1 Shift in Learning Environments from School Based to Community Based

India is a huge country with a massive population. Currently our literacy rate is 75 per cent and the government intends to achieve 100 per cent literacy with its various campaigns and partnerships with private sectors, public sectors, non-governmental organizations (NGOs) to achieve this magical landmark in the next decade.

The Sarva Shiksha Abhiyan was launched by the government in 2001 to ensure that all children in the age group of 6–14 attend school compulsorily and complete eight years of schooling by 2010. An important element of this scheme was the Education Guarantee Scheme, Alternative, and Innovative Education especially for children staying in areas having no school within a radius of a kilometer. A centrally sponsored District Primary Education Programme was launched in 1994. By 2005, it has opened more than 16,000 new schools.

Majority of the Indian illiterates live in rural areas. Economic and social barriers play a key role in keeping these lowest strata of our society illiterate. Government programmes alone cannot reach out to every illiterate of our society and needs support of every Indian to achieve 100 per cent literacy. There is a need for Public-Private-Partnership to reach out for this cause. NGOs are doing a great job of eradicating illiteracy along with the support of the state governments. It is a continuous, ongoing process, which needs to be supported by the State government, municipal corporations, panchayats and especially administration at the district and village levels.

Here are some examples of exemplary work done by some outstanding associations with their novel ideas and schemes at the village and district levels to spread literacy.

1. Andhra Pradesh — Enduring Initiatives for Achieving 'Education for All (EFA)'

(i) MAABADI (Our school)

The MAABADI scheme was started with the aim of providing education access to all the children in the age group of 6–11 living in small habitations of population of 100–200 people. The Andhra Pradesh government assists the local communities to hire instructors wherever there are 10 students. Local communities are given assistance by the government to train such instructors. More than 1200 MAABADIs have been set up in the state.

Note: All this information is based on (Based on – 'Education for All: National Plan of Action, INDIA' by the Department of Elementary Education and Literacy, Ministry of Human Resource Development, Government of India, New Delhi)

(ii) Akshara Bharathi Programme

The Andhra Pradesh government had launched 'Akshara Bharathi Programme' (total literacy campaign) on 2nd October, 2004, as a part of Akshara Bharathi Programme Adult Literacy Campaign. It proposed to cover about 40.89 lakh non-literates in the

state in four stages. The programme has resulted in Andhra Pradesh recording a literacy rate of 61.11 per cent in 2001 as compared to 44.08 in 1991. This represents a 17 per cent increase over the figure recorded in the 1991 census and the highest decadal growth ever to be recorded in the state.

The following strategies were adopted under the programme to achieve the goal of total literacy in the state:

- Focal groups have been identified in each district, which are educationally backward and steps have been taken to make all of them literate in Akshara Bharathi Programme.
- Government organizations, especially educational institutions like B.Ed Colleges and DIET, have been requested to take up literacy campaign through students. Many of the institutions have come forward and are actively participating in the campaign.
- Non-governmental organisations (NGOs) are actively involved in the programme. Some of the prominent NGOs have adopted specific areas to achieve total literacy.
- Concerted efforts are being made to achieve total literacy in gram panchayats where a number of non-literates are limited. These villages can be declared total literate after completion of the programme.
- Special efforts are being made to conduct total literacy campaigns in urban slums with the help of Municipal Administrative Department.

(iii) Rishi Valley Rural Education Centre (RVREC)

This programme was started by the Rishi Valley Public School in 1980s to cater to the educational needs of the children living in the rural areas of Andhra Pradesh. Rishi Valley Public School set up the RVREC satellite school programmes for sixteen satellite schools functioning in the rural areas which do not have any access to any schooling facility at all. Initially RVREC started their operations from a single room but now is a full-fledged resource centre with a comprehensive teacher-training programme, vocational training resource, learning/teaching resource centre, a specially formulated curriculum and sixteen one-room village schools.

The RVREC has experimented with alternatives to the traditional textbook and has developed an educational kit called as "School-in-a-Box" which contains 1500 laminated cards. It is a major innovation in teaching/learning materials for multi-grade schools. The kit has replaced the conventional textbooks, which is designed for multi-level and multi-grade teaching. It allows the student to learn at their own pace, provides congenial atmosphere for students and prevents dropouts. RVREC has also developed a supportive teacher education programme and evaluation systems. The RVREC schools provide an education programme that is comprehensive and academically sound.

The satellite school programme of RVREC is closely allied to environment and ecology. Each of the sixteen schools started in completely barren land, but now nurtures a re-generated ecology. Each of the schools has grown fruit trees such as papaya and custard apple, providing nutrition supplement to the children. The one-room schools have turned into resource centres in the villages for community activities. All the sixteen schools have full-fledged community organizations that participate not only in the running of the schools, but also in all village matters. The strong focus on ecology and soil conservation has helped to rejuvenate the rural environment.

The RVREC's work has enormous potential for replication in the country. Single teachers, thereby necessitating multi-grade teaching, run a majority of Indian rural schools. The RVREC has become a much sought-after resource agency for programmes in several States of India. The education kit has been translated in several other languages. The Rishi Valley Institute of Educational Resources has emerged as an important centre for hands-on teacher training. It also houses a curriculum and educational materials development cell.

(iv) MV Foundation

The MV Foundation (MVF) is a private, charitable trust in Andhra Pradesh that has developed a model that uses education to tackle child labour. MVF's uncompromising belief is that every child who is not in school or who has dropped out of school is a working child and that giving accessible education to such children is the only solution to the problem of child labour. MVF works to bring such children into the mainstream of school education. The age group of the children varies from 5 to 11 years. MVF has made a significant impact on the children belonging to the age group of 9 to 14 years, considered as the most difficult schooling age group. One hundred and fifty-seven villages have now been declared child labour free and over five hundred adolescent children have been enrolled into formal schools through camps and conducted bridge courses.

MVF uses a set of strategies and systematic efforts to put working children into the school system. It runs short and long-term residential camps, which help the children to go through the difficult process of withdrawing from work and preparing for school. Parents are also oriented to adjust to the schooling of their children. While young children are encouraged to join school directly, the older ones, mostly first-generation students, are conditioned to the process of schooling in long-term camps. One of the key features of MVF's intervention is the reliance on the formal, regular government schools to provide for the education of hitherto working children. MVF has eschewed the use of special schools for child labourers. MVF has established that the non-formal education (NFE) Centres for working children and over-age children, by offering flexible timings and a compressed curriculum, do not really help to break the child labour cycle. MVF designed residential camps primarily to ensure that children do not relapse back to work. MVF also developed the unique concept of the bridge course to help working children come on par to join the appropriate grade. MVF's endeavour has been to reinforce the role of the formal school as a means of ensuring equity in schooling, given the longstanding criticism that the NFE system provides 'second class' education to poor children.

Social mobilization and awareness building among communities and parents is the mainstay of MVF's curriculum. In many villages where MVF has intervened, communities are contributing to teacher salaries, building and furniture costs, where State support has fallen short of requirements.

The MVF approach to tackling child labour differs from that followed by the National Child Labour Eradication Programme (NCLEP) of the Government of India. NCLEP provides support for the setting up of special schools for child labourers, financial incentives to parents and mid-day meals to attract children into schools. MVF has demonstrated that financial incentives and special facilities are neither necessary nor sufficient to pull children away from work. Apart from playing the role of advocacy, the Bharatiya Krishna Vidya Vihar (BKVV) has also emerged as a nodal resource point for training teachers and NFE instructors. A number of Governments has replicated the MVF model widely and non-government agencies have done so to tackle the problem of

child labour. The 'back to school' programme of the government of Andhra Pradesh embraced the camp approach of MVF. The Social Welfare Department hostels were used to run camps for getting children out of work and preparing them for schools. 1 00,000 children are estimated to have been sent to formal schools from thirty-four hostels.

The NGOs surveyed have worked to bring quality improvements at the school level. Their interventions have focused on the school as the unit for reform and change. NGOs have expanded the scope of quality improvements within the school. The NGO sector has developed and implemented incipient concepts such as multi-grade, multi-level teaching, child-centered teaching-learning processes, and cognitive and non-cognitive attributes in children and integrated learning (across subjects). The NGOs surveyed, have taken many of these quality improvement concepts forward, and notably found ways and means by which academic and administrative reforms can reinforce each other. Their interventions have led to a greater understanding of how the quality of classroom processes can be enhanced, with the school as a responsible and responsive entity, combining academic, financial and management improvements.

All the NGOs surveyed viewed community participation as an extremely valuable contributor to increase the quality of school education. Participation of parents in school management increases the accountability of schools and attendance rates of teachers and children. The school-community link is considered indispensable and pursued as a central strategy by all the NGOs surveyed. The influence of the NGOs surveyed can be summarized as follows: The MV foundation established the link between child labour eradication and universalization of elementary education. It brought about a radical change in the NFE programme in Andhra Pradesh by strengthening the importance of formal schools and making special efforts to integrate children

2. Madhya Pradesh

(i) The Rajiv Gandhi State Mission

The Rajiv Gandhi State Mission in Madhya Pradesh has introduced a project on a pilot basis for using computers to improve the quality of teaching in rural elementary schools through indigenous customized educational software. The idea is to integrate the use of computers with classroom activities to improve the child's comprehension of difficult parts of each subject as well as to instill computer literacy. A syllabus mapping the difficult areas of learning has been developed and educational software on this for all subjects is being prepared for use in the academic year 2002–03. Started in November 2000, 648 Head Start centers were operational in middle schools that have a primary section and serve as Jan Shiksha Kendras or resource centers for primary schools in a radius of eight kilometers. A total of 2,358 teachers have been given training in computer-enabled education.

(ii) Eklavya

This organization maintained a long-standing collaboration with the State Council of Education Research and Training (SCERT) in Madhya Pradesh for a state-wide revision of curriculum. It collaborates with the District Primary Education Programme for piloting an integrated primary education package. Member of the resource group of the National Council for Education Research and Training (NCERT) for the development of instructional materials for the primary years.

3. Himachal Pradesh – Gyankalash

The District Primary Education Programme in Himachal Pradesh, in collaboration with All India Radio, Shimla, has started a 15-minutes bi-weekly programme called Gyankalash to provide academic support to primary teachers. The programme helps in improving the teachers' access to knowledge, especially those in remote areas, as it is impossible to reach them through conventional means.

In the first phase of Gyankalash, topics were identified and radio scripts were developed in workshops organized especially for this purpose. Resource persons, teacher educators from state and district level, practicing teachers in secondary and primary schools participated in the workshops. In the next phase, teachers and students from government primary schools were involved in the production and broadcast of the spots. In order to motivate teachers, certificates were given to teachers on the successful completion of the training under different phases of Gyankalash.

4. Karnataka—Nali Kali

In 1999, the Nali Kali programme was introduced in Karnataka in privately managed schools. The USP of this programme was that learning takes place in an interactive environment, taking note of the age-wise competency of the student. The students are divided into groups and when they master one level of competency, they move on to the next group to master that level of competency. In this pedagogy, students learn at their own pace, move to next levels of competency at their own pace and most importantly are independent of the learning achievement of that learning group. The pedagogy usually involves use of games, storytelling, songs, surveys and using educational toys. It has been noted that this method eliminates the formal system in our schools of roll calls, exams, rankings and promotions, which are considered unhealthy educational practices for age groups between 5 and 14.

5. Uttaranchal—Balwadis

An innovative approach for Early Childhood Care and Education (ECCE) for Community Empowerment Supported by the Department of Education, Ministry of Human Resource Development, Government of India, was initiated. Set up in the balwadis of Uttarakhand Seva Nidhi Paryavaran Shiksha Sansthan, Almora, this programme aims at providing a quality ECCE programme to children in age groups between 3–6 years and living in remote, economically backward Himalayan villages in Uttaranchal.

In Uttaranchal, twenty-nine community groups belonging to ten districts in Uttaranchal are working together with a common goal of development and education and are trying to foster social and ecological sustainable rural communities through the medium of education. Majority of the children reached by this programme are girls and it is fast becoming a forum for community education and child development.

The geographical conditions at Uttaranchal, make it imperative to be flexible, both in terms of curriculum and admission procedures. Girls start attending primary schools by the age of five or six. Over the years, universal primary education of girls in all villages having a pre-primary centre has been achieved. Primary school teachers welcome children from the Balwadis as they are more confident and articulate. The initiative has yielded results. People working as teachers nowadays are mostly graduates. A benefit of this has been that, girls are marrying late. A social group, comprising 12,000 rural women has been formed as a direct offshoot of the balwadi programme. The

environmental education is an important component of the balwadi curriculum. It aims at fostering children's knowledge about the environment. The programme also helps in developing skills which enable them to translate their knowledge into action.

- The community provides the room for the balwadis centre. The villagers who also help in construction of a small building called balbhavans donate the land for the balwadi.
- Members of the women's group maintain the centre. They apply mud plaster on the walls and on the floor, help in digging the garbage pit, and installing a temporary sanitation facility near the centre. The land for these facilities is provided free by the community.
- The community, the local NGO and the balbhavan organize a *bal mela* every year. The displays made by the children are displayed. Balwadis form a strong link of education among the children and the village community. A women's group is formed wherever the balwadi centre functions. The local community group and the women's group review the programmes conducted by the balwadis every month and new activities are initiated as per the need and demand.

6. Tamil Nadu — Mid-day Meal Scheme

The mid-day meal scheme in Tamil Nadu was started on a small scale in 1925–26 by the Corporation of Madras to improve school attendance. The philanthropists and voluntary organizations were urged by the government to start free school lunch centers in villages and towns in the state. In 1961, the state started receiving Cooperative for American Relief Everywhere (CARE) food commodities for feeding 500,000 children through the school lunch programme state achieved another milestone in 1982 with the launch of the Nutritious Meal Programme for schoolchildren in classes I to X. This programme is being implemented through Nutritious Meal Centers located in schools, and all children who are willing to enroll are fed. During 2001–02, 5.80 million children were enrolled for the Mid-day Meal Scheme.

7. Uttar Pradesh—Shiksha Mitra Yojana: Calling Women Teachers

The Government of Uttar Pradesh has started the Shiksha Mitra Yojana to meet the demand for primary school teachers. There is a demand for female teachers. The village education committee tries to recruit local residents for teaching the primary school. Women are given 50 per cent reservation in this scheme.

8. Maharashtra—Pratham

Pratham, a public charitable trust, was established in Mumbai in 1994 in collaboration with the Commissioner of the Municipal Corporation of Greater Mumbai, UNICEF and several prominent citizens. Hence, it has tripartite partnership. The objective of this initiative is to bring every underprevileged child to school for proper education. Pratham's programmes' reaches over 200,000 children everyday. Since its initiation, Pratham has spread its wings to seventeen states and 38,000 villages. The corporate sector is the biggest funder while the government has done its bit by opening schools and sharing its facilities. Five programmes have been key to Pratham's initiative of serving the underprivileged.

(i) **Pre-school children:** Children are identified or located through community-based child care centres and balwadis.

(ii) **Out-of-school children (including drop outs and those who have never been to schools):** Bridge courses wer started to groom children before they entred school. Those who are deprived of attending regular schools are prepared by Pratham for the National Open School examinations.

(iii) **Working children:** Special outreach programmes are produced to tap working children or those surviving in difficult situations.

(iv) **In-school children:** Children academically weak are given learning support and other remedial facilities.

(v) **Computer-assisted learning programme:** Children in municipal schools are familiarized with computer.

According to Pratham's annual report, over 173,000 children has gained computer skills in 450 centres across eight states. Over 54,000 youth have gained employable skills.

9. Rajasthan— Bodh Shiksha Samiti

This organization advocated a model of appropriate education for the urban deprived, by drawing attention to the size of the problem of the unschooled among the urban poor in Rajasthan. The coordinator of the National Core Group for the Education of the Urban Poor, the Technical support agency to the UN System Education Initiative in Rajasthan and the Member of the Resource Group of the National Council for Education Research and Training (NCERT) for the development of instructional materials for the primary years are involved in the implementation of this programme.

10. Orissa—Shree Ramakrishna Ashram

Shree Ramakrishna Ashram started its innovative education project in August 1999 with MHRD funding in the district of Kalahandi district in Orissa. It is a rural and tribal area where children in the ages of 6–14 have a 50 per cent rate of school dropouts. The children stay at the centre and provided with free uniforms, food, remedial teaching and study material by the centre. The parents of such children are given a monthly stipend of '.100/- as an incentive for allowing their children to enroll at the centre. State syllabus is followed with emphasis on value-oriented education. The children are taught English and Oriya, Science, Mathematics. Social Sciences and drawing, and are given free access to medical and library facilities. Special emphasis is laid on agriculture and modern farming techniques to enable the children to earn their own livelihood. Community participation is mobilized by audiovisual shows and public meeting which leads to the children enhancing their knowledge on various facets in such meetings.

6.5.2 Shift in Learning Environment from Real to Virtual Learning Environment

India being a big country with a huge population, needs heavy investment in education sector to build schools and classrooms, hire and train teachers, supply notebooks and textbooks to the weaker section children. ICTs can bridge this gap of inadequate education infrastructure by having virtual classrooms even in the remotest areas. The only criteria needed for this are electricity and internet connection to start such virtual learning environment anywhere in the country.

Virtual Learning Environment (VLE) is a phrase that contains online learning services. This is also called learning platform that organizes and provides access to

online learning services for the students, teachers and administrators. These services include access control, provision of learning content, e-learning tools and administration of user groups. In much literature, different terminologies have been used for the term "virtual learning" as:

- Internet learning
- Distributed learning
- Network learning
- Online learning
- Tele learning
- E-learning
- Computer assisted learning
- Distance learning
- Web-based learning
- Federated learning

The above terms indicate to us that in VLE, the student

- is at a far-off place from the tutor/ teacher /instructor;
- uses some form of Internet-connected computer technology to learn
- has access to the learning resource materials which are web-based;
- interacts with the teacher/tutor/ instructor and also with other students;
- is provided with some form of support by the government/ NGO/community, to meet his/her needs.

The characteristic features of the web-based VLE are:

- It facilitates self-learning at the student's convenient time and place.
- Electronic publication is faster and cheaper.
- It facilitates cheaper and faster delivery of the study material.
- It facilitates better teacher-student interactivity.
- It enables a student to update learning materials speedily.

IGNOU Initiatives in India

Popularly known as IGNOU, the Indira Gandhi National Open University was established in 1985 to impart education by means of distance and open education. IGNOU has also taken up certain initiatives as well. Some of them are discussed below.

e-Gyankosh

It is a digital database of study material of IGNOU, which are accessible to students as well as educational institutions. There are 185 digital repositories, which stores, indexes, preserves and shares learning material.

Nodlinet

National Open and Distance Students' Library and Information Network (NODLINET), is an initiative of the Library and Documentation Division of IGNOU to bring higher education to the doorsteps of the under-privileged and those who cannot go for the

same. The aim is to provide access to all electronic and digital resources from leading publishers and vendors across the globe anywhere at any time using advanced technologies to enhance the quality of education at par with the conventional education system.

IUC-TEFED

Inter University Consortium for Technology-Enabled Flexible Education and Development (IUC-TEFED) is the latest initiative of IGNOU, which works as a nodal point to undertake all types of collaborative activities involving open, and distance learning, e-learning new knowledge creation, appropriate technology and so on. The structure of Inter University Consortium is on the lines of Pan-African e-network and the existing consortia of UGC, AIU and so on. All the open universities in the country can be its founding members while conventional universities can become its associate members. NGOs and organizations involved in the development of education can also be invited for collaboration and partnership. The consortium is expected to facilitate convergence and sharing of knowledge through judicious mix of media and technology.

6.5.3 Open Distance Learning Environment

The education system in India is somewhat rigid. Students who are unable to continue with their studies rarely get a second chance to study further. Mostly the schooling is done in regular schools and children are passed en masse from one grade to another leading to constraints in supply of seats in schools. This problem can be tackled in some ways by developing open distance learning (ODL) systems in schools. India has enormous potential to develop its ODL as the system allows for multiple exits and re-entry into schooling and the students have the flexibility to upgrade their qualifications and skills at their own convenience. ODL system has enabled secondary school to let financially poor students to work and continue their education and upgrade their skills or learn new ones to supplement their work. Distance education using information and communication technologies (ICTs) can extend opportunities to young people who have to work and yet want to continue schooling, and because of economies of scale, its recurrent costs per student are lower than those of face-to-face teaching. The challenge to open schooling has often been the public perception of its second-class status. Interestingly, across all four continents concerns were raised about educational quality, excessive rote learning associated with high-stakes secondary examinations, lack of development of creative, problem-solving skills, etc., which led to pedagogical reforms in almost all countries ensure equivalent standards of a qualification conferred by open schooling systems.

The unique feature of the ODL system is that, it is user friendly and has resulted in its tremendous growth during the past decades. In ODL system, the students are free to learn at their own convenience and pace and place. This uniqueness and the ease of acquiring knowledge play a pivotal role in enhancing our emergent knowledge society. Today almost half the students enrolled in higher education courses are receiving education through ODL system i.e., either by open universities or by correspondence courses of traditional universities. The ODL system is plagued with problem of equity, efficiency, quality and its benchmarking. This results in low acceptability of students graduating from this system and they find it difficult to get gainful employment.

In the wake of the UN Millennium Development Goals, which emphasize education for sustainable development, there is a need and demand for innovative methodologies and programmes in the ODL system that would meet the quality requirements of the large and diverse communities of the country, for their overall development.

India has the unique distinction of having introduced distance education, in the form of correspondence education, nearly four decades back at the tertiary level and 35 years ago at the secondary level.

For better understanding, we will divide this section into: Distance education at the higher education level and distance education at the school level.

At the higher education level

In late 1950s, there were demands to increase the number of higher educational institutes across the country, as many universities were not in position to provide quality higher education. In view of the increased demands, the Planning Commission had to include the scheme of correspondence education in its third five-year plan (1960 – 1965) and an expert committee was formed to work out the details of the same. As a result of the concentrated efforts by the Government, the first directorate of correspondence of education was established in 1962 by Delhi University by admitting 1,112 students for Bachelors Degree in Arts.

The growth of higher education was further augmented by The Education Commission (1964-66) when it recommended the expansion of correspondence education to cover higher education as widely as possible. As a direct consequence, a few more universities in India launched a correspondence education department. However, the system started taking firm roots only in mid seventies with phenomenal growth in the number of universities offering distance education, as well as in number of students. Further, a breakthrough in distance education in India at tertiary education level occurred as a result of the establishment of Andhra Pradesh State Open University (1982) and the Indira Gandhi Open University (1986).

As of today, India has 49 universities offering distance education and seven State open universities covering 20 per cent of the student population in higher education. Thus, today India has the largest distance education system in the world, both in terms number of institutes and students in the education system.

IGNOU is a pioneer in Open and Distance Learning in India and is among the prime educational institutions not only in the country but also in the Indian subcontinent. It has crossed national boundaries, providing higher education and assisting other developing countries in this regard. It strives to provide cost-effective and quality education to all sections of the society, including those living in remote and far-flung areas through the ODL system.

The infrastructure of IGNOU consists of a three-tier system. The headquarter is placed at the top tier, under which are placed the Regional Centres and Sub-Regional Centres. The Study Centres in India and abroad form the third tier and form the interface or connecting point of the university with the students. The headquarter houses the schools and divisions. Each component of this huge ODL infrastructure is capable of playing a very important role in devising new and innovative solutions to provide quality, cost effective and user-friendly services to the students through distance mode. IGNOU recognizing the need for such an innovation system in the ODL system established the National Centre for Innovations in Distance Education (NCIDE). An innovative system, the NCIDE provides a solid ground for nurturing bright minds whose ideas are expected to revolutionize the ODL system. The aim of the centre is to develop a culture of constant search for new innovative solutions towards IGNOU's mission of seamless education, cost efficiency and borderless access to quality education. NCIDE promotes, develops and pilots innovations in all aspects of the ODL system and works through the build-operate transfer (BOT) mechanism. It provides intellectual and technological support to the stakeholders for the growth and development of the ODL system. It acts as a resource centre for prototype development that ensures quality assurance, cost- and student-related effectiveness, and system efficiency. NCIDE encourages innovations in distance education through collaborations within IGNOU and with other institutes in India and abroad.

Distance learning at school level

Distance learning at school level evolved through four different stages. We will look at each stage in great detail:

First stage — correspondence education

The history of distance learning at school level is distinct; unlike distance education at higher level, it was neither driven by the pressure of demand nor was it planned as an alternative to improve the quality of education. Indeed, the genesis of distance education can be traced to the problem of students in the secondary school examinations. Throughout the 1960's, secondary education in India was characterized by low participation, low transition and high failure rates. This dismal situation propelled the idea to start correspondence courses at the secondary level. The idea originated in 1964 when the conference of Boards of Secondary Education in India recommended that it should consider starting correspondence courses at the secondary level. This idea helped in initiating a series of actions, which propelled the growth of distance education at the school level:

- The board of secondary education of Madhya Pradesh started correspondence courses to provide coaching for secondary school students in 1965.
- In 1968, Government established Delhi Patrachar Vidyalaya – a special correspondence school.
- In the state of Rajasthan, it was made compulsory for all private students taking senior secondary examination to register in a correspondence course

The second stage — open learning system

After India's independence, there were many under-privileged communities and localities that continued to remain bereft of educational opportunities. Open school system was seen as an alternative medium to cater to the needs of the underprivileged students across India. Although the idea of open school emerged in 1974, it took concrete form only in 1978 through the recommendations of the international conference on correspondence education held in New Delhi in 1978. The recommendations of the seminar paved the way for the quick establishment of Open School. Thus, the Open School project was finally established by CBSE in 1979. The true aim of establishing Open School at secondary level was to provide a second chance and opportunities for those in the 14+ age group, who for a number of reasons, were unable to continue their studies in the formal system.

Starting with an enrollment of 1,672 in 1981, enrollment increased to reach more than 40,000 in 1989.

The third stage — National Open School (NOS)

The National Open School (NOS) was established in November,1989, as an autonomous organisation in pursuance of National Policy on Education, 1986, by the Ministry of

Human Resource Development (MHRD). Its mission was to provide inexpensive education to all, bring greater equality and justice in the society and help in the evolution of a learning society.

The objectives of the NOS were:

- To facilitate student interested in getting education and provide opportunities by implementing courses and programmes of general education, life enrichment modules and vocational courses up to pre-degree level.
- To provide consultancy services and to engage in model building in collaboration with states and variety of other agencies or institutions
- To serve as an agency for effective dissemination of information related to distance education and open learning.
- To identify and promote standards of learning in distance education systems and open schools which may be set up in different parts of the country, through research and evaluation and to maintain standards of equivalence with the formal system, while keeping its own distinct character.

NOS has the largest open schooling system globally. It has more than 1,000 study centres across India. The cumulative enrolment of the student exceeds over half a million. The annual enrolment trend shows a steady growth and in the current year the enrolment at secondary and senior secondary level alone is expected over 150 thousand.

In this light, the National Institute for Open Schooling (NIOS) was established in 1989 as an autonomous organization to cater to the educational needs of school dropouts and socially and economically disadvantaged sections of the student population. It offers a secondary certificate course equivalent to ten years of schooling, and a senior secondary certificate equivalent to twelve years of schooling. It also offers a vocational education course that can be combined with general academic subjects. NIOS publishes its own distance learning materials, and has the authority to register, examine, and certify students.

NIOS operates through a network of five departments, two divisions, eleven regional centres, and 2,750 study centres across India and abroad. Nearly three hundred thousand students are enrolled and it is increasingly viewed as a track for lifelong learning. NIOS offers twenty-six courses in six languages for secondary examinations and twenty four courses in Hindi, English, and Urdu for senior secondary examinations. Self-instructional material is provided in English, Hindi, and Urdu.

NIOS uses a multi-level and multi-media delivery mechanism, though print remains its main medium of instruction. It regularly revises course materials, and also develops them for self- learning through graphics and simple illustrations. The NIOS material is considered to be of high quality and is sometimes used by the formal system for remedial teaching. The secondary education course material is available both in print and on the Internet for use by other students and interested students. A CD version is also available for sale. The cost of printed NIOS materials is built into the student fee structure.

Objectives of NIOS

- To provide professional advice to the Government of India, and to the States, regarding proper development of Open and Distance Learning system at school level in response to requests from the concerned Government/s or suo moto.
- To develop need based Academic and Vocational Education Programmes for livelihood and lifelong learning up to pre- degree level.

- To attain excellence in developing quality Open and Distance Learning curricula and courseware for learners.
- To accredit institutions for developing effective learner support system to facilitate learning learning up to pre-degree level.
- To strengthen the Open and Distance Learning system through Research and Development activities.
- To promote open schooling at national and global level by networking, capacity building, sharing of resources and quality assurance.

The main functions of NIOS are:

- To take steps for developing strategy plans for promoting and up scaling the open schooling programme in India
- To provide technical and financial support to state governments for setting up and up scaling of state open schools (SOSs)
- To develop needed action plan for making education equitable and inclusive for the marginalized and disadvantaged groups like girl/women, minorities, and differently- able (physically and mentally challenged)
- To offer a wide spectrum of courses of study in general, vocational and continuing education and life enrichment courses up to pre-degree level
- To develop need based curricula and self learning materials for (i) open basic education (OBE), (ii) secondary and senior secondary education, and (iii) Vocational Education and Training (VET) Programmes with focus on skill development
- To develop multi-media and multi-channel delivery modes for effective transaction of courseware to support courses and programmes
- To provide effective student support services for facilitating learners by establishing study centres in agencies, organizations and institutions in India abroad
- To conduct examinations and issue certificates to successful learners
- To partner with National Literacy Mission under the equivalency programme for providing education/certification to neo-literates
- To promote quality of learning in ODL through monitoring, supervision and evaluation, maintaining equivalence of standards with the formal education system, while retaining its own distinct character
- To undertake research, innovation and development activities in the area of open schooling and disseminate the findings to all stakeholders
- To establish a data base on open schooling
- To act as resource organization and capacity building centre in open schooling at national as well as international level
- To collaborate with national and international organizations for promotion of open schooling;
- To partner with government schemes and programmes at school sector for achieving the national goals and objectives
- To provide professional/technical consultation in field of ODL to institutions/ organizations/agencies in India and abroad.

A close examination of the profile of the students and reach of NIOS will reveal that it has gained more acceptance and credibility in the higher education system and even job market. Service delivery in a decentralized format through regional centres and expanding network of accredited study centers have helped NIOS to proliferate in rural and urban clusters of the under-privileged. The mandate of NIOS was modified in 2002 to make it an apex body for open schooling; its functions now involved teaching, accrediting and examining organization. NIOS has achieved tremendous feat, in 2008 with only 30 per cent learners making use of the online enrollment facility available in a few regions, has now become 100 per cent online admission (24x7) from year 2010-11 for both academic and vocational courses. Given that there are far more secondary-level aged youth outside of the formal system than inside it, NIOS offers a real opportunity to expand secondary education.

The fourth stage — State Open Schools

Following the recommendations of NPE and inspired by the success of NOS, some of the major states established state-level open schools. These state open schools further augmented the growth of distance education in India.

The National Institute of Open Schooling (often abbreviated as NIOS or NOS) was:

- To take initiatives in research, innovation and experimentation in the area of Open Schooling and Open Learning and disseminating tested innovative practices to other States;
- To form joint ventures with agencies and institutions that would be willing to provide learning assistance to the students and to accredit such Learning Support Centres or Study Centres, including study centres, abroad;
- To establish Regional Centres, for purpose of promoting the proper functioning of the Learning Support or Study Centres.

Relevance and importance of distance education in India

- The capital cost of the conventional education system has risen phenomenally in recent decades.
- Distance education helps in breaking the class and geographical barrier, and therefore helps in widening the scope of education in India.
- Educational programs/courses offered by the conventional institutes are not relevant to the existing social needs.
- The rigidity regarding course-duration and classroom attendance are still a concern in conventional educational institutes.
- Distance education helps students to balance between career and education. Professionals of different sectors can enroll in the open universities and thus pursue career and higher education simultaneously.
- Distance learning is needed to achieve the cherished goal of the nation for universalization of education.
- Benefits of higher and better education offered by conventional institutes continue to be enjoyed by a privileged few in India.

6.6 SOCIALLY USEFUL PRODUCTIVE WORK/ WORK EXPERIENCE (SUPW/WE)

Education at all stages has been regarded as a powerful instrument for social transformation. The major task of education in India today is to usher in a democratic, socialistic secular society which removes prejudices among people. The objectives of introducing 'Socially Useful Productive Work/Work Experience (SUPW/WE)' in the schools is to help in the realisation of these goals. Therefore, not only does it form an integral part of the school curriculum, but has its ramifications into other subjects of the school curriculum.

The Programme of Action of the National Policy on Education of 1986 states that the basic emphasis in interlinking education and culture should be on helping a child to discover his latent talent and to express it creatively. This can be achieved through a participative process, using their immediate environment giving special emphasis to curriculum reorientation and motivating teachers to interact with the students at different levels. NPE-86, therefore, recommended that Work Experience/SUPW should be integrally linked with various subjects both at the level of content and pedagogy.

The formulation of NPE-86 was based on a similar analysis of the prevailing situation with regard to SUPW as recommended by the Ishwar Bhai Patel Committee Report. The national consensus was to retain the name, 'Work Experience' with the definition that it is "purposive and meaningful manual work organized as an integral part of learning process and resulting in either goods or services useful' to the community". The NPE'-86 states that it should be an essential component at all stages of education to be provided through well structured programmes. In view of this, there are no conceptual differences between the recommendations of the NPERC and NPE'86. The problem basically relates to its poor implementation. The National Curricular Framework of 1988 brought out by NCERT has suggested compulsory work experience at all stages of school education.

It is critical to have a minimum time allocation for this component of the school curriculum so that it is not excluded altogether during the process of curriculum prescription. One can approximately suggest 1/5th to 1/8th of the total curricular time for Work Experience/ SUPW depending on the stage of education. At present, the time allocation hardly exceeds 10 percent in many States. Steps would ,therefore need to be taken to see ,that the objectives envisaged in the policy are fulfilled through measures which remedy the flaws in implementation.

Handicrafts in this country are an important part of our rich cultural heritage, which serve to satisfy the aesthetic needs of man and provide a vehicle for his urge for self expression. The real significance of handicrafts lie in the newness and surprise of each object.

Today we are losing not only an ancient heritage but an essential element in our social composition which has been a strong cementing force. SUPW/WE in schools gives an opportunity to revive and keep alive the rich heritage and cultural traditions of our country and encourages creativity among students. During the Workshop on SUPW/ WE, the teachers get intensive training in three to four crafts. The crafts which are generally taught are Pottery, Clay Modelling, Paper Mache, Mask Making, Tie & Dye, Rangoli, Wall decoration, Cane work, Bamboo work, Book binding, Paper toys, etc. Classes for Learning of Songs in National languages are also conducted to inculcate a

spirit of communal harmony and a sense of respect for all the languages. Lecture-demonstrations and slide-shows are arranged on a variety of topics related to Indian Handicrafts and Culture. Sessions on use of CCRT's educational material for creative activities in curriculum teaching are also organised.

Check Your Progress

9. What is the importance of distance education in India?
10. What is e-gyankosh?
11. What is the role played by the MV Foundation in Andhra Pradesh?

ACTIVITY

Find out the existence of community college in your vicinity and their valuable contribution to the development of society.

6.7 SUMMARY

In this unit, you have learnt that:

- The term vocation has been derived from a Latin term 'vocare' which means 'to call'. Traditionally, this word was used in religious terms but with the change of time this term came to be used for an occupation to which a person is specially drawn or for which he or she is suited, trained, or qualified.
- Vocational education is a conditional activity; it is conditioned by highly varying circumstances which prompt its need and its existence. It emphasizes on preparation for jobs and careers in diversified vocational or professional workers and entrepreneurs.
- Vocational education prepares an individual for choosing, entering and pursuing successfully the vocation of one's choice. In this sense, vocational education helps an individual in selecting his occupation which is a developmental process taking place over a period of years. It ends in a compromise between interests, capacities, values and opportunities which are available.
- Kothari Commission observed that in India only 9 per cent of the students are able to get education through vocationalized curriculum.
- Man is a product of his environment and inherent aptitudes. Along with, the nature of his career patterns is also determined by the individual's socio-economic level, mental ability and personality characteristic to which one is exposed to.
- The second stage is sub-divided into (i) fantasy stage and (ii) realistic stage. This description is evident that +2 or senior secondary stage is most relevant for providing actual or concrete vocational education to students.
- Vocationalization means learning of a skill or a range of skills through study of technologies, related sciences or other practical work. Vocationalization of higher secondary education aims at increasing the employment potential of the people through education for self-employment, with emphasis on agricultural and related occupations, including cottage and agro industries, and through preparation for specific competencies in different vocations.
- Separate committee and sub-committees should be organized within the jurisdiction of the education department of the government for giving training in their respective vocation. These committees will look after part-time training and correspondence courses in their respective areas.
- While India has made quantitative improvement in technical and vocational education, we have not yet paid adequate attention to its qualitative side. Many technical and vocational institutions are being run in a very bad condition. There are no good workshops, laboratories, libraries and buildings. Well trained teachers are very few.
- The mother tongue has been accepted as the medium of instruction in India up to the secondary state. After passing this stage, when a student takes admission in some technical institution, he is given training in English. This creates a great difficulty for the trainee and many capable students are lag behind.
- Through its Five-Year Plans, India has developed opportunities for technical and vocational education. But the development of these opportunities has created the problems of unemployment, especially for the technical hands.
- The language policy of the government has created an undesirable situation before secondary education. The language policy was initiated by Mudaliar Commission. It recommended that at lower and higher secondary levels, students should study two languages.
- The National Policy of Education, 1986, is a comprehensive document from educational planning and renovation point of view. The concept of vocational education is discussed in the part V of the policy document.
- Vocational education will also be a distinct stream, intended to prepare students for identified occupations spanning several areas of activity. These courses will ordinarily be provided after the secondary stage, but keeping the scheme flexible, they may also be made available after class VIII.
- It is proposed that vocational courses cover 10 per cent of higher secondary students by 1995 and 25 per cent by 2000. Steps will be taken to see that a substantial majority of the products of vocational courses are employed or become self-employed. Review of the courses offered would be regularly undertaken. the government will also review its recruitment policy to encourage diversification at the secondary level.
- With the advancement of time and changes in the employment scenario, innovations in the vocational education become a must. For example, National Curriculum Framework (NCF), 2005 has suggested including distinct areas in the curriculum right from the elementary stage to enable students to develop basic vocational skills.
- The community college is an alternative system of education, which is aimed at the empowerment of the disadvantaged and the underprivileged (urban poor, rural poor, tribal poor and women) through appropriate skills development leading to gainful employment in collaboration with the local industry and the community and achieve skills for employment and self employability of the above sections of people in the society.

- India is a huge country with a massive population. Currently our literacy rate is 75 per cent and the government intends to achieve 100 per cent literacy with its various campaigns and partnerships with private sectors, public sectors, Non-governmental Organizations (NGOs) to achieve this magical landmark in the next decade.
- In Andhra Pradesh, the most significant change is the strengthening of the self-help group (SHG) movement, and common interest groups have been formed around a variety of activities, ranging from thrift to management of forest resources.
- The MV Foundation (MVF) is a private, charitable trust in Andhra Pradesh that has developed a model that uses education to tackle child labour. MVF's uncompromising belief is that every child who is not in school or who has dropped out of school is a working child and that giving accessible education to such children is the only solution to the problem of child labour.
- The Rajiv Gandhi State Mission in Madhya Pradesh has introduced a project on a pilot basis for using computers to improve the quality of teaching in rural elementary schools through indigenous customized educational software.
- The District Primary Education Programme in Himachal Pradesh, in collaboration with All India Radio, Shimla, has started a 15-minutes bi-weekly programme called Gyankalash to provide academic support to primary teachers. The programme helps in improving the teachers' access to knowledge, especially those in remote areas, as it is impossible to reach them through conventional means.
- In 1999, the Nali Kali programme was introduced in Karnataka in privately managed schools. The USP of this programme was that learning takes place in an interactive environment, taking note of the age-wise competency of the student.
- The mid-day meal scheme in Tamil Nadu was started on a small scale in 1925–26 by the Corporation of Madras to improve school attendance. The philanthropists and voluntary organizations were urged by the government to start free school lunch centers in villages and towns in the state.
- The Commissioner of the Municipal Corporation of Greater Mumbai, UNICEF, and several prominent citizens, first established Pratham in Mumbai in 1994 as a public charitable trust. Since then, the Pratham initiative has spread to twenty-six cities and five rural districts in nine states around the country.
- India being a big country with a huge population, needs heavy investment in education sector to build schools and classrooms, hire and train teachers, supply notebooks and textbooks to the weaker section children.
- Popularly known as IGNOU, the Indira Gandhi National Open University was established in 1985 to impart education by means of distance and open education. IGNOU has also taken up certain initiatives as well.
- The education system in India is somewhat rigid. Students who are unable to continue with their studies rarely get a second chance to study further. Mostly the schooling is done in regular schools and children are passed en masse from one grade to another leading to constraints in supply of seats in schools.
- NIOS operates through a network of five departments, two divisions, eleven regional centres, and 2,750 study centres across India and abroad. Nearly three hundred thousand students are enrolled and it is increasingly viewed as a track for lifelong learning.

6.8 KEY TERMS

- **Curriculum:** It is the set of courses, and their content, offered at a school or university.
- **E-learning:** It is a system of learning which comprises all forms of electronically supported learning and teaching.
- **UNESCO:** Part of the United Nations machinery to promote exchange of ideas and information
- **UNICEF:** Part of the United Nations machinery to promote the health and education of children and mothers
- **Vocation:** A person's devotion to one specific area of expertise

6.9 ANSWERS TO 'CHECK YOUR PROGRESS'

1. The two words which are similar to vocation in meaning and purpose are occupation and profession, but minute differences among the dictionary meanings of these terms differentiate them thinly.
2. Vocational education prepares an individual for choosing, entering and pursuing successfully the vocation of one's choice. In this sense, vocational education helps an individual in selecting his occupation which is a developmental process taking place over a period of years. It ends in a compromise between interests, capacities, values and opportunities which are available.
3. Some of the impediments in vocational education are:
   (i) The government has not taken up the problem of vocationalization of education with due seriousness.
   (ii) Lack of teachers for imparting instruction according to the vocationalized aspects incorporated in the general curriculum.
   (iii) As Education Department of the Government has not been able to receive guidance for determining the exact nature of the vocationalized curriculum, the vocationalized education programmes could not be formulated according to the social and national needs.
   (iv) Due to lack of necessary facilities in schools and training colleges, laboratories and workshops have not been satisfactorily organized and the required number of trained teachers is not available.
4. Vocationalization means learning of a skill or a range of skills through study of technologies, related sciences or other practical work. Vocationalization of higher secondary education aims at increasing the employment potential of the people through education for self-employment, with emphasis on agricultural and related occupations, including cottage and agro industries, and through preparation for specific competencies in different vocations.
5. The agencies that play a significant role in the implementation of vocational curriculum at +2 level of secondary education are:
   (i) All India Vocational Education Council
   (ii) Human Resource Development Ministry

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(iii) NCERT

(iv) Regional training boards

6. The University Commission(1948–49) emphasized the need of establishing rural universities for teaching agriculture and allied subjects. It also recommended for making more progressive medical education, teachers' training and education in law.

7. For example National Curriculum Framework (NCF), 2005 has suggested including distinct areas in the curriculum right from the elementary stage to enable students to develop basic vocational skills. The NCF suggests that the senior secondary stage may be the end of students' formal education, leading to the world of work and employment.

8. According to the National Policy of Education, 1986, the establishment of vocational courses or institutions will be the responsibility of the Government as well as employers in the public and private sectors; the Government will, however, take special steps to cater to the needs of women, rural and tribal students and the deprived sections of society. Appropriate programmes will also be started for the handicapped.

9. The importance of distance education in India is stated below:
   - The capital cost of the conventional education system has risen phenomenally in recent decades.
   - Distance education helps in breaking the class and geographical barrier, and therefore helps in widening the scope of education in India.
   - Educational programs/courses offered by the conventional institutes are not relevant to the existing social needs.
   - The rigidity regarding course-duration and classroom attendance are still a concern in conventional educational institutes.
   - Distance education helps students to balance between career and education. Professionals of different sectors can enroll in the open universities and thus pursue career and higher education simultaneously.

10. It is a digital repository initiated by IGNOU to enhance the accessibility of knowledge to share its valuable resources with educational institutions and students internationally. These 185 national Digital Repositories act as podium to store, index, preserve and share the digital learning resources developed by the Open and Distance Learning Institutions in the country.

11. The MV Foundation (MVF) is a private, charitable Trust in Andhra Pradesh that has developed a model that uses education to tackle child labour. MVF's uncompromising belief is that every child who is not in school or who has dropped out of school is a working child and that giving accessible education to such children is the only solution to the problem of child labour.

6.10 QUESTIONS AND EXERCISES

Short-Answer Questions

1. What do you understand by vocational education?
2. Briefly state the need and importance of vocational education.

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3. What are the prominent functions of vocational education at the higher secondary stage?
4. List the impediments in the implementation of vocational education.
5. Briefly state the role played by community college in the field of education.

Long-Answer Questions

1. Describe the recommendations of the National Review Committee on vocationalization.
2. Summarize the recommendations of the various committees and commissions on vocationalization of secondary education.
3. What are the issues of vocationalization of secondary education?

6.11 FURTHER READING

B.K. Nayak (2010). *Education in Emerging Indian Society,* Axis Publications, New Delhi.

Bhatnagar, Suresh (2004). *Education in India,* Loyal Book Depot, Meerut.

Lal Raman Bihari (2004). *Bhartiya Shiksha ka Vikas avm uski Samasyen*, Rastogi Publications, Meerut.

Model Curriculum by UGC (2003). University Grants Commission, New Delhi.

National Curriculum Framework, (2005). NCERT, New Delhi.

Ravi Samuel S. (2011). *A Comprehensive Study of Education,* PHI Learning Private Limited, New Delhi.

UNIT 7 HIGHER EDUCATION AND ITS PROBLEMS

NOTES

Structure

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7.0 INTRODUCTION

Higher education is defined simply as the education after schooling. It is the education that aims to attain mastery over a subject or a set of subjects of one's preference. The international definition of higher education indicated that it is the post school education which is named either as higher education, further education, tertiary education and under-graduate education. Higher education comprises three stages. The first one is under-graduate or graduation degree. The next one is post-graduation or masters in a specific subject, and the next one is research degree which is bifurcated into Master of Philosophy (MPhil) and Doctor of Philosophy (PhD) disciplines. It is usually a degree level education, which takes three to four years for completion and award of degree.

Higher education is basically theoretical in nature, including practical or research work as per the nature of the subject adopted. In brief, it may be said that higher education is post-school education which is delivered in colleges, institutions of higher education, training college, technical colleges, and so on, as per the nature or stream of studies. These streams are numberless. Some of them include arts or humanities, commerce, sciences, medical, engineering, management, and technical subjects.

In this unit, we will discuss in detail the problems related to higher education in India.

7.1 UNIT OBJECTIVES

After going through this unit, you will be able to:

- Discuss the objectives of higher education in India
- Explain the structure of higher education in India
- Describe the problems in higher education in India—scarcity of financial resources, upgrading the curriculum, management of private institutions and autonomy of universities
- Analyse the issues related to curriculum and evaluation in higher education

7.2 AIMS AND OBJECTIVES OF HIGHER EDUCATION IN INDIA

The tradition of higher education is age old in India. Even in the pre-Vedic ages, there used to be three types or levels of education in India. The first stage of education used to complete after twelve years. The pass outs of this education were given the title of '*Snatak*'. The second level of education used to continue for another 12 years. These students were given the title of '*Vasu*'. The third stage of education prolonged up to 36 years, and the degree or title of '*Rudra*' was awarded to the pass outs. The last stage of education used to prolong up to forty-eight years. The scholars who used to pass this level of education were considered to be the experts of their fields and were given the degree of '*Aditya*', which means 'sun' or the source of light, life and energy.

The system of specialized or higher education continued consistently in late Vedic, Buddhist and Muslim periods. The time period of various levels of education and the titles awarded after achieving specific levels of education changed from time to time. For example, in Buddhist education the scholars were called '*Bhikkhus*' after passing the higher level of education. In medieval education, there were titles such as 'Aalim', 'Kamil', 'Fazil' that were awarded to the passed outs of higher levels of education.

The system of higher education was overhauled with the intervention of the British during the colonial period. Universities were established, colleges were affiliated and new nomenclature for degrees and certificates were decided. Later, especially after the recommendations of Charles Wood's Dispatch in 1854, there came a revolution in the quarter of higher education in India. The reports of Indian University Commission (1904) and Calcutta University Commission (1917) also set milestones in the development of international standard higher education in India.

In the post-Independence era, the University Education Commission (or Dr. Radhakrishnan Commission) (1948), National Education Commission or Kothari Commission (1964–66), National Education Policy (1968), National Education Policy (1986) and its programme of action (1992) are a few notable names linked with higher education in India. As a result, the number of universities has come up from 27 in 1951 to 570 in 2011. Enrolment of students also has crossed 1,50,00,000 mark in comparison to 3,60,000 in 1951. Expenditure upon the establishment and management of higher education has also gone up many times since Independence.

In the First Five-Year Plan (1951–56), the total amount spared for university education was merely 14 crore rupees, whereas the amount allocated for higher education in the Tenth Five-Year Plan was 3,607 crore rupees. These efforts have yielded promising results and Indian higher education is leaping in quality and quantity. Yet, there is much to be done to meet the international standards in the field of higher education.

Objectives of higher education have also undergone tremendous change in the course of its development since the ancient times. The process of change in the objectives of higher education has several distinct stages viz., the Vedic age, Buddhist Age, Medieval Age, Colonial Age and Post-Independence Age. Radhakrishnan Commission (1948) and Kothari Commission (1964–66) have done much to distinguish the objectives of higher education. The National Policy of Education, 1986, has redesigned the objectives of higher education and tried to make relevant and competitive as per the needs of time and needs of the progressive India. As per the policy, the chief objectives of higher education in India are to:

1. Reflect upon the critical social, cultural, economic, moral and spiritual issues.
2. Make the higher education proactive and research oriented in view of the dynamic society constantly entering the unchartered areas of knowledge and functioning.
3. Strengthen and expend faculties, departments, facilities and quality of academics, experiments, teaching–learning strategies and material, as well as human resource in order to make education more and more competent and competitive.
4. Upgrade the management, leaning and research systems of the universities and colleges.
5. Ensure the interest and success of private players in the field of education, the government needs to create autonomous departments within universities on a selective basis.
6. Redesign the existing programmes and courses to meet the expectations and requirements of specialization with special emphasis on the competence related to the languages.
7. Increase flexibility in the combination of programmes to facilitate inter-disciplinary research and development.
8. Enhance state level planning and coordination of higher education through national councils and University Grants Commission (UGC) to keep a watch on the standard of education.
9. Upgrade and enhance the intervention of science and technology in transactional methodology.
10. Employ qualified and capable manpower on merit basis and also make arrangements for teacher preparation.
11. Enhance support to ensure high level research in higher education institutions and universities. Suitable mechanism will be set up by the UGC to ensure coordination among the universities in research areas, especially in science and technology.
12. Pay special attention to enhance research in humanities and social science to fulfil the need for the synthesis of knowledge. Efforts will be made to research and secure the ancient knowledge and to relate it with the contemporary reality.
13. Develop a mechanism of sharing of human and material resource among the institutions of higher education to make-up the deficiency the quality implements in the field of research and development in higher education.
14. Establish open universities to augment opportunities for higher education as an instrument of democratizing education.

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15. Take-up appropriate steps to de-link degree from jobs in selected areas.
16. Establish rural universities on the lines of Mahatma Gandhi's ideas of basic education and mass education.

Some of the aims of university education, as put down by Kothari Commission (1964–66), are as follows:

1. The aim of higher education is to seek and cultivate new knowledge, to engage vigorously and fearlessly in the pursuit of truth, and to interpret old knowledge and benefits in the light of new needs and discoveries
2. The aim of higher education is to provide right kind of leadership in all walks of life.
3. The aim of higher education is to supply society with competent men and women trained in the fields of agriculture, arts, medicine, science and technology and different other professions.
4. The aim of higher education is to take the attitudes and values for developing good life of an individual and the society.

7.3 STRUCTURE OF HIGHER EDUCATION IN INDIA

The structure of higher education has two dimensions. The first dimension is that of the types of institutions, their establishment and management, which in short is termed as the 'institutional framework or structure'. The other dimension is the degrees and certificates awarded at the culmination of the programme. This specification is usually termed as 'academic structure of higher education'. Both types of structure are explained hereunder with required details.

A. Institutional structure of higher education

As far as the institutional framework is concerned, it consists mainly of seven types of institutions. These are as follows:

1. Central universities
2. State universities
3. Open universities
4. Institutions established by state legislative act such as private universities
5. Deemed universities
6. Institutes of national importance
7. Colleges affiliated with universities.

At present, there are 42 central universities, 286 state universities, 14 open universities, 129 deemed universities, 115 private universities or institutions established by state legislative acts of various states of India, 39 institutes of national importance, and more than 52,000 colleges affiliated with universities. These include both the colleges aided by the government and unaided i.e., not receiving any aid from any government. These institutions are opened by the central government or the state governments, private education societies and non-governmental organizations (NGOs). These are regulated by specific bodies such as University Grants Commission (UGC), All India Council for Technical Education (AICTE), National Council for Teacher Education (NCTE), Medical Council of India (MCI), and Distance Education Council of India (DEC).

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There is an active and effective system for ensuring and maintaining quality in the institutions of higher education. Various regulatory bodies have constituted specific organizations to ensure and monitor quality concerns in specific types of universities, colleges and institutes through auditing and inspection at given intervals. One of such regulatory bodies is National Assessment and Accreditation Council (NAAC), which was established by the UGC in 1994. A similar function related to technical education is conducted by the National Board of Accreditation (NBA), which was set up by AICTE in 1994; and in case of agricultural education conducted by the Accreditation Board (AB), which was set up by Indian Council of Agricultural Research (ICAR) in 1996.

B. Academic structure of higher education

Next to the institutional structures of the institutions of higher education in India, there lies the system of programmes and courses and their time frame. In this context, the structure of education may be categories into three layers:

1. Under-graduate programmes (bachelor's degree)
2. Post-graduate programmes (master's degree), and
3. Research programmes (doctoral degree).

A detailed description of the academic structure of higher education in India is explained hereunder with required particulars:

1. **Under-graduate (bachelor's degree) programmes:** It is usually an undergraduate academic degree awarded generally for a programme starting after schooling and lasting up to three or four years. This may have varied nomenclatures depending upon the type of bachelor programme opted. For example, Bachelor of Arts (BA) after humanities programme, Bachelor of Commerce (B Com) after commerce stream, Bachelor of Science (B Sc.) after undergoing a programme in sciences stream, Bachelor of Technology (B Tech.) after technological programmes, Bachelor of Business Administration (BBA) after management programmes, and so on.
2. **Post-graduate (master's degree) programmes:** It is an academic degree usually awarded for completion of a postgraduate programme offered after three or four graduation programme. Post-graduate programmes long usually from one to two years in duration. Like graduation the degree of post-graduate programmes also has subject specific nomenclature. For example Master of Arts (MA) after humanities programme, Master of Commerce (M Com) after commerce stream, Master of Science (M Sc.) after undergoing a programme in sciences stream, Master of Technology (M Tech.) after technological programmes, Master of Business Administration (MBA) after management programmes and like that.
3. **Doctoral (research degree) programmes:** It is an academic degree of the highest level. In India, there are two types or research degrees. The first one is offered after post-graduation in some discipline as the degree of Master of Philosophy (MPhil). The duration of this degree programme happens to be usually from one to one and a half years. The other is awarded after going though a full scale research programme and approval of thesis. This degree is recognized as Doctor of Philosophy or doctorate (PhD). Traditionally, the award of a doctorate implies recognition of the candidate as an equal by the university faculty under which he or she has studied.

7.3.1 Structure of Higher Education

The UGC regulates universities and colleges teaching general subjects. It has the power to determine and maintain standards and disburse grants. Technical education is regulated by the AICTE. Technical institutions can provide degree programmes if they are affiliated with a university (this condition is waived for some institutions). Affiliation is not required if the institution runs only diploma programmes. The Central Advisory Board of Education (CABE) co-ordinates between the centre and the states.

The following table provides the regulatory structure for different type of higher education institutions in India.

Table 7.1 Regulatory Structure of Higher Education in India

Types of Institutions	Regulatory Structure
1. Universities	Set up by Act of Parliament or State legislatures (can be public or private).
2. Deemed to be universities	Central govt grants status on recommendation from UGC. Have autonomy to set their own syllabus, admission criteria and fees.
3. Colleges	Affiliation to a public university is mandatory. Can be aided, unaided or autonomous.
4. Institutes of National Importance	Status granted by an Act of Parliament (IITs, NITs etc). Can award degrees without affiliating with a university.
5. Technical education (central govt funded; state govt funded; and self-financed institutions)	AICTE can approve setting up of new institutions and introduction of new courses. It includes engineering, technology, management, architecture, town planning and pharmacy.
6. Institutions offering medical, legal, dental, nursing, pharmacy, teacher education.	Regulated by 13 professional councils such as the Medical Council of India, Bar Council of India, and Dental Council of India who can recognise courses and promote the institutions.

Source: University Grants Commission Act, 1956; The All India Council for Technical Education Act, 1987, Institutes of National Importance; Annual Report: 2009-10, Ministry of Human Resource Development; "Professional Councils" in the UGC website.

National Knowledge Commission (NKC) recommendations on the regulatory structure of higher education

The NKC, which submitted its report in March 2009, has made the following recommendations with regard to the regulatory structure of higher education in India:

- An Independent Regulatory Authority for Higher Education (IRAHE) should be established through an Act of Parliament to set standards and determine eligibility criteria for new institutions.
- The IRAHE shall also settle disputes and licence accreditation agencies (both public and private).
- UGC shall only disburse public funds. Abolish all professional bodies except the MCI and BCI who shall provide licences to those wishing to enter the profession.

Yash Pal Committee Recommendations on the structure of higher education

The Yash Pal Committee, which submitted its report in June 2009, has made the following recommendations with regard to the regulatory structure of higher education in India:

- A National Commission of Higher Education and Research (NCHER) should be established through a Constitutional amendment, to replace UGC, AICTE, NCTE and DEC.
- Professional bodies such as MCI and BCI should conduct qualifying examinations.
- NCHER shall create norms for accreditation and certify accrediting agencies, independent of the government.
- A National Education Tribunal should be constituted to adjudicate disputes.

7.4 HIGHER EDUCATION IN NPE OF 1986

The issue of higher education has been discussed in the National Policy of Education (NPE) of 1986 (NPE has also been discussed in Unit 6) in the part V titled 'Re-organization of Education at Different Stages'. The chapter contains plans and details about the following:

(i) Early childhood care and education
(ii) Elementary education
(iii) Child centred approach
(iv) School facilities
(v) Non-formal education
(vi) Secondary education
(vii) Vocationalization

All these areas are tried to be given new look and philosophy to meet the needs and aspirations of constantly developing Indian society. The issue of higher education is given special importance by stating it to be 'an opportunity to reflect on the critical social, economic, cultural, moral and spiritual issues facing humanity. It contributes to national development through dissemination of specialized knowledge and skills'. These words are sound evidences of the importance given to the arena of higher education in the policy. The text devoted to the redefining and restructuring higher education through the policy is given hereunder in original form from the NPE, 1986:

- Higher education provides people with an opportunity to reflect on the critical social, economic, cultural, moral and spiritual issues facing humanity. It contributes to national development through dissemination of specialized knowledge and skills. It is therefore a crucial factor for survival. Being at the apex of the educational pyramid, it has also a key role in producing teachers for the education system.
- In the context of the unprecedented explosion of knowledge, higher education has to become dynamic as never before, constantly entering uncharted areas.
- In view of the need to effect an all-round improvement in the institutions, it is proposed that, in the near future, the main emphasis will be on the consolidation of, and expansion of facilities in, the existing institutions.
- Urgent steps will be taken to protect the system from degradation.
- In view of mixed experiences with the system of affiliation, autonomous colleges will be helped to develop in large numbers until the affiliating system is replaced by a freer and more creative association of universities with colleges. Similarly, the creation of autonomous departments within universities on a selective basis will be encouraged. Autonomy and freedom will be accompanied by accountability.

- Courses and programmes will be redesigned to meet the demands of specialization better. Special emphasis will be laid on linguistic competence. There will be increasing flexibility in the combination of courses.
- State level planning and coordination of higher education will be done through Councils of Higher Education. The UGC and these Councils will develop coordinative methods to keep a watch on standards.
- Provision will be made for minimum facilities and admission will be regulated according to capacity. A major effort will be directed towards the transformation of teaching methods. Audio-visual aids and electronic equipment will be introduced; development .of science and technology curricula and material, research, and teacher orientation will receive attention. This will require preparation of teachers at the beginning of the service as well as continuing education thereafter. Teachers' performance will be systematically assessed. All posts will be filled on the basis of merit.
- Research in the universities will be provided enhanced support and steps will be taken to ensure its high quality. Suitable mechanisms will be set up by the UGC for co-coordinating research in the universities, particularly in thrust areas of science and technology, with research undertaken by other agencies. An effort will be made to encourage the setting up of national research facilities within the university system, with proper forms of autonomous management.
- Research in indology, the humanities and social sciences will receive adequate support. To fulfil the need for the synthesis of knowledge, inter-disciplinary research will be encouraged. Efforts will be made to delve into India's ancient fund of knowledge and to relate it to contemporary reality. This effort will imply the development of facilities for the intensive study of Sanskrit and other classical languages. An Autonomous Commission will be established to foster and improve teaching, study and research in Sanskrit and other classical languages.
- In the interest of greater coordination and consistency in policy, sharing of facilities and developing interdisciplinary research, a national body covering higher education in general, agricultural, medical, technical, legal and other professional fields will be set up.

To sum up, the highlights of the plans and procedures pertaining to higher education in the National Policy of Education, 1986, are summarized as follows:

- Elevating the standard of aims and functions of higher education.
- Emphasising consolidation and expansion of facilities in existing institutions.
- Opening a large number of autonomous institutions.
- Regulating the admission process in the higher education institutions.
- Redesigning the programmes of courses in higher education.
- Enhancing research and development facilities in universities and colleges.
- Establishment of open universities for providing continuing or distance education.

7.5 PROBLEMS IN HIGHER EDUCATION IN INDIA

Education has been a subject of private enterprise from pre-historic times. Such efforts were not sufficient to provide educational facility to who all needed it. Secondarily, it was not uniform, standard and necessarily updated. There was state support to some extent to this sort of education at it needed sufficient funds to manage it. This support was quite vivid during the medieval period when kings and high placed ministers and courtiers patronized 'madrasas'. The British period came up as a new age for the upgrading the education set-up, standardization and expansion of higher education in direct state participation. Therefore, it may be said that scarcity of financial resources, upgrading of curriculum, problems related to privatization of institutions of higher education and autonomy of universities are the major challenges in the way of development of higher education in India.

7.5.1 Problem of Scarcity of Financial Resources

Though the state has became an important agency to ensure higher education to all who qualify or deserve for it, providing the same to a big number of aspirants in the country like India is next to impossible for any single agency, be that be the government itself. Institutions of higher education need abundant funds to establish, manage and run any single institution of higher learning. Apart from land, building, laboratories, equipment, and related infrastructural facilities; sufficient number of faculty members also demand copious investments. It is therefore, the governments at central and state levels have given way to private players to venture into the field of higher education. There are several other measures being taken to manage this problem which may be listed as under:

- *Establishment of seven types of institutions of higher education for lessening the burden on any single agency for providing higher education single handedly.* These are central universities, state universities, open universities, deemed universities, private universities or institutions established by state legislative acts of various states of India, institutes of national importance and self-finance colleges.
- *Establishing institutions of higher learning under corporate social responsibility.* The corporate social responsibility Act is an important tool to lessen the burden of the government in the field of provision of higher education to the masses. Corporate houses like Wipro, Tata, HCL, Tech Mahindra are quite ahead in establishing institutions of higher learning in various fields.
- *Collaborations with foreign countries is also a tool to diverse the task of arranging financial capital for establishment and management of higher education institutions.*

7.5.2 Problem in Upgrading the Curriculum

The world today is getting more and more competitive and advanced day by day. The policy of periodical changes or upgrading the syllabi is neither applicable nor successful nowadays. Therefore, constant renovation or standardization of the courses has become need of the hour. To meet this challenge, following measures are being preferred by the universities and concerned institutions of higher education:

- Accreditation from the national and international agencies. There are several accreditation agencies in the fields of various types of education. These include National Assessment and Accreditation Council (NAAC) established by the UGC in 1994, National Board of Accreditation (NBA) set up by AICTE in 1994, and Accreditation Board (AB) set up by ICAR in 1996.
- Apart from the above mentioned national level accreditation agencies, there are several international agencies also that are known for their standardization and

upgraded systems. The British Standards Institution is one among them which helps organizations to excel on the global standards. Similarly, International Standards Organization (ISO) in another such institution for marking standardization of institutions globally for the sake of improvement in their business processes.

- Other than the national and international accreditation bodies, there are several regulatory agencies who play positive role in the pursuance and sustenance of quality in the institutions of higher education. Prominent among them are University Grants Commission (UGC), All India Council for Technical Education (AICTE), National Council for Teacher Education (NCTE), Medical Council of India (MCI) and Distance Education Council of India (DEC).

7.5.3 Problem in Management of Private Institutions

There are all levels and sorts of educational, technical professional and managerial institution in private sector. These are ensuring expansion of educational facilities in remote, backward and tribal areas. These are providing better and upgraded educational facilities to talented and above average students; and on the other hand, good employment to educated youth in the country. Under the mutual market and official stress, competition and compulsions these are providing the best available infrastructure, standard education, high-class training and guidance to their students. These are helping to generate high-class professionals in all walks of life and making India to compete the worldwide competition.

But on the other side, these institutions charge excessive fee and other charges and make quality education much expensive and out of reach for others. There is hardly any place for disabled, poor and weaker sections of society in the private institutions apart form those who are getting grants from government. Many of these institutions adopt illegal, corrupt and immoral practices or by-passes to get recognition and affiliation and cheat both the government and the public. They exploit their employees' capacities, parents' aspirations and students' calibre to make their own name fame and money. Even then their products are not essentially superior and valuable. There is hardly any job security, proper remunerations, balanced or justified workload and responsibilities in these institutions. Apart from this, dictatorial management is a common characteristic of most of the private institutions.

If we try to find out the causes of many of the problems existing in the institutions of higher education in the private sector, or involving private sector in the responsibility of providing higher education to the masses, we come across several facts. The foremost among them are as follows:

- Scarcity of financial resources with central government and state governments
- Rapidly growing population
- Demand for educated and skilled man power in all sectors of the economy
- Need to upgrade nation's standard to pace with the international community
- To provide appropriate and satisfying employment facilities to the educated, skilled and capable people in the country

Finding solution to the problem is not as hard as it seems in the first sight. Few simple means and measures would be capable to evade many of the problems existing in the private institutions. These include:

- Selection for the admission to the private institutions to be done by the government agencies or in a transparent manner.
- While giving affiliation to the private institutions, care should be taken regarding their need and importance for the region/country.
- There should be an impartial and transparent system of fee and other charges for private or self-financed institutions.
- Rule and regulations for these institutions should be clear and simple. There should be one central body to regulate and inspect them. Parents, teachers, government officials and educationists should be involved in the governing bodies of these institutions.
- A system of internship should be introduced to ensure the worth of the students studying in such institutions.

7.5.4 Problem of Autonomy of Universities

Autonomy means right to regulate institutions in all areas of its management, under the statutes set by the governments, Indian Universities Board (IUB) and University Grants Commission (UGC). There are two observations regarding granting autonomy to universities. In the first case, universities are denied autonomy and are made to function under official control. Political pressure politicizes all the matters of academics and administration from admission of students to the appointment of teachers leading to sustained pandemonium and total turmoil in the institutions. Red-tapism in the organizations and institutions hampers the pace of decision-making, execution of decisions and planning of further growth. Universities apply all their efforts just to fulfil the official formalities and in teaching the tendency of innovations and experiments in curbed. Curriculum becomes a limitation and very often it remains to be useless, outdated and impractical. It is hardly rationalized and restructured as per the need of the hour. There remains no inspiration, facilities and yearn for good, hard and commendable work. All benefits are time based and not performance based.

On the other hand, if universities are granted autonomy and are allowed to manage their matters independently, there remains no uniformity in any of the academic or administrative matters of universities. Selfish motives may bring baseless norms in institutional administration. Curriculum is either changed frequently or remains static for years. Examination and evaluation loses consistency and reliability, hence, the standard of studies deteriorates. No proper use of allotted money is seen or funds may not be used in desired manner or for the intended purposes.

Looking at the causes of the problem it may be noted that severe misuse of power due to non-sincerity and lack of honesty is the foremost reason of the crises. Other than this, the politics of vote, anarchy and mess in the campuses due to political motives, frequent changes in government and subsequently in the administration also make the situation bad to worse. Fanatic and groundless ambitions of high placed officials and politicians also add manure to the problem.

To find a workable solution to the problem a status of autonomy may be provided along with a set of accountability. Freedom to administer internal affairs should have checks and balances from the concerned authorities. UGC should ensure that the curriculum and research work in universities should be of high/international standards. The jurisdiction of UGC in fixing the minimum qualification should be maintained along with universities, as far as the rights of selection and promotion of teachers is concerned.

Examination and evaluation should have more precision, transparency and objectivity; and lastly, the academic and administrative bodies should work independently in close cooperation with each other.

7.6 CURRICULUM AND EVALUATION IN HIGHER EDUCATION

Evaluation is an act or process that assigns 'value' to a measure. Literally, evaluation means 'to find the value of or to judge the worth of'. In the process of evaluation; we make a judgment as to the suitability desirability or value of a thing. In education, evaluation refers to the assessment of student's progress towards stated objectives, the efficiency of the teaching as well as the effectiveness of the curriculum. Apart from classroom examination, evaluation also deals with the evaluation of cognitive, affective and psychomotor domains of the students.

According to J.M. Bradfield, 'evaluation is the assignment of symbols to phenomenon in order to characterize the worth or value of the phenomenon usually with reference of some social, cultural and scientific standards'. In the words of Hanna, 'evaluation is the process of gathering and interpreting evidences on change in the behaviour of al students as they progress through school'.

7.6.1 Problems of the Traditional Evaluation System

The system of examination has been a matter of concern since the inception of formal schooling in India. Prior to this, the evaluation of pupils was almost subjective and depended upon the observation of students' character and learning by gurus or mentors. The traditional schools of education viz., Gurukulas, Parishads, Tolls, Mathas, Madrasas, Maktabs and Convents did not have prefixed programme of study, and largely followed individual curriculum and statute. Hence, their outcome of education was not predetermined and universal.

With emergence of the Western system of education, schools in 17th century, schools started developing syllabi, curriculum, examination and evaluation systems, and so on. With this, there developed two streams of academic institutions viz., Indigenous and Western. Western style institutions had well designed curriculum, transitional methodologies and examination system, which were later imbibed by the Indigenous institutions. In the beginning it seemed to be a path-breaking culture, but later on several drawbacks were felt in various facets of school system. The evaluation system is one such area, which continues to be an area of concern even today.

The objective of school examination system is to measure and evaluate students' performance in all the areas of individual achievement. These areas include knowledge, understanding, skill, creativity, applicability, research and innovations in selective areas of expertise. But ironically, the system of examination has been failing to bring forth the desired results. The major shortcomings of the system are discussed hereunder:

(i) Emphasis upon rote learning

The conventional examination system contains a scheme of periodical tests, terminal tests and annual examinations. The question papers of such examination contain basically three types of questions viz., Essay-type questions, Long-answer questions and Short-answer questions. Recently, objective type questions have also been a part of question papers in schools and higher education institutions. All these types of questions are alike as far the type of answer is concerned. They all need a set of information which is basically memory based. Memorizing facts and information is the best way to score high in such examinations. As a result, students tend to develop a habit of memorization of facts and texts. This practice not only prevents students to research and analyse their content, but also hampers their innovation and creativity to a great extent.

(ii) Subjectivity

The traditional system of examination enhances subjectivity by giving more weightage to written tests. Such tests are held periodically and contain a repeated set of questions. In schools, teachers usually discriminate among students due to varied reasons. These may include caste, creed, religion, region, monitory status, and so on. Sometimes, teachers consider gifts and presents, nepotism and vicinity as a basis of awarding marks or grades to individual students. In certain cases, monitory, sexual or preferential aspects also determine results in written examinations. In school examinations, students usually mention all the relevant details on their answer sheets. At times, teachers recognize the writing pattern of students and this becomes a tool for discriminatory results.

(iii) Poor content coverage

The traditional examinations have a fixed pattern of questions, which is repeated without gap in all assessments. The students can pass such examination by observing the previous sets of question papers. Moreover, teachers tend to disclose important questions to students well before examinations. In such circumstances, students tend to develop a habit of preparing guess papers or purchase such texts from market to pass a particular examination. Such books are easily available at book stores and are very popular among students.

(iv) Problem of administration

The traditional system of examination loses reliability as it is conducted without proper vigilance measures. Students sit in a line with the same set of question papers. In such examinations, invigilation plays a vital role; but in most of the cases, it is not conducted religiously. Copying is another issue which hampers the trustworthiness of school examination system. Students waste more time in assessing important questions and preparing chits or copying material. Biased invigilation, insufficient staffing and improper sitting arrangements are other drawbacks of such system.

CHECK YOUR PROGRESS

1. Define 'higher education'.
2. What kind of efforts was made by the British to upgrade higher education in India?
3. List the commissions appointed by the Indian government to develop higher education.
4. What are the drawbacks of traditional system of evaluation?

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7.6.2 Proposed Reforms in Evaluation in Higher Education

Educationists, educational philosophers and educational administrators are keen to develop modern examination system to get rid of the shortcomings of the traditional evaluation pattern. In this process, several successes have been achieved. Some of them are discussed hereunder:

- **Application of scientific approach:** To overcome the shortcomings of the traditional examination system, it has been suggested to adopt scientific approach to prepare question papers and evaluation of answer books. This includes weighing for types of questions and various aspects of the content as per the objective of the subject. A schemes of options and inclusion of applicative questions is also kept in mind which preparing a question paper. Preparation of Blue Print, Scoring Key and Marking Scheme is also suggested to make the question paper apt and apposite for the evaluation of the student performance. A question-wise analysis is also suggested to make the question paper more student-friendly.
- **Multiple choice questions:** School managements, state boards of examination and universities are briskly adopting innovative evaluation systems to add objectivity and reliability to the examination systems. To overcome the problems of rote learning, subjectivity and poor content coverage; Multiple Choice Questions or MCQs have been incorporated as an evitable part of examination system. The Central Board of Secondary Education (CBSE) has been pioneering in adopting such system in recent years.
- **Combined question papers:** In place of subject-wise question papers, some schools are adopting the system of Combined Question Papers, or CQPs, to overcome the limitation of traditional evaluation pattern. Such question papers contain items from all the disciplines of the content for a class.
- **Open book examinations:** Another innovation in the field of examination reforms is the conduct of Open Book Examinations or OBE. Such examinations are conducted to lessen stress among students and provide them with the opportunity of answering questions from a valid source. The most important fact regarding the Open Book Examination is that it can be beneficial only for the students who have been studious and aware of the whereabouts of the content in books. It reduces excessive dependence on rote learning and develops the habit of book surfing among students. Such habit is especially helpful for the students and practitioners of medical and legal studies.
- **On demand examinations:** On demand examination is another innovation in the area of examination reforms which is particularly suitable for the students of information technology and distance education. The world now is shedding all boundaries of time and space and bridging the gaps among the nations and populations. Education plays a vital role in this process by imparting online education and on demand examination systems. Such examination maintains the sanctity and reliability through competent security systems.
- **Continuous and comprehensive evaluation:** The Continuous and Comprehensive Evaluation (CCE) is a scheme evaluation of students takes place on a regular basis, covering the various aspects of their expansion and progress. As the name suggest, 'Continuous' stands for customary assessments, regularity of unit testing, analysis of learning gaps, applying corrective measures, re-testing and providing feedback/remarks on self-evaluation and perfection. 'Comprehensive', in contrast, attempts to cover the scholastic as well as the co-scholastic issues concerning a student's growth and development; moreover, these two issues of the evaluation process are monitored via formative as well as summative assessments.

CCE is a streamlined tool for providing a holistic profile of the learner through the most precise assessment of all the tools included in the system spread over the total span of instructional time in the institution. It helps to identify every single aspect of individual personality including attitude, aptitude, inclination and preferences; which bring forth the actual self of an individual. Class tests, projects, portfolios, presentations, and so on, are effective measures of CCE which are being implemented in schools and institutions of higher learning quite successfully.

7.6.3 Principles of Curriculum Framing in Higher Education

Curriculum in general terms is the sum total of all the activities; scholastic or co-scholastic taking place in an educational institution. In includes all the scheduled activities in terms of daily programme and annual calendar of an institution. In broader terms, curriculum of an institution includes the goals, objectives and all the methods, materials and assessment schemes to ensure the achievement of them. In short, curriculum may be defined as the collective entity of all the efforts, activities and assessments taking place in an institution of teaching and learning.

Framing curriculum for higher education is a cumbersome activity as far as time and efforts are concerned. Any activity of curriculum framing normally involves seven steps as follows:

1. Selecting an appropriate title for the course
2. Defining the objectives of the course
3. Putting the learning outcomes of the course in a sequence
4. Sequencing the course content as per the objectives and learning outcomes
5. Defining the mode of interaction and transaction of the course
6. Framing the assessment components of the course
7. Fixing the system of evaluation of the achievement of objectives

Title of the course must be indicating not only the very nature of the course, but also the components involved in it. It should be short, crisp and affirmative to avoid any dubiety or similarity with related titles. The objectives of the course help learner to understand the need and importance of the course of study. It also makes the learner to set priorities in order to achieve the maximum of knowledge, understanding and skill development out of the course. The course objectives must follow learning outcomes which may be in measurable terms.

Sequencing the content may be done in fractions of units or modules with appropriate titles. Bifurcation of the content should also be sequences suitable so that the easy and apparent experiences come first and tough and abstract components should follow them. It would be convenient for the teacher as well as for students to define the mode of interaction between the teachers and taught and the methodology of transaction of the content.

Selection of components of evaluation is very important to ensure the achievement of all the learning objectives set in the beginning of the curriculum. The last step is to fix

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a system of evaluation. This aims at helping teachers to evaluate all the objectives and students to keep prepared for all sorts of evaluation.

Along with the steps of curriculum framing; seven principles of curriculum preparation should also be kept in mind. These are as follows:

(i) Challenge

(ii) Comprehensiveness

(iii) Sequence

(iv) Intensity

(v) Personalization

(vi) Consistency

(vii) Significance

These principles of curriculum framing make learning more valuable and enjoyable for the learner. Implementation of these principles also makes the curriculum beneficial for learners, society and the nation.

Curriculum of higher education has ever been as per the needs of time and society. In the British period, the curriculum of higher education was more for achieving the aims of the government than of the Indian masses. In 1948, the University Education Commission suggested to make the curriculum of higher education more comprehensive, updated and practical. The Kothari Commission in 1964 suggested adopting inter-disciplinary approach in formation of curriculum for higher education. To incorporate these suggestions, the University Grants Commission (UGC) framed Curriculum Development Centres (CDCs) for curriculum development for higher education.

The National Education Policy, 1986, suggested reviewing these curricula after every five years. The Model Curricula prepared by UGC were sent to all the states with instructions to implement them latest by 2003 lest the grant will be ceased. Many universities have updated their syllabi on the UGC guidelines, but there is much to be done even today.

In 2005, National Council for Educational Research and Training (NCERT) came up with a National Curriculum Framework with a view to provided a progressive vision to the Indian education system. The National Curriculum Framework (NCF), 2005, suggested that education up to secondary school should provide adequate knowledge base, experience, language abilities and maturity to engage in various types of knowledge in complete sense, concepts, structure of knowledge, investigation techniques and validation measures. It should also make the learners to recognize their area of study in higher education.

It is evident that curriculum has been a core concern for the governments and experts for a long time. The structure of higher education is fabricated around the curriculum. Though UGC has tried to maintain standard and uniformity through its model curriculum, the levels of universities in India are so varied that the vision of UGC is yet to be fulfilled. There are universities who are so progressive that they usually find place among the top 100 or 200 universities of world. On the other hand, scores of universities fail even to follow the marginal norms of their own. At the end, it would be appropriate to state that curriculum framing and follow-up are among core concerns of higher education programmes in India.

7.6.4 New Courses Introduced in Higher Education

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Today, several colleges and universities are offering different courses. Social sciences, business management and animation are some of the many new courses that have been introduced or tweaked by Indian universities, private as well as government-run, keeping in mind the evolving trends and emerging disciplines in the job market. Some universities, which offered diploma courses, have restructures the curricula of these subjects to make them regular course, such as master's in development communication and Master's in visual effects and animation. A degree course offers in-depth knowledge as compared to a diploma. The new introductions are motivated by the great demand in the corporate sector, the social sector and even by the UN agencies. Legal education, too, seem to be undergoing a reform with the usual two-year LLM programme being pruned to a one-year course. Multiple new programmes in tourism, computers, retail management and fashion merchandising, as well as diploma courses in food science, technology and plantation management and agriculture are also on offer are catering to changing needs.

7.7 DISTANCE EDUCATION

Distance education is characterized by a non-conformist and non-traditional approach, which, in effect, questions existing norms of traditional education and seeks to provide a new orientation to the education process. It assumes premises about the nature of learning that are vastly different from those governing the traditional system of education. Moreover, it has its own dialectic register which arises out of its endeavour to overcome the problems that are implicit in imparting instruction to students who are at a distance from the teacher and/or the institution.

Distance education does not exist in a vacuum. It is, in fact, an outcome of certain socio-historical compulsions and technological growth; it is a system, which is firmly related to social and cultural environments. The most important development in this regard is the advancement made in the field of electronic mass media. For instance, technological growth opens up new channels of communication which, when put to use, can replace the usual channel which is of oral communication.

There are different terms that have been used for denoting the concept of distance education. Some of the well known are 'distance education', 'distance learning', 'distant teaching', 'tele-work', 'tele-learning', 'outreach', and 'tele-teaching'. All of them have been used to describe the same basic process and outcomes. It usually takes place when a teacher and students are separated by physical distance, and technology like voice, video, data and print are used to bridge the instructional gap.

Attempts have been and are still being made to define distance education succinctly. It is, however, very difficult to arrive at a definition that may bring together, by the process of connotation and denotation, all the aspects that characterize distance education.

Wedemeyer (1977) has used the terms 'opening learning', 'distance education', and 'independent study' in his work, but favours the last term consistently. According to him: 'Independent study consists of various forms of teaching, learning arrangements in which teachers and learners carry out their essential tasks and responsibilities apart from one another, communicating in a variety of ways. Its purposes are to free on campus or external learners with the opportunity to continue learning in their own environment, developing in all learners the capacity to carry on self-directed learning the ultimate maturity required of the educated person.'

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While defining distance education, the famous thinker Borje Holmberg stated: 'Distance education covers the various forms of study at all levels that are not under the continuous, immediate supervision of tutors present with their students in lecture rooms or on the same premises but which nevertheless, benefit from the planning, guidance and teaching of a supporting organization.'

Otto Peters emphasized the role of technology, saying that distance education is 'a method of imparting knowledge, skills and attitudes. It is rationalized by the application of division of labour and organizational principles as well as by the extensive use of technical media, especially for the purpose of responding high-quality teaching material, which makes it possible to instruct great numbers of students at the same time wherever they live. It is an industrialized form of teaching and learning'.

For Michal Moore, the related concept of "distance education" was defined as 'the family of instructional methods in which the teaching behaviours are executed apart from the learning behaviour, including those that in a contiguous situation would be performed in the learner's presence, so that communication between the teacher and the learner must be facilitated by print, electronic, mechanical, or other devices'.

Dohmen of Germany defines distance education as a 'Systematically organized form of self-study in which student counselling, the presentation of learning material and securing and supervising of student's success is carried out by a team of teachers, each of whom has responsibilities. It is made possible at a distance by means of media, which can cover long distances'.

It should not be assumed that there are no other definitions except the few we have discussed above, nor do we suggest that any one or a combination of any two or more of the above definitions actually describe distance educations comprehensively. There are other definitions too, and many more will come up as we explore this innovative system of education. The main concept of the various definitions gives the same outcome, that is:

- Under distance education, the teacher and the learner are separated from each other and this is the central characteristics of this form of education.
- Distance education is an institutional kind of educational system. It is, therefore, distinct from private study, which may result from private reading or watching TV, or attending a talk, etc.
- Distance education makes use of the various technically advanced media such as printing, telephone, audio-video, computer and broadcasting.
- It is a two-way communication because the student is able to respond through assignment-responses or other media and, therefore, can receive feedback. The student, thus, enters into a dialogue with the institution.
- Each student is separated from his/her peer group in the sense that although the learners are from a fairly sizable population they do not have face to face interaction amongst themselves. Thus, distance education becomes a highly individualized learning system. In this sense, it remains one of the most individualized of all education systems. Even though study groups may be formed under distance education learning programmes, these may not be compulsory and the student is free to work entirely on his/her own.

To be effective, the technology of distance education should remain relatively transparent, allowing the instructors and students to concentrate on the process of teaching and learning.

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Unfortunately, due to the captivating nature of many distance delivery technologies and techniques, faculty, students and administrators can easily become distracted by the opportunities and limitations of the delivery system and lose sight of the academic needs to be met. In fact, if faculty staff and students are constantly being reminded of the technological delivery system itself, either through technical problems or through impressive but unnecessary technological capabilities, they will be distracted from effective teaching and learning. For this reason, it is critical for the distant educator to remain firmly focused on the instructional goal, content requirements and student needs.

Still, it is easy to get bogged down with the notion of distance and falsely assume that bridging relatively long distances requires more planning and effort than teaching over short distances. Although, this makes sense initially, further investigation leads to the realization that the same challenges must be faced and difficulties overcome whether students are two blocks, two miles, or two time zones away.

In fact, whether the course is delivered face-to-face or at distance, critical instructional elements remain unchanged. These include organizing, planning, understanding student needs and characteristics, developing content and gaining familiarity with presentation methods.

An effective distance education begins with careful planning and an understanding of course requirements and students' needs. Appropriate technology can also be selected once these elements are understood in detail. A fully functioning distance education effort requires the consistent and coordinated work of administrators, faculty, on-site facilitators, technicians, and support personnel.

While each individual plays a different role, they have a common goal which is to provide relevant and well-planned distance learning experiences to a selected group of learners.

Need of distance education

There are various reasons for the growing popularity of distance education. Some of these are as follows:

1. **Over-population:** Over-population in most of the developing countries has led to the emergence of a large number of students. But, the number of formal institutions and seats are limited; as a result of which most of the students have to wait for another year to take admission in institution in the subject of their choice. But, now the circumstances have changed and with the emergence of distance education, students can look for multiple options in various educational institutions at the right time without needing to wait.
2. **Knowledge explosion:** The concept of distance education provides an opportunity to gain ample knowledge on varied subjects, of which most of the students around the world are not in a comfortable position to attain differently. Thus, distance education acts as a tool for explosion of knowledge.
3. **Qualification enhancement:** Distance education also enhances the qualification of many people who are either looking for a job or are looking for a better job. There are many people who while working want to improve their qualification to get promoted in their job. Hence, for them distance education is the right platform. It gives an opportunity to the working class people to gain qualification easily without hampering their job.

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4. **Double access:** There are many people who have to work at very early age due to many social and economic reasons. Such person does not get an appropriate chance to study at the right time. Therefore, for such people, distance education acts as a boom. While working they can study too. Thus, they have dual access of both job and study.
5. **Geographical segregation:** Due to undeveloped communication systems, there are several places on earth that remain untouched by new educational courses. The complete geographical segregation of the place leads to unawareness about new and vocational courses that are emerging in several educational institutions. In such places, the concept of distant learning acts like a boon. It gives new opportunities to the students.
6. **Financial circumstances:** Distance learning also meets the demand of those people who are financially unstable or whose economic condition is not very sound. In most of the educational institutions, the fees of the distance learning courses are usually low in comparison to regular courses.
7. **Self-improvement:** Proper education leads to self-improvement. Therefore, distance learning is also very much needed for self-improvement and self learning of an individual.
8. **Easy availability:** The access to distance education is very easy. One can easily avail any course at particular time under distance education from any university.

Importance of distance education

Education is very important for every individual. It not only enhances individual's personality but also offers opportunities for a better future. Distance education is a product of a continuous development that started well over a century ago and is of great importance for today's and future students. Here, we are going to deal with some of the points which will show how important the concept of distance education is. These points are as follows:

1. **Teaching at a distance can be effective:** If teaching techniques and delivery methods takes into account the needs, diversity, and context of distance learner, teaching at distance can be effective.
2. **Concept of distance education understands the requirements of students:** The concept of distance learning understands both urban and rural students, regional as well as national and international students and provides equal opportunity to all of them. It also provides an opportunity to exchange social, cultural and provisional heritage of person from a particular cultural background to another.
3. **Distance education is a boon for service aspirants:** Distance education has become a boon for most of the service aspirants. It is very important for those people who due to their service are not able to achieve their desired goal during their student life. This is the most important platform for most of the skilled people to rebuild their academic quality in later stage.
4. **Distance education enhances economic and official status:** Distance education is also very important for enhancing the position in respective area of job and profession. In addition, it also provides financial gain consequently by raising an individual's position in an office.
5. **Distance education is suitable to all age group:** There is no age bar while acquiring degree through distance education. It is suitable for all age group.

Characteristics of distance education

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Distance education means that the learner is physically at a long distance from the teacher for much, most or even all of the time during the teaching/learning process, in contrast to educational communication in a classroom situation which is 'contiguous'. This new system of education may be visualized in the following characteristics:

- Distance education is a needed component of most national educational systems.
- Distance education is a coherent and distinct field of educational endeavour.
- Distance education embraces programmes at a distance at a primary and secondary, technical and further, at college and university levels in both public and private sectors. It has existed for somewhat over hundred years and is to be found in most countries.
- Distance education provides a complete educational programme for both adult and children outside of, and distinct from, conventional, oral, group-based provision. It has its own laws of didactical structure and its own quasi-industrial administrative procedures.
- Distance education is a form of education fraught with problems for administrators, teachers, and students. It is characterized by the fragility of the non-traditional in education. This difficulty concerns the quantity, quality and status of education at a distance. Good practice in distance education seeks to provide solutions for these inherent difficulties.
- Under distance education, the learners have to take much greater responsibility for learning than they were used to.
- There is a wider choice of the content under distance education. It is the method that has to be provided to the learner.
- Here, individuals differences among the learners have not only being recognized, but also catered to.
- Learners have their own pace to complete or working through the courses. They may start, stop, and/or complete the courses according to their own convenience and abilities.
- Under distance education, evaluation of student performance should be independent of the consequences, methods and place.
- Teachers concentrate on educational tasks by withdrawing from social and administrative tasks. They should function more as managers of educational materials than as the traditional sources of all correct information and knowledge.
- Teachers accept the role of the educational media as a role complementary to their own. The implication is that the course/material to be reconceived and designed afresh.
- The educational operation should affect a judicious media-mix-using all the media and methods. This should be one of the major principles of course design and production.
- The system operates wherever the learners are independent of the domicile and grouping characteristics of the learner.

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Open education

'Openness' in terms of education has become an increasing feature of today's educational system. The notion of open education was reflected not only in the pedagogical styles adopted but in physical layout of the school building as a whole and of age related teaching areas in particular. The concept of open education refers to that kind of non-conventional education which has been weaning away from the conventional constraints that characterize the traditional school/college/university education. What makes an open education different from other form of education is its 'openness'. In an open education system, anyone can get education anytime, despite of his qualification. Thus, open education system removes all the barriers of education from its system. For instance, in an open school anyone who has either passed or failed in any class (suppose Eighth Standard) can directly get promoted to Ninth Standard without any prerequisite.

This change is of the kind that was experienced a few centuries ago when sectarian education yielded to liberal education. This change was essentially curriculum based. Now, liberal education is yielding to open education. This change is both curricular and organizational in nature.

Characteristics of open education

The various characteristics of open education are as follows:

- Open education does not operate through traditional conventions which are essentially restrictive in nature.
- In an open education system, there are restrictions in admission.
- In an open education system, there are restrictions on attendance.
- In an open education system, there are restrictions on the candidature for examinations.
- In an open education system, there are restrictions on the period of time to be devoted to a course.
- In an open education system, there are restrictions on the number of examinations given and taken in a year.
- In an open education system, there are restrictions on subject combinations for a particular degree.
- In an open education system, there are restrictions on the mode of didactic communication and the didactic task.

It should be clear to us that correspondence/distance education institutes may or may not be 'open' in the sense we have referred to above, or may be open only to a limited degree. And in the same way, even a traditional college/university may become open to a recognizable degree. Research programmes like MPhil and PhD may be put under this category. In what follows:

(a) We shall avoid using the expression correspondence education, unless we have to use it in a specific sense, and

(b) The expressions distance education and open education will be used synonymously. The distance mode allows the educational systems to be open and the openness of the education system suits for the promotion of distance education.

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Advantages of open education

The advantages of open education are as follows:

- It develops a student's autonomy and responsibility.
- It maximizes space through shared areas.
- It moves away from whole-class instructions to differentiated activities.
- It supports team planning, team teaching and team assessing.
- It facilitates social learning and peer-group learning.
- It reduces resource duplication.
- It encourages cooperative work.
- It supports flexible group size and membership.
- It avoids feeling of insecurity and isolation.
- It facilitates the sharing of ideas by students and teachers.
- It facilitates consistent and supportive handling of difficult student by more than one teacher.

Relation between distance education and open education

The relationship between distance education and open education is that open education can be effected easily through distance education systems on the one hand, and on the other advances in the practice of distance education help and encourage education to become more and more open. Naturally, the two go together, and therefore, there is a visible 'overlap'.

Correspondence education

Correspondence education is another form of distance learning in which there is exchange of study/teaching materials among students and teachers across the country, say geographically from one place to another, by post. Under correspondence course, students usually takes up lecture notes, lesson plans, textbook and problem sets from the teacher and after completing the assignment they send it back to the teacher for grading.

Usually, in correspondence education, the exchange of assignment takes place either through post or through electronic mail. The procedure adopted for admission to the courses and examinations are more or less the same as have been in use over the centuries in the traditional college/university education. The mechanism of correspondence education is illustrated in Figure 7.1.

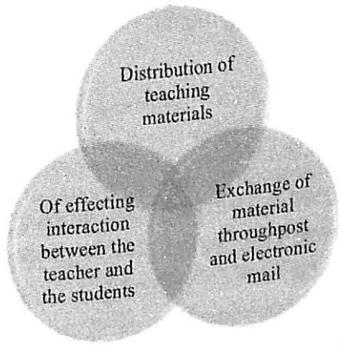


Fig. 7.1 Mechanism of Correspondence Education

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Advantages of correspondence education

The advantages of correspondence education may be summarized as follows:

- In such learning environment students become self-directed and very active.
- This forms of education system are easily scheduled.
- Here, self-instructional materials are easily available.
- Correspondence education generates flexibility. Students can complete course from home as well.
- Correspondence course is economically affordable by everyone.
- With this system of education, there is learning while earning.
- It is good for drop-out candidates and women, especially housewives.

Disadvantages of correspondence education

The disadvantages of correspondence education may be summarized as follows:

- Correspondence course does not offer the entire desired course to the students.
- There is lack of physical interaction between teacher and students.
- In this education system, students contact is not encouraged which is very good for learning.
- Students are generally left alone under correspondence education system.
- Sometimes, it becomes tough to handle both work and course as a result of which one gets hampered.

Availability of distance education courses

Distance education is present in many countries all over the world. It is practised in many subject areas. There are varieties of models for delivering instructions and guidance at a distance education. Some of the important models for delivering instructions and guidance at a distance education are as follows:

- **Traditional:** In this method, zero per cent online technology resources are utilized to deliver content or engage learners.
- **Web-facilitated:** Course is delivered primarily face-to-face, with a few per cent usage of online technologies such as utilizing a learning management system or Website to present syllabus and assignment information.
- **Blended/Hybrid:** This is a combination of online and face-to-face methods in which there is delivery conducted via online resources such as online discussions, posting and submission of assignments online, multimedia lecture content available online.
- **Online:** The primary facilitation of the course is online, usually with no face-to-face meetings.

Everyone can easily avail the courses provided by the institution of distant education. Usually, the people who avail distance education are not in a position that enables them to be attending regular courses. They could be persons who have to work for a living in order to support themselves and often also their families, workers who want to complete their primary or secondary school education; or skilled workers and technicians who want to improve their vocational qualification. Also, the agricultural labourers who intended

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to move into a town and, therefore, wish to prepare themselves for a new occupation; workers in occupations which come to an end and who, therefore, wish to prepare themselves for a new occupation; workers in occupations which come to an end and who, therefore, need retraining; immigrants who wish to obtain citizenship of their new country and have to acquire specific knowledge about it.

Students who live in sparsely settled areas, children of farmers in isolated area can also avail the courses of distance education just like the students who live too far away from the nearest day school of their own nationality such as children of diplomats, missioners, military personal abroad, children of experts employed in developing countries, children of persons in itinerant trades, sailors or the children of immigrants who are to be instructed in their mother tongue.

Besides them, persons who are unable to attend regular schools for health reasons: sick persons who are bedridden, handicapped persons, or people who have to stay in hospitals for longer time can also avail the education through distance education system. Persons who are hindered from attending regular schools by the state: prisoners' children and juveniles in reformatories can also be benefitted by distance education.

Apart from these five groups, there are distance students who do not come into this category. They might well be able to attend regular courses but prefer to enrol in distance education courses. Some do it in order to supplement the instruction of their regular school or to raise their level of general education; gifted students do it in order to reach an advanced level and still other people do it in order to find out whether they fit into a specific vocational pattern so as to clarify vocational options.

Finally, there are also teachers who study courses at a distance in order to inspire and prepare themselves for teaching. Usually, there are fewer students who wish to complete their secondary education in order to obtain entrance qualification for institutes of higher learning.

Thus, we find that every class of people can avail the use of distance education. It is easily available and easily assessable. It provides flexibility and abundant opportunity for individual to access education.

7.8 CONTINUING EDUCATION

Any organized educational activity outside the formal education system, whether operating separately or as an important feature of some broader activity that is intended to serve identifiable learning clientele and learning objectives, is termed as 'non-formal education'. The non-formal education usually embraces all forms of learning activities that are basically organized outside the formal education system such as distance education, hobby courses, etc.

While defining non-formal education, famous thinker P. H. Coombs stated that non-formal education is 'any organized programme of learning, carried on outside the framework, the rule and logistics of the formal education system'.

In the words of R. G. Paulsten, non-formal education is 'structured systematic non-school educational and training activities of relatively short duration in which sponsoring agencies seek concrete behavioural changes in fairly target population'.

Thus, the programme of non-formal education is a significant step to boost the education system of a country.

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Essential feature of non-formal education

The following are the essential features of the non-formal education:

- **A support system:** Non-formal education is not an alternative to the formal education system. It is a support system or a support service to the formal education system to realize the goal of Universalization of Elementary Education (UEE).
- **Out-of-school children:** Non-formal education caters to the needs of out-of-school children in the age group of 6–14. Children who have never been enrolled in a school, children who have dropped out of the school and girls the children who belong to SC/ST, rural communities and urban slums are primarily beneficiaries of the non-formal education system.
- **A flexible system:** Children can be enrolled in the non-formal education centre at any age, not necessarily at the age of six. There is no fixed age of entry, no fixed time table, in fact, nothing is rigidly followed in the non-formal education centre. Classes can be held in the morning, afternoon or even in the evening depending on the convenience of the local beneficiaries. Therefore, so children who work in the fields or are engaged in household works can be enrolled in the non-formal education centres.
- **Need based curriculum:** Problems and needs of the local community provide the content of the non-formal education curriculum. These problems and needs are related to several aspects of life such as health, vocation, family life, citizenship, culture, society, physical environment, etc. The non-formal education does not prescribe any syllabi in language, arithmetic and environmental studies as is in the formal system. It follows the integrated approach to curricular transaction.
- **Place of education:** The classes for the non-formal education can be held in a primary school, community centres or at any place in local communities.
- **Organization:** Non-formal education can be organized by the government departments and non-government organizations (NGO).
- **Less expensive:** Compared to the formal education, the non-formal education is less expensive in terms of material costs, teacher's salary, etc.

Continuing education, as the term indicates, is essentially a follow-up education. Its starting point depends on from where one wishes to take off and continues one's education in whatever field one wants. It can be in the nature of post-literacy to post-graduation programmes or anything in between. However, but in most cases, it would be highly flexible and unstructured—a point closer to the nature of the non-formal education. Continuing education is obviously a component, and essential strategy in the lifelong education concept.

Continuing education takes on from where the formal education or adult education leaves a learner. Therefore, the starting point for continuing education may be many-neo-literate, school dropouts with permanent literacy skills, secondary school leavers, college and university drop-outs and those who have completed the college and university education.

In the Indian context, the problem of continuing education is more pronounced at three levels, namely, neo-literate, school dropouts and the secondary school leavers. For the college and university leavers, or those who have completed these, there is a necessity of continuing education, though not as acute as to warrant priority over the neo-literate and school dropouts with permanent literacy. Women's welfare programmes and their related educational components are also included in this.

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There have been myriad efforts with success in the preparation and dissemination of post-literacy materials, more specifically under the National Literacy Mission's post-literacy programmes. Seen in the perspective of continuing education, quite a few agencies have been engaged in this activity. Agriculture, health and family welfare departments, and cooperative banks have been producing materials for their extension programmes, which could also be used for continuing education purposes.

Similarly, for the school leavers, there is a lot of scope for material preparation in areas like 'do it yourself', vocational education materials, and materials for small-scale entrepreneurship programme. Mention must be made of the systematic work in this regard of the NCERT, which produces vocation-based materials primarily meant for the senior secondary education programmes for the school leavers.

Further, the culture centres established in the different regions of the country also provide a potential avenue to further the cause of continuing education. However, these have not been visualized as continuing education agents, and whatever agencies have been responsible for these programmes have viewed them from their own perspective, and have not considered them as an activity of continuing education.

Check Your Progress

5. List the innovative means of evaluation in higher education.
6. What is meant by 'distance education'?
7. Give two advantages of open education.
8. List a few reasons which led to the popularity of distance education.
9. Name a few important models for delivering instructions and guidance at a distance education centre.

ACTIVITY

1. Search the Internet and list a few universities in India that offer correspondence education.
2. Browse through news articles and government websites and make a note on the latest reforms on the curriculum of higher education in India.

Did You Know

The Distance Education Council (DEC) is an apex body for the Open and Distance Learning (ODL) system in India. DEC is responsible for coordination, promotion and maintenance of standards of the ODL system.

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7.9 SUMMARY

In this unit, you have learnt that:

- Higher education, also known as further education, tertiary education and after school education, is the education after schooling. It aims at attaining mastery over a subject or a set of subjects of one's preference; and is delivered in colleges, institutions of higher learning and universities.
- In India, the system of higher education has made considerable change since Vedic period to the modern times. The onus of making higher education comparable to the international standards in modern times goes to the British.
- In the post-Independence era, several commissions were appointed to study and suggest recommendations to make it dynamic and constructive for individuals, society and the nation. As a result the number of universities has come up from 27 in 1951 to 570 in 2011. Enrolment of students also has crossed 1,50,00,000 mark in comparison to 3,60,000 in 1951.
- Indian higher education aims at reflecting upon the critical social, cultural, economic, moral and spiritual issues. Its course is dynamic and research oriented, competitive and promoting innovations in all walks of social and national life.
- The tasks of establishing open universities, de-linking degree from job and establishment of rural universities are integral parts of the objective of higher education as mentioned in the NPE of 1986.
- The structure of higher education in India is divided into two types. One of them is named as the 'institutional structure' and the other is called the 'academic structure'.
- The NPE of 1986 has laid down several plans pertaining to the higher education which involve elevating the standard of aims and functions of higher education, emphasis upon consolidation and expansion of facilities in existing institutions, opening a large number of autonomous institutions, regulating the admission process in the higher education institutions, redesigning the programmes of courses in higher education, enhancing research and development facilities and establishment of open universities for providing distance education.
- Development of innovative evaluation mechanisms has contributed appreciably to overcome the shortcomings of the conventional examination system. These help students to pay more attention towards understanding and generalization of the content and discourage memorization of the content.
- Development of innovative evaluation has made the evaluation an ongoing process rather than a periodical activity. These approaches would be able to reduce stress and related problems in students and help them to become more innovative and participative in classrooms as well as in their lives.
- Curriculum is the sum total of all the activities; scholastic or co-scholastic taking place in an educational institution. Developing curriculum for higher education is a cumbersome activity and involves seven steps from selection of topic to the settling a system of evaluation of the achievement of objectives. Along with there are seven principles of curriculum preparation—(i) challenge, (ii) comprehensiveness, (iii) sequence, (iv) intensity, (v) personalization, (vi) consistency and (vii) significance. These steps and principles of curriculum framing make learning more valuable and enjoyable for the learner.
- Curriculum of higher education has undergone rigorous changes in recent years. These include the efforts of Kothari Commission, National Policy of Education, 1986, Curriculum Development Centers of the University Grants Commission (UGC) in adopting a uniform and progressive curriculum for the future.
- The National Curriculum Framework (NCF), 2005, suggested that education up to secondary school should provide adequate knowledge base, experience, language abilities and maturity to engage in various types of knowledge in complete sense, concepts, structure of knowledge, investigation techniques and validation measures. It should also make the learners to recognize their area of study in higher education.
- The relationship between distance education and open education is that open education can be effected easily through distance education systems; on the one hand, other advances in the practice of distance education help and encourage education to become more and more open.
- Distance education is present in many countries all over the world. There are varieties of models for delivering instructions and guidance at a distance education.
- Continuing education takes on from where the formal education or adult education leaves a learner. Therefore, the starting point for continuing education may be many-neo-literate, school dropouts with permanent literacy skills, secondary school leavers, college and university drop-outs and those who have completed the college and university education.

7.10 KEY TERMS

- **Autonomy:** Right to regulate institutions in all areas of its management, under the statutes set by the governments, Indian Universities Board (IUB) and University Grants Commission (UGC)
- **Correspondence education:** Exchange of study/teaching materials among students and teachers across the country, say geographically from one place to another, via post
- **Curriculum:** Collective entity of all the efforts, activities and assessments taking place in an institution of teaching and learning
- **Evaluation:** Assessment of student's progress towards stated objectives, the efficiency of the teaching and the effectiveness of the curriculum
- **Open Book Examinations (OBE):** Examinations conducted to lessen stress among students and provide them with the opportunity of answering questions from a valid source

7.11 ANSWER TO 'CHECK YOUR PROGRESS'

1. Higher education is the education after schooling. It aims at attaining mastery over a subject or a set of subjects. It is also known as Further Education, Tertiary Education and Under-graduate Education.
2. The government under the British tried to modernize higher education by opening universities and colleges on European pattern. There were several commissions

viz., Wood's Dispatch (1854), Indian University Commission (1904) and Calcutta University Commission (1917) which set milestones in the development of international standard higher education in India.

3. Prominent commissions appointed by the Government of India after 1947 are University Education Commission (1948), National Education Commission (1964–66), National Education Policy (1968), National Education Policy (1986) and its Programme of Action (1992).
4. The traditional evaluation pattern has several shortfalls such as excessive emphasis on rote learning, subjectivity, poor content coverage and problem related to its administration.
5. Some of the innovative scheme of evaluation involves: application of scientific approach, multiple choice questions, combined question papers, open book examinations, on demand examinations, and continuous and comprehensive evaluation (CCE).
6. Distance education is characterized by a non-conformist and non-traditional approach, which, in effect, questions existing norms of traditional education and seeks to provide a new orientation to the education process. It assumes premises about the nature of learning that are vastly different from those governing the traditional system of education.
7. Two advantages of open education are:
   (i) It develops a student's autonomy and responsibility.
   (ii) It moves away from whole-class instructions to differentiated activities.
8. There are various reasons for the growing popularity of distance education. Some of these are as follows:
   - Over-population
   - Knowledge explosion
   - Qualification enhancement
   - Double access
   - Geographical segregation
   - Financial circumstances
   - Self-improvement
   - Easy availability
9. Some of the important models for delivering instructions and guidance at a distance education are as follows:
   - **Traditional:** In this method, zero per cent online technology resources are utilized to deliver content or engage learners.
   - **Web-facilitated:** Course is delivered primarily face-to-face, with few per cent usage of online technologies such as utilizing a learning management system or website to present syllabus and assignment information.
   - **Blended/Hybrid:** This is a combination of online and face-to-face methods in which there is delivery conducted via online resources such as online discussions, posting and submission of assignments online, multimedia lecture content available online.
   - **Online:** The primary facilitation of the course is online, usually with no face-to-face meetings.

7.12 QUESTIONS AND EXERCISES

Short-Answer Questions

1. What are the objectives of higher education in India?
2. Highlight the special features of higher education as per the NPE of 1986.
3. What are the problems of the traditional Indian evaluation system?
4. Write a short note on the correspondence education in India.
5. What are the essential features of the non-formal education in India?

Long-Answer Questions

1. Explain the structure of higher education in India.
2. Give a detailed account on the provisions enlisted in the NPE of 1986.
3. Explain the problems related with the scarcity of financial resources and autonomy of universities in India.
4. Write a short note on the principles of curriculum framing in higher education.
5. Give a detailed account on the present status of distance education and continuing education in India.

7.13 FURTHER READING

Ranjan, Y.S. (2001). *Way Beyond The Three R's: India's Education Challenge in the 21st Century.*

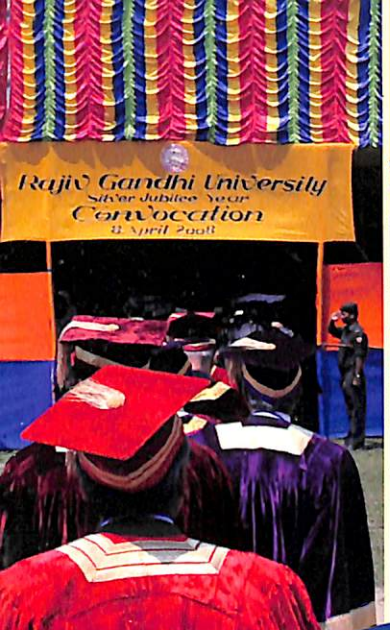
Reddy, M.C. Reddeppa and P. Adinarayana Reddy. (2007). *Education and Women Empowerment.*

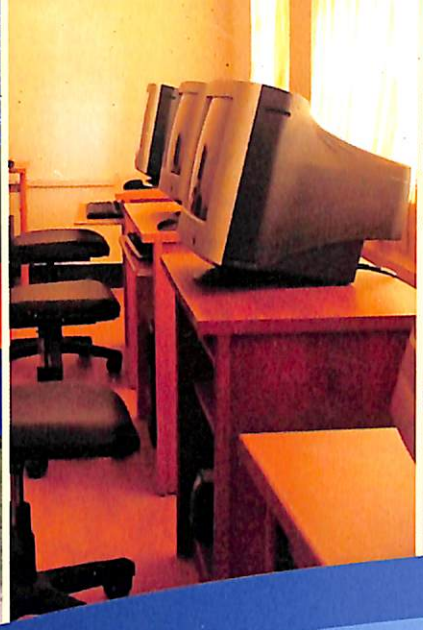
Agrawal, S.P. and J.C Aggarwal. (2006). *Women's Education in India: Historical Review Present Status Perspective Plan with Statistical Indicators.*

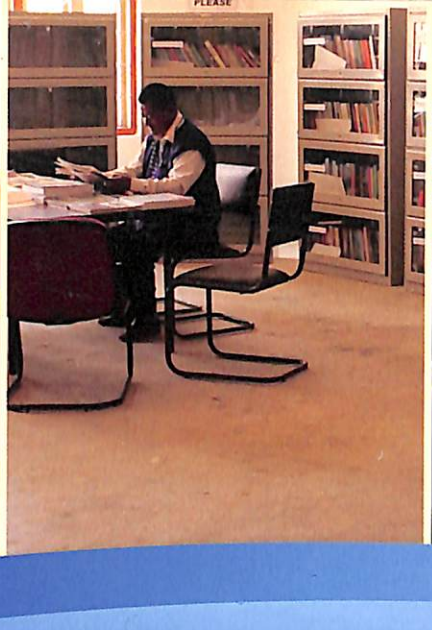
Deka, Birendra. *Higher Education in India: Development and Problems.* Atlantic.

Patanjali, P.C. *Development of Higher Education in India.* Shree Publishers.

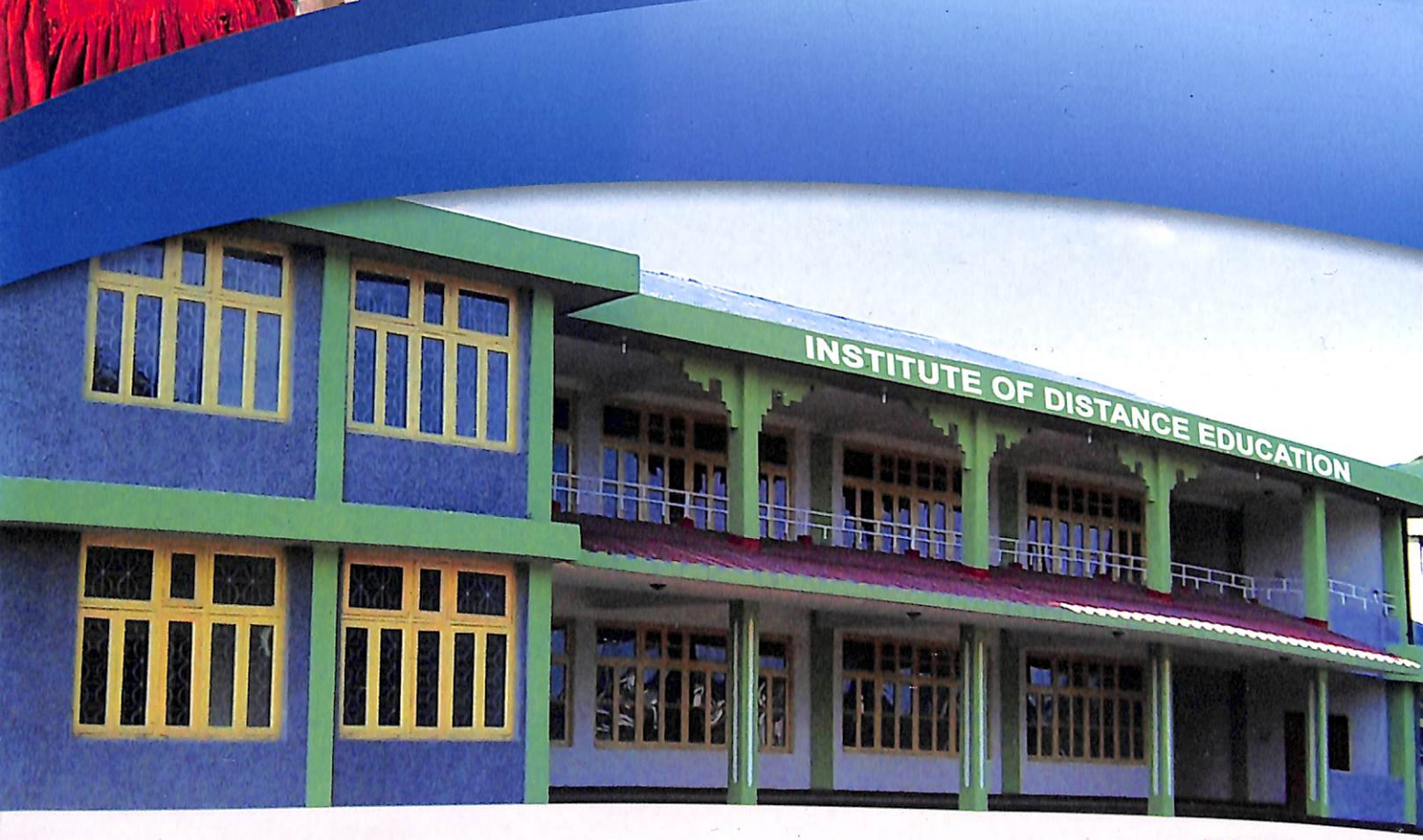
Nicholls Gill. *Developing Teaching and Learning in Higher Education.* Routledge.











M.A. (Education)

FIRST YEAR

MAEDN-404

Unit 8

INSTITUTE OF DISTANCE EDUCATION
Rajiv Gandhi University

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TEACHER EDUCATION AND PROBLEMS OF INDIAN EDUCATION

UNIT 8 EDUCATION BACKWARDNESS IN INDIA

(With Special Reference to Arunachal Pradesh)

Structure

8.0 Introduction
8.1 Unit Objectives
8.2 Literacy and its Factors in the Northeast
  8.2.1 Arunachal Pradesh - An Overview
  8.2.2 Educational History of Arunachal Pradesh
  8.2.3 Literacy Rate
  8.2.4 Gender Gap in Literacy
8.3 Constraints in Communications and Physical Facilities
  8.3.1 Physical Facilities
8.4 Education of Socio-Economically Disadvantaged Section
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8.0 INTRODUCTION

North-east India, for geographical and historical reasons, has been a backward region of India. The 1947 partition of British India detached it from the rest of India except for a 12-mile wide chicken- neck near Siliguri in North Bengal. It is rather recently that government is paying attention to the development of north-east India, particularly, Arunachal Pradesh.

This unit will give you an outlook of the literacy rate in the North-East, with special reference to Arunachal Pradesh. It will try to understand the geographical and physical constraints in establishing infrastructure, such as, schools and libraries.

8.1 UNIT OBJECTIVES

After going through this unit, you will be able to:

- Discuss the history of education in Arunachal
- Explain the discrepancies in literacy rate in Arunachal
- Evaluate the constraints in communications and lack of physical facilities
- Describe the schemes for the socio-economically disadvantageous sections
- Assess the lack of effective teacher education programmes in the North-East

8.2 LITERACY AND ITS FACTORS IN THE NORTHEAST

The eight states in the Northeast — Arunachal Pradesh, Assam, Manipur, Meghalaya, Mizoram, Nagaland, Tripura and Sikkim — cover an area of 2,62,179 sq. km. constituting 7.9 per cent of the country's total geographical area. According to 2001 census, only 39 million people or about 3.8 per cent of the total population of the country live here. Traditionally, the Northeast has a poor record educationally. The literacy rate of the region, according to 2001 census, was 55.3 per cent, much lower than the national average. This has changed in the past decade. The 2011 census shows Tripura, Mizoram and Sikkim have high literacy rate, just after Kerala, which has 100 per cent literacy rate. Arunachal Pradesh holds the 34th position among states and Union territories.

8.2.1 Arunachal Pradesh — An Overview

Arunachal Pradesh is the land of breathtakingly beautiful sunrises between skyrocketing mountains, sparkling rivers, lakes, and ample of snow. It has vast expanse of rolling plains, hills, and beautiful water bodies at the far eastern edge of India. Interestingly, Arunachal Pradesh has the least population density, with just over 13 lakh people living in the vast area of over 80,000 kilometers square. The population density of Arunachal Pradesh is even less than 20 people per kilometer square of area, according to Arunachal census of 2011. Population growth rate is more than 25 per cent here, but has shown decrement since the last census.

Literacy in this state, however, is far more disappointing. With only over 60 per cent of literate citizens, it is one of the two states in India having lowest literacy. On the positive side, the literacy has increased since the last survey by more than 10 per cent. Additionally, the increase in female literacy is greater than that in males'. Though large in size, the state of Arunachal has far less area urbanized; making most of the population live in rural areas. Whatever small urban areas exist, the gender ratio found in those areas is dissatisfactory, whereas the sex ratio in villages shows above 900 females per 1000 males.

As vibrant is the land, so are the people living in it. Arunachal population speaks above 50 dialects in total owing to the cultural diversity. Yet, the official language is English. The state capital is Itanagar. Some other major cities like Bomdila, Bhismaknagar, and Bhalukpong are worth visiting. Numerous tribes reside in the state each following their own cultures and ceremonies. Owing to wide tourism opportunities due to the Buddhist monasteries and cultural fests, the state has been gradually progressing.

The capital city which is also the largest city in the state of Arunachal Pradesh is Itanagar. The languages spoken in the Arunachal Pradesh state includes English. In total Arunachal Pradesh state comprises 16 districts. The ISOCODE assigned by International Organization for Standardization for Arunachal Pradesh state is AR.

According to census 2011, the literacy rate in Arunachal Pradesh has seen upward trend and is 65.38 per cent. Of that, male literacy stands at 72.55 per cent while female literacy is at 53.52 per cent. In 2001, literacy rate in Arunachal Pradesh stood at 54.34 per cent of which male and female were 65.43 per cent and 40.23 per cent literate, respectively. In actual numbers, total literates in Arunachal Pradesh stands at 766,005 of which males were 439,868 and females were 326,137.

8.2.2 Educational History of Arunachal Pradesh

During the beginning of the 20th century, Arunachal had no schools at all. The first school was established in 1918, in Pasighat, and the second in 1922, in Dambuk. Not surprisingly, both locations bordered the more developed state of Assam, and the establishment of schools went hand-in-hand with the advancement of regular administration. Progress was slow and, at the time of Independence, there were only three schools in the entire state and, only up to the primary level.

Most people in the state were not familiar with the written word until recently; many did not have a script of their own. The exceptions were the Buddhist tribes of the Kameng region and the Lower Lohit Valley. The monasteries of the former provided religious instruction in the Tibetan language and, the Khamptis brought with them (from present-day Myanmar) the tradition of reading and writing in the Tai-Khampti language.

As a result and out of necessity, knowledge was passed on from generation-to-generation, through oral histories and learning by doing, and the responsibility of teaching and guiding fell on the older people. The ballads that people sing even today are not just expressions of music and creativity, but, are rooted in time, place, and culture, and have a context. They are an important means of transmitting knowledge.

There were community institutions where young men and women were initiated into their responsibilities and taught skills that were relevant to their needs. In these societies, there was a consequential premium on recall, on precedent and oratory, and on age and experience. The knowledge of farming, of hunting, of conservation, of herbs and medicinal plants, were all passed down from one generation to the next. Social skills and community responsibilities were learnt in the Kebangs and community houses.

Newer systems of learning and knowledge have come to Arunachal Pradesh and the domain of knowledge that a person needs to encompass has broadened. The old systems, based on clan and community, have come under stress and have weakened but, they are still very important.

8.2.3 Literacy Rate

Given the fact that most languages in the region do not have a script of their own, it is not surprising that the literacy levels in the state were extremely low. However, for a people who have recently been introduced to the written word, the progress in the last few decades has been remarkable. Along with formal education, the literacy rate in Arunachal has also increased considerably. As late as 1981, the literacy rate in Arunachal Pradesh was 25.55 per cent, which means that only one in four people was literate. The literacy rate for men was 35.12 per cent (one in three men was literate) while for women it was only 14.02 per cent (one in seven women was literate). All these rates were substantially below the national average. The literacy rate varied from a high of 34.94 per cent in Lohit district to as low as 9.39 per cent in East Kameng and 15.75 per cent in the Upper Subansiri district.

The definitions of population used in the estimation of the literacy rate vary across the different census documents. The 1981 census takes the 6+ population as the reference group; whereas the 1991 census and 2001 census both take the 7+ population as the reference group for the estimation of the literate population. To make the literacy figures comparable, the literacy rates for the districts for the year 1981 have been computed taking the literacy rate of the 7+ population. (East Kameng and Upper Subansiri) the

female literacy rates were as low as 3.52 and 6.48 per cent, respectively. The districts of West Kameng, West Siang, East Siang, Dibang Valley, and Lohit enjoyed literacy rates above the state average but, everywhere the literacy levels were low.

Starting from this low literacy rate, the state has made rapid progress. The literacy rate in the state increased from 25.55 per cent in 1981 to 41.59 per cent in 1991 and further to 54.34 per cent in 2001. In the 1981-91 decade, the literacy rate for men went up to 51.45 per cent (an increase of 16.33 percentage points). During the same period, the male literacy rate in the country increased by 7.75 percentage points.

Not surprisingly, the four districts with the highest literacy rates in 1981, continued to have literacy levels above the state average. West Siang, East Siang, Dibang Valley, Lohit, as well as West Kameng and Changlang had literacy rates above the state average. Tawang, East Kameng, Lower Subansiri, Upper Subansiri, and Tirap continued to have literacy rates below the state average. Women's literacy rate registered an increase of 15.67 percentage points in the same period. At the national level, the increase in women's literacy rate was 9.53 per cent points in the 1981-91 period. However, women's literacy continued to be low, with a rate of 29.69 per cent, only one in three women in Arunachal was literate. For India as a whole, the literacy rate for women in 1991 was 39.29 per cent. Women's literacy was extremely low in Tawang, East Kameng, and Tirap (all below 20 per cent).

By 2001, the literacy rate in Arunachal Pradesh climbed up to 63.83 per cent for men, 43.53 per cent for women and 54.34 per cent for the entire population. Arunachal is ranked at number 32 among the 35 states and Union Territories of the country in terms of literacy, according to the 2001 Census. The literacy rate in Arunachal Pradesh is only 10.50 percentage points below the all-India literacy rate of 64.80 per cent. The gap between the literacy rate for India and the state is now 11.40 percentage points for men, 10.20 percentage points for women and 10.50 percentage points for the total population. Once again, districts like West Kameng, Papum Pare, West Siang, East Siang, Dibang Valley, Lower Subansiri, and Lohit have literacy rates higher than the state average.

However, in eight districts — Tawang, East Kameng, Kurung Kumey, Upper Subansiri, Upper Siang, Dibang Valley (New), Changlang, and Tirap — the literacy rate is below the state average. (Changlang and Upper Subansiri have a literacy rate just above the 50 per cent mark). East Kameng is ranked second from the bottom with a literacy rate of 40.64 per cent, and less than one in three women is literate (the male literacy rate is 52.36 per cent and the female literacy rate is 28.59). Kurung Kumey district is ranked at the bottom with a literacy rate of 25.74 per cent; only one in four people is literate, and only one in three men is literate (male literacy rate of 34.08 per cent).

8.2.4 Gender Gap in Literacy

Across all the districts and the state, the gender gap in literacy is apparent. As late as the year 2001, there is a difference of more than 20 percentage points between male and female literacy rates. Seven districts (West Kameng, Papum Pare, Lower Subansiri, West Siang, East Siang, Lower Dibang Valley, and Lohit) have higher literacy rates for women than the State average. However, in Kurung Kumey district, only one out of six women is literate (female literacy is at 17.45 per cent). Women's literacy in Tawang, East Kameng, Kurung Kumey, Lower Subansiri, Upper Subansiri, Upper Siang, Dibang Valley (New), Changlang, and Tirap are all below the state average (43.53 per cent).

Notwithstanding the low literacy rates for women in many parts of the state, rapid gains have been made in women's literacy, and the difference in the literacy rates between men and women in Arunachal is smaller than that in the rest of the country.

Check Your Progress

1. Name the Northeastern states to which have improved their educational records?
2. When and where did the first two schools of Arunachal come up?
3. How was knowledge distributed among youngsters in the early days?
4. Name the districts where literacy rate among women were extremely low.

Did You Know

Rajiv Gandhi University, earlier known as Arunachal University, established in 1984, is the oldest university in Arunachal Pradesh. The foundation stone for the university was laid by the then Prime Minister of India Late Smt. Indira Gandhi. Before the inception of Rajiv Gandhi University, colleges of Arunachal Pradesh were affiliated to North Eastern Hill University, Shillong.

8.3 CONSTRAINTS IN COMMUNICATIONS AND PHYSICAL FACILITIES

The state being almost entirely hilly and covered by forest has difficult roads and communication channels. They greatly hinder the story of educational facility.

Enrolment, access, and performance

While the spread of the school system and the growth of literacy in Arunachal are encouraging, the high inter-district variation can be better understood by looking at the enrolment and availability of schools. The enrolment of children in schools shows the spread of education. Different measures can be used to analyse the enrolment of children in schools. Among the commonly used measures are the Gross Enrolment Ratio (GER), the age-specific enrolment ratio, the dropout rates and school attendance records.

Gross Enrolment Ratio

The Gross Enrolment Ratio (GER) is computed as the ratio of total enrolment at a particular level, irrespective of the age of the children, to the total population in the age group expected to be at that level of schooling. Thus, the GER at the primary school level would be a percentage of the total number of children enrolled to the total population in the age group 6 to 11 years. This ratio sometimes exceeds 100 per cent due to the inclusion of over-aged and under aged children. The district-wise Gross Enrolment Ratio for the primary and upper primary levels has been computed for the year 2001.

Gross enrolment ratio at the primary level

In 2001, the GER at the primary level in Arunachal Pradesh was 104.66 per cent. East Kameng, Papum Pare, Lower Subansiri, Upper Subansiri, West Siang, East Siang, and Upper Siang districts reported more than 100 per cent GER at the primary level. The GER exceeded 100 per cent in these districts due to the enrolment of over-aged and under-aged children at the primary level. In Lower Subansiri, the GER was as high as 180 per cent, and in West Siang, and in Upper Subansiri also it was very high. The low GER in Lohit (62.41 per cent), Changlang (64.88 per cent), Tirap (74.47 per cent), and Dibang Valley (80.72 per cent) is of concern.

Gross enrolment ratio at upper primary level

The GER at the upper primary level in 2001 was 79.05 per cent in Arunachal Pradesh, which is higher than the national average (58.64 per cent). This is, however, substantially lower than the GER at the primary level. There are some districts like Tawang, West Kameng, Lohit, and Changlang, which have a lower GER at the upper primary level than the national average. The low GER at the upper primary level (in the age group 11-13) in these four districts as well as in Tirap and Upper

Subansiri, could be due to either large-scale dropouts or never-enrolled children or both. It may also be due to there being a large number of children in the age group other than 6-10 years in classes I-V, and there being a greater proportion of students of the specified age, in the classes VI-VIII.

Age-specific enrolment ratio

The age-specific enrolment ratio (ASER) is another indicator of the level of participation of children in school. This ratio is defined as the number of children enrolled in the school in a particular age group (irrespective of the grade in which they are enrolled) to the total number of children in that age group. The limitation of this indicator is that it does not take into account the level/ class in which the child is enrolled. An examination of the data for the age-specific enrolment shows that Arunachal's performance in both 1981and 1991 is lower than the average for the country, but, the enrolment figures have improved over the period.

8.3.1 Physical Facilities

In last decade Arunachal Pradesh has made considerable progress in moving towards the goal of universal elementary education. While in 2000-01, before the commencement of Sarva Shiksha Abhiyan, there were just 1,576 primary and 537 upper primary government and government-aided schools; now the figures stand at 2,718 primary schools and 998 upper primary schools. Despite such a large number of primary schools added in recent years, there are gaps.

The 2011-12 Annual Work Plan and Budget of SSA Rajya Mission, Itanagar, shows there are still 124 habitations, with 3809 children in the age group 06-14 years who are deprived of schools. While five years ago, 30,562 children (i.e. 9.64 per cent of children in 06-14 years age group) remained out-of-school, as per enrolment data during the year 2010-11, 11,343 children (i.e. only 3.24 per cent) were not in school.

The percentage of single teacher primary schools is much higher (45.46 per cent) in Arunachal Pradesh, than the national average of 20.12 per cent. And the percentage of total schools having drinking water facilities and toilets in rural areas is lower than the national average of 47.98 per cent and 12.76 per cent, respectively. In Arunachal Pradesh, only 5.57 per cent of the total schools have separate toilets for girls, which is lower than the national average of 6.43 per cent.

Availability of schools, attendance, and performance

While four districts have achieved a gross enrolment ratio of 100 per cent at the primary level and one district at the upper primary level, there continue to be many areas in Arunachal where access to schooling remains an issue. The Tenth Plan document for Arunachal Pradesh clearly says that 85 per cent of the population has primary schooling facilities within a distance of 2 km and the remaining 15 per cent of the population live in far-flung areas of the state with no road connectivity. Since the population of Arunachal is scattered, the standard norms of population followed elsewhere in the country for the establishment of schools are not relevant in Arunachal Pradesh. The Seventh All-India Educational Survey, 2002, also provides information regarding the availability of school facilities in the habitations/villages.

At the state level, 51.62 per cent of the habitations have primary school facilities within a one kilometre distance (39.64 per cent have a primary school within them and another 11.98 per cent have a primary school within a one kilometre distance but not within them). About 32 per cent (10.64 per cent plus 20.52 per cent) of habitations have schooling facilities at the upper primary level, within a distance of three kilometers. The worst-affected districts in the provisioning of primary schooling, where more than 50 per cent of the habitations do not have school facilities within a one kilometre distance, are Tawang, Papum Pare, Kurung Kumey, Lower Subansiri, Upper Subansiri, Dibang Valley and Lohit. The problem is most acute in the districts of Kurung Kumey and Dibang Valley, where 75.11 and 84.82 per cent of the habitations, respectively do not have primary schools within a radius of one kilometre.

As high as 68.83 per cent of all habitations in Arunachal do not have school facilities within a three- kilometre distance at the upper primary level. In West Kameng, East Kameng, Kurung Kumey, Upper Subansiri, Dibang Valley, Upper Siang, and Lohit, more than 70 per cent of the habitations do not have upper primary school facilities within a distance of three kilometres.

Absence of adequate schooling facilities both at the primary and upper primary levels results in large-scale prevalence of dropouts and non-enrolment. Dropout rates at the primary and upper primary level in Arunachal in 2003 were 20 per cent and 36 per cent, respectively. The main reasons for the non-enrolment and dropout of the children in the age group 6-17 years, as given by NFHS-2, are that the school is too far away (more boys than girls gave this reason), or that the children are required for house work (both boys and girls cited this as a reason), and not interested in studies (more boys than girls gave this as a reason).

Cost was also an issue and between 10 and 15 per cent of the children said that this was the main reason for them not attending school. The percentage of children citing that 'the school is too far away' as the main reason for not attending school is the highest in Arunachal Pradesh among the north-eastern states. Therefore, adequate provisioning of schooling facilities is imperative.

The establishment of inter-village boarding schools is a solution to the problem of setting up schools in small and remote habitations, and to the issue of provisioning of primary schools for children

Check Your Progress

5. What is gross enrolment ratio?
6. What is age-specific enrolment ratio?
7. According to the latest data, how many primary and upper primary schools do Arunachal Pradesh have?
8. Identify two reasons for low enrolment in schools.

8.4 EDUCATION OF SOCIO-ECONOMICALLY DISADVANTAGED SECTION

Article 46 of the Constitution states that, 'The state shall promote, with special care, the education and economic interests of the weaker sections of the people, and, in particular of the Scheduled Castes and Scheduled Tribes, and shall protect them from social injustice and all forms of social exploitation". Articles 330, 332, 335, 338 to 342 and the entire Fifth and Sixth Schedules of the Constitution deal with special provisions for implementation of the objectives set forth in Article 46. These provisions need to be fully utilized for the benefit of these weaker sections in our society.

After Independence, the Government of India has taken number of steps to strengthen the educational base of the persons belonging to the Scheduled Castes and Scheduled Tribes. Pursuant to the National Policy on Education-1986 and the Programme of Action (POA)-1992, the following special provisions for SCs and STs have been incorporated in the existing schemes of the Departments of Elementary Education and Literacy and Secondary and Higher Education (External website that opens in a new window):

a. relaxed norms for opening of primary/middle schools; a primary school within one km walking distance from habitations of population up to 200 instead of habitations of up to 300 population.
b. Abolition of tuition fee in all States in Government Schools at least up to the upper primary level. In fact, most of the states have abolished tuition fees for SC/ST students up to the senior secondary level.
c. Incentives like free textbooks, uniforms, stationery, schools bags, etc., for these students.
d. The **Constitutional (86th Amendment) Bill,** notified on 13 December 2002, provides for free and compulsory elementary education as a Fundamental Right, for all children in the age group of 6-14 years.
e. **Sarva Shiksha Abhiyan (SSA):** It is a historic stride towards achieving the long cherished goal of Universalization of Elementary Education (UEE) through a time bound integrated approach, in partnership with States. SSA, which promises to change the face of elementary education sector of the country, aims to provide useful and quality elementary education to all children in the 6-14 age group by 2010.

The main features of the programme are:

(i) Focus on girls, especially belonging to SC/ST communities and minority groups.
(ii) Back to school campus for out of school girls.
(iii) Free textbooks for girls.
(iv) Special coaching remedial classes for girls and a congenial learning environment.
(v) Teachers' sensitization programmes to promote equitable learning opportunities.
(vi) Special focus for innovative projects related to girls education.
(vii) Recruitment of 50 per cent female teachers.

- **District Primary Education Programme (DPEP)**

The thrust of the scheme is on disadvantaged groups like girls, SCs/STs, working children, urban deprived children, disabled children, etc. There are specific strategies for girls and SCs/STs; however, physical targets are fixed, in an integrated manner including coverage of these groups as well. According to a study by NIEPA, schools in DPEP districts had more than 60 per cent students belonging to SC/ST communities.

- **Mahila Samakhya (MS)**

MS addresses traditional gender imbalances in educational access and achievement. This involves enabling women (especially from socially and economically disadvantaged and marginalized groups) to address and deal with problems of isolation and lack of self-confidence, oppressive social customs and struggle for survival, all of which inhibit their empowerment.

- **National Programme for Education of Girls at Elementary Level (NPEGEL)**

The NPEGEL under the existing scheme of Sarva Shiksha Abhiyan (SSA) (External website that opens in a new window) provides additional components for education of girls under privileged/ disadvantaged at the elementary level. The Scheme is being implemented in Educationally Backward Blocks (EBBs) where the level of rural female literacy is less than the national average and the gender gap is above the national average, as well as in blocks of districts that have at least 5 per cent SC/ST population and where SC/ST female literacy is below 10 per cent based on 1991.

- **Shiksha Karmi Project (SKP)**

SKP aims at universalization and qualitative improvement of primary education in remote, arid and socio-economically backward villages in Rajasthan with primary attention to girls. It is noteworthy that in Shiksha Karmi Schools, most of the students are from SCs, STs and OBCs.

- **Kasturba Gandhi Balika Vidyalayas**

Under the scheme of Kasturba Gandhi Balika Vidyalayas (External website that opens in a new window), 750 residential schools are being set up in difficult areas with boarding facilities at elementary level for girls belonging predominantly to the SC, ST, OBC and minorities. The scheme would be applicable only in those identified Educationally Backward Blocks (EBBs) where, as per census data 2001, the rural female literacy is below the national average and gender gap in literacy is more than the national average. Among these blocks, schools may be set up in areas with concentration of tribal population, with low female literacy and/or a large number of girls out of school.

- **Jan Shikshan Sansthan (JSS)**

The Scheme of JSS or Institute of People's Education is a polyvalent or multifaceted adult education programme aimed at improving the vocational skill and quality of life of the beneficiaries. The objective of the scheme is education, vocational and occupational development of the socio-economically backward and educationally disadvantaged groups of urban/rural population particularly neo-literates, semi-illiterates, SCs, STs, women and girls, slum dwellers, and migrant workers.

Literacy campaigns have had an enormous impact on other social sectors. The campaigns have served the cause of promoting equity and social justice in society and fostering of a scientific temper and a sense of belonging to India's great composite culture and consciousness of unity in diversity.

- **Mid-Day Meal Scheme**

The Mid-Day Meal scheme is a successful incentive programme. It covers all students of primary classes in all government, local body and government aided schools in the country with the aim to improve enrolment, attendance and retention while simultaneously impacting on the nutritional status of the children.

- **Central Institute of Indian Languages (CIIL)**

The Central Institute of Indian Languages Mysore has a scheme of development of Indian Languages through research, developing manpower and production of materials in modern Indian Languages including tribal languages. The Institute has worked in more than 90 tribal and border languages.

- **Kendriya Vidyalayas (KVs)**

15 per cent and 7.5 per cent seats are reserved for SCs and STs respectively in fresh admissions. No tuition fee is charged from scheduled Caste and Scheduled Tribe students up to class XII.

8.5 TEACHER EDUCATION IN NORTHEAST INDIA

We have read about teacher education in India. Here we will concern ourselves with the North-East only.

Training for elementary teachers in the true sense is non-existent in Northeast India. Table 8.1 shows the number of B.Ed Colleges in the region.

Table 8.1 State Wise Number of B.Ed Colleges

States	Number of B.Ed colleges
Arunachal Pradesh	1
Assam	52
Meghalaya	3
Mizoram	1
Manipur	3
Nagaland	2
Sikkim	2
Tripura	1

Source: NCTE (National Council of Teacher Education) website

There has always been a dearth of trained teachers in the North-East. Once the Sarva Shiksha Abhiyan became operational in 2002, a large number of teachers were recruited for the programme, where training was inclusive. This effort, however, could not meet the total requirement of the state as it was a short-term scheme and could not be a substitute of a regular full-length training programme.

After the National Policy of Education was started in 1986, an effort was initiated under a centrally-sponsored scheme to various reorganize teacher education programmes, such as, SCERT. The District Institutes of Education and Training (DIETs) was, hence established in all states in a phased manner. The process was slow one and the reason contributing to it was inadequate infrastructures in the states and lack of faculty. Among the Northeastern states, except for Arunachal Pradesh and Sikkim, all the states have SCERTs.

The Right to Education Act, 2009, has put a lot of emphasis on teacher education programmes and each state has to take initiatives to reorient teachers to a child-friendly pedagogy and take responsibility of the welfare of the children.

North East Regional Institute of Education

The North East Regional Institute of Education (NERIE) is a constituent unit of National Council of Educational Research and Training (NCERT), New Delhi. NERIE was set up at Shillong in 1995 to cater to the educational needs of the North Eastern states, viz., Assam, Arunachal Pradesh, Manipur, Meghalaya, Mizoram, Nagaland, Sikkim and Tripura. The other constituent units of NCERT are National Institute of Education (New Delhi); Central Institute of Educational Technology (CIET), New Delhi; Pandit Sunderlal Sharma Central Institute of Vocational Education (PSSCIVE), Bhopal; Regional Institute of Education (RIE), Ajmer; Regional Institute of Education (RIE), Bhopal; Regional Institute of Education (RIE), Bhubaneswar and Regional Institute of Education (RIE), Mysore

NERIE aspires to provide academic and technical support system to assist and advise the governments of the above mentioned states on policies and programmes on all aspects of school education and reshape the state curricula.

It primarily aims at capacity building of the state and district level resource institutions/teachers education institutions and State Boards of Secondary and Higher Secondary Education located in the region in undertaking research, development and training. The Institute will try to engage itself in (i) the promotion and support of the programmes of the Government of India and the NCERT, (ii) development of school education in the North- East, and (iii) development of a different kind of professional identity in the areas of language in education, science and mathematics education in the light of NCF 2005, teachers' professional development, research on sociological and cultural dimensions of Education, etc.

The programmes of NERIE focus on development of interventions for the special problems of school education in the region such as the problems of under qualified and untrained teachers, high rates of school dropouts, low levels of pupil achievement and high rates of unemployment among school leavers/school dropouts.

The programmes of NERIE also focus on research, development and training in the areas of national priority concerns such as universalization of elementary education, vocationalization of secondary education, increased educational accessibility for girls, SCs and STs and the physically challenged, improvement of science and mathematics education, computer education and educational technology.

In view of the special demographic, geographical, and other features of the region, a distinguishing characteristic of the NERIE will be its functioning modality marked by distance mode of learning and training in addition to the conventional face to face system of education and training. This could be a step towards decentralization of delivery of training by making it accessible to a large number of clienteles. The Institute will network with Indira Gandhi National Open University (IGNOU) and CIET, NCERT, New Delhi for the purpose. The Institute will make all efforts to preserve the ethnic/cultural identities of the people of the NE region.

Since the programmes of the Institute will be formulated on the basis of the specific needs of the NE states, most of the programmes will be organized in the concerned states in collaboration with the state departments of education, SCERTs cr Boards of Education except the common regional programmes. Keeping in mind the repeated requests from the Madrassa Board, the NERIE will also make efforts to improve the content and pedagogy of teaching secular subjects in the Madrassa schools of the region.

The long term role of the NERIE would be to facilitate development of human resource in the NE region so that the states are able to provide quality inputs in all aspects of school education. It is worth mentioning here that when the NERIE came into existence there were so many pre-service teacher training institutions operative in the region. This makes the NERIE different from the other RIEs. Keeping the aforementioned in mind, the NERIE will focus its attention on in-service teacher training programmes in the region.

Since the most important goal of the NERIE is to strengthen the functioning of the SCERTs and the DIETs in the NE States, it may start part time/correspondence M. Ed.; certificate courses in ECCE/ICT for the in–service faculty members of the SCERTs and DIETs in couple of years from now, and pre-service teacher training programmes as and when the Institute is ready for the same.

Drawbacks of teacher education in the North-East

The biggest deficiency in teacher education in the North-East is the absence of pre-service teacher training. In most northeastern states, teacher's education or qualification is comprised on while recruiting teachers. They are appointed without training. Though it has been made compulsory in some states for teachers to have a minimum qualification of 10+2 with two-year diploma in teaching, none of the states have followed it. As a result, teachers are appointed without training and sent for training a few years later as in-service candidate. This system has increased the percentage of untrained teacher and added to the vicious circle of demand for teachers and supply of untrained ones.

Check Your Progress

9. How many B.Ed colleges do Arunachal have?
10. Why was the North East Regional Institute of Education set up?
11. What is the aim of North East Regional Institute of Education?
12. What is the biggest hindrance to teacher education in the North-East?

ActivityFind out what steps the state government has taken to improve primary education in Arunachal. How many primary schools are there in one district and what is the rate of enrolment in them.

8.6 SUMMARY

In this unit, you have learnt that:

- Arunachal Pradesh has only over 60 per cent of literate citizens, it is one of the two states in India with low literacy.
- According to census 2011, the literacy rate in Arunachal Pradesh has seen upward trend and is 65.38 per cent.
- During the beginning of the 20th century, Arunachal had no schools at all.
- The first school was established in 1918, in Pasighat, and the second in 1922, in Dambuk.
- Given the fact that most languages in the region do not have a script of their own, it is not surprising that the literacy levels in the state were extremely low.
- However, the literacy rate in the state increased from 25.55 per cent in 1981 to 41.59 per cent in 1991 and further to 54.34 per cent in 2001.
- By 2001, the literacy rate in Arunachal Pradesh climbed up to 63.83 per cent for men, 43.53 per cent for women and 54.34 per cent for the entire population.
- Across all the districts and the state, the gender gap in literacy is apparent. As late as the year 2001, there is a difference of more than 20 percentage points between male and female literacy rates.
- Different measures can be used to analyse the enrolment of children in schools. Among the commonly used measures are the Gross Enrolment Ratio (GER), the age-specific enrolment ratio, the dropout rates and school attendance records.
- The GER at the upper primary level in 2001 was 79.05 per cent in Arunachal Pradesh, which is higher than the national average (58.64 per cent).
- An examination of the data for the age-specific enrolment shows that Arunachal's performance in both 1981and 1991 is lower than the average for the country, but, the enrolment figures have improved over the period.
- At the state level, 51.62 per cent of the habitations have primary school facilities within a one kilometre distance (39.64 per cent have a primary school within them and another 11.98 per cent have a primary school within a one kilometre distance but not within them).
- Absence of adequate schooling facilities both at the primary and upper primary levels results in large-scale prevalence of dropouts and non-enrolment.
- After Independence, the Government of India has taken number of steps to strengthen the educational base of the persons belonging to the Scheduled Castes and Scheduled Tribes.
- Training for elementary teachers in the true sense is non-existent in Northeast India.
- The North East Regional Institute of Education (NERIE) is a constituent unit of National Council of Educational Research and Training (NCERT), New Delhi.
- NERIE aspires to provide academic and technical support system to assist and advise the governments of the above mentioned states on policies and programmes on all aspects of school education and reshape the state curricula.

8.7 KEY TERMS

- **Age-specific enrolment ratio (ASER):** It is an indicator of the level of participation of children in school.
- **Gross Enrolment Ratio (GER):** It is computed as the ratio of total enrolment at a particular level, irrespective of the age of the children, to the total population in the age group expected to be at that level of schooling.

8.8 ANSWERS TO 'CHECK YOUR PROGRESS'

1. The 2011 census shows Tripura, Mizoram and Sikkim have high literacy rate, just after Kerala, which has 100 per cent literacy rate.
2. The first two schools were established in Pasighat in 1918, and in Dambuk, in 1922, both bordering the more developed state of Assam.
3. Arunachal till late did not have a script of its own. Hence, oral history was passed on by the older generation and much of the learning was learning by doing.
4. Women's literacy was extremely low in Tawang, East Kameng, and Tirap (all below 20 per cent).
5. The gross enrolment ratio (GER) is computed as the ratio of total enrolment at a particular level, irrespective of the age of the children, to the total population in the age group expected to be at that level of schooling.
6. This ratio is defined as the number of children enrolled in the school in a particular age group (irrespective of the grade in which they are enrolled) to the total number of children in that age group.
7. Arunachal Pradesh has 2,718 primary schools and 998 upper primary schools, according to the latest data.
8. Two major causes for low enrolment to schools are cost and distance.
9. Arunachal has one B.Ed college.
10. NERIE was set up at Shillong in 1995 to cater to the educational needs of the North Eastern states, viz., Assam, Arunachal Pradesh, Manipur, Meghalaya, Mizoram, Nagaland, Sikkim and Tripura.
11. The primary aim of North East Regional Institute of Education (NERIE) is capacit building of the state and district level resource institutions/teachers education institutions and State Boards of Secondary and Higher Secondary Education located in the region in undertaking research, development and training.
12. The biggest hindrance to teacher education in the North-East is lack of pre-service training.

8.9 QUESTIONS AND EXERCISES

Short-Answer Questions

1. How has Arunachal improved its educational sector?
2. How are schools distributed in districts of Arunachal Pradesh?
3. Write a note on gender gap and literacy.
4. Why is there a shortage of schools in the state?
5. What are the problems of teacher education in Arunachal Pradesh?

Long-Answer Questions

1. Discuss the educational scenario of the North-East.
2. Literacy rate in Arunachal Pradesh has seen upward trend. Justify this sentence.
3. Discuss the gross enrolment ration in the primary and upper primary levels of Arunachal Pradesh.
4. Describe the various schemes for SCs, STs, and rural population in Arunachal.

8.10 FURTHER READING

Begi. Joram. (2007). Education in Arunachal Pradesh Since 1947: Constraints, Opportunities, Initiatives and Needs. New Delhi: Mittal Publications.

Biswas. Nikunja. B. (1999). Education in North-east India: With Special Reference to Arunachal Pradesh . Delhi: Shipra Publications.

Das. Sanjukta. (2011). Primary Education in Hills of Arunachal Pradesh. Germany: Lambert Academic Publishing.

http://planningcommission.nic.in/plans/stateplan/sdr_pdf/shdr_ap05.pdf

http://mdoner.gov.in/content/arunachal-pradesh-2

http://www.census2011.co.in/census/state/arunachal+pradesh.html