Teacher Education

Unit 1

Objectives

After studding this this unit you will be able to

- Give Meaning and Scope of Teacher Education
- State Objectives of Teacher education at elementary , secondary and college level
- Explain Recommendations of Education Commission (1964-66) and NPE (1986, 1992) ON Teacher Education

Introduction

It is well known that the quality and extent of learner achievement are determined primarily by teacher competence, sensitivity and teacher motivation.

The National Council for Teacher Education has defined teacher education as A programme of education, research and training of persons to teach from preprimary to higher education level.

Meaning

Teacher education refers to the policies and procedures designed to equip prospective teachers with the knowledge, attitudes, behaviors and skills they require to perform their tasks effectively in the classroom, school and wider community.

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, allthe 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 hisresponsibilities more effectively. In 1906-1956, the program of teacher preparation was called teacher training. It prepared teachers as mechanics or technicians. It had narrower goals with its focus being only on skill training. The perspective 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. Itincludes 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 s kills, computer skills, information   retrieving and management skills and above all life long 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

Nature of Teacher Education

1) Teacher education is a continuous process and its pre

service and in service components are complimentary to each other.

According to the International Encyclopedia of Teaching and Teacher education (1987), —Teacher education can be considered in three phases

Preservice, Induction and Inservice. The three phases are considered as parts of a continuous process.

2)Teacher education is based on the theory that —Teachers are made, not born‖ in contrary to the assumption, —Teachers are born, not made. Since teaching is considered an art and a science, the teacher has to acquire not only knowledge, but also skills that are called —tricks of the trade.

3)Teacher education is broad and comprehensive. Besides pre service and in- service programmes for teachers, it is meant to be involved in various community programmes and extension activities, viz adult education and non formal education programmes, literacy and development activities of the society.

4)It is ever evolving and dynamic. In order to prepare teachers who are competent to face the challenges of the dynamic society, Teacher education has to keep abreast of recent developments and trends.

5) The crux of the entire process of teach er education lies in its curriculum, design, structure, organization and transaction modes, as well as the extent of its appropriateness.

6) As in other professional education programmes the teacher education curriculum has a knowledge base which is sensitive e to the needs of field applications and comprises meaningful, conceptual blending of theoretical understanding available in several cognate disciplines. However the knowledge base in teacher education does not comprise only an admixture of concepts and principles from other disciplines, but a distinct gestalt' emerging from the conceptual blending', making it sufficiently specified.

7) Teacher education has become differentiated into stage- specific programmes. This suggests that the knowledge base is adequately specialized and diversified across stages, which should be utilized for developing effective processes of preparing entrant teachers for the functions which a teacher is expected to perform at each stage.

8) It is a s ystem that involves an interdependenc e of its Inputs, Processes and Outputs.

Definition and Meaning of Teacher Education

Good"s dictionary of Education defines Teacher Education as "All formal and informal activities and experiences that help to qualify to a person to assume the responsibility as a member of the educational profession or to discharge his responsibility most effectively"

1. **Wikipedia: Teacher education** refers to the policies and procedures designed to equip prospective teachers with the knowledge, attitudes, behaviors and skills they require to perform their tasks effectively in the classroom, school and wider community.

Although ideally it should be conceived of, and organised as, a seamless continuum, teacher education is often divided into these stages Which is 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);

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- *teacher development* or *continuing professional development (CPD)* (an in-service process for practicing teachers).

Britannica: **Teacher education,** any of the formal programs that have been established for thepreparation of teachers at the elementary- and secondary-school levels.

Some of the most important objectives of teacher education are as follows:

1. Imparting an adequate knowledge of the subject- matter:

The objective of teacher education is to develop a good command of the subject matter of the assignment given to him in the colleges.

2. Equipping the prospective teachers with necessary pedagogic skills:

The main objective of teacher education is to develop a skill to stimulate experience in the taught, under an artificially created environment, less with material resources and more by the creation of an emotional atmosphere. The teacher should develop a capacity to do, observe, infer and to generalize.

3. Enabling the teacher to acquire understanding of child psychology:

The objective is to understand the child psychology so that the teacher is able to appreciate the difficulties experienced by children so as to bring about new modes and methods of achieving the goals in consonance with the reactions of the children.

4. Developing proper attitudes towards teaching:

One of the major objectives of teacher education is to develop proper altitudes towards teaching as a result of which he will be able to maximize the achievements from both the material and human resources. T here is also development of a proper perception of the problems of universal enrolment, regular attendance, year-to-year promotion.

5. Developing self-confidence in the teachers:

The objectives of teacher education are development of the ability to take care of himself in terms of:

(a) Adjustment with the physical conditions,

(b) Healthy adjustment with the social environment

(c) Adjustment with himself to derive emotional satisfaction with his life.

6. Enabling teachers to make proper use of instructional facilities:

The objective of teacher education is to develop the capacity to extend the resources of the school by means of improvisation of instructional facilities.

7. Enabling teachers to understand the significance of individual differences of child and to take appropriate steps for their optimum development:

The objective of teacher education is to know the causes of individual differences as a result of which he will be able to develop the ability to be a child with children, an adult with the adults, a responsible citizen among the community.

8. Development of the ability to give direct satisfaction of parents from the achievement of children in terms of:

(a) Proper habits of taking care of the body,

(b) Proper attitudes reflected in the behaviour of the children at home, in the school, in the streets, at the farms and fields etc.

(c) Progress in the class.

The duties of the teacher is very much relevant in nursery, primary, middle, secondary, higher secondary schools. Hence the scope of teacher education is very vast. The duties of the teacher in different stages of education depend on the foundational general education of the teacher. Emphasis is to be on the practical aspects rather than theory.

Objectives of Teacher education at elementary , secondary and college level

Teacher education reaches teachers at all levels of education namely Pre primary , Primary, Secondary , Higher Secondary and Higher Education . The need and requirements of students

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and education vary at different levels . Hence level and stage – specific teacher preparation is essential.

Objectives of Teacher Education at Elementary stage

The objectives of teacher education at elementary stage are such that it helps the individual to

- possess knowledge of first and second language, mathematics, topics related to social and natural sciences.
- Develop skills to identify , select and organize learning experience pertaining to subjects mentioned above and also the skills to conduct tthem.
- Possess theoretical and practical knowledge in respect of the child health, physical and creational activities, work experiences, play games, creative art, music and tghe skills to conduct these activities.
- Develops understanding of the major psychological principles pertaining to growth and development oif children under his /her care.
- Possess theoretical and practical knowledge in respect of childhood education including integrated teacher.
- Develops understanding of the majore principles of learning in formal and informal situation.
- Conducts action research
- Understands the role of the school, the peer groups and community in shaping the personality of the child and also develops an amicable home and school relationship
- Understands the role of the school and teachers in changing the society.

Some other objectives are

• To make the teachers aware of the nature, purpose, problems and issues of elementary education.

 • To enable them to understand the nature and maturity of children for imparting education and to ensure their many sided development.

• To enable them to manage and mobilize community resources for the school and teaching.

 • To empower pupil teachers to impart and organize instruction of unified and integrated subjects, their nature and purpose in the new educational and social context.

• To develop holistic approach for understanding and solving the problems of life. • To create environmental awareness with the intent of promoting its protection / preservation

• To prepare them to use the latest constructivist pedagogy and evaluation techniques and

• To enable them to impart value education, life skills education, work education and feel their responsibility towards the education of neglected sections of society including those affected by diseases and deprivation of various forms.

Objectives of Teacher Education at Secondary stage

Aims and objectives – secondary stage are –

- To possess competency to teach subject of specialization of accepted principles of teaching and learning in the context of new school curriculum

Terminal Behaviour:

- Depth of their understanding of the concept pertaining to the concern discipline.
- Makes an external and internal judgement of the quality of an article through the
- principles against criterion.
- Locates the deficiencies, short falls and observes deficiencies and pit fall;s.
- Knows the ways through which adolescent learns
- Understand the concept of work and experience
- Appreciates the rational of curriculum
- Possess the skills to teach
- Develop understanding , skills , interests and attitude which would enable them to foster the alround growth of the child.

Terminal Behaviour

1. Understands the total concept of personality
2. Knows the various techniwques through which total personality development takes place.
3. Understands the significance of enabling the child to make a wholesome personality development.

4. Possess communication mental and social skills to interact with pupils.
5. Manifests psychomotor skills in formal and informal institutional situations.
6. Shows a ppositive and warm attitude about optimum physical, intellectual , emotional and social development ogf rthe child.
7. Shows a interest in development of the child indicated by

❖ Intrinsic and extrinsic readings pertaining to adolescent growth problems and needs.
❖ Organization of sociocultural functions and excursion terms.
❖ Conference with the adolescents.
• Possess sufficient theoretical and practical knowledge about an adoloscent's health and physical education programme, work experience and recreational activities.

Terminal Behaviour

1. Knows the sources institutional, home, neighbourhood and the local of the institution which influence health.
2. Knows the structure and functiomning of various bodily system
3. Knows about the roole of physical education, games, trecreational activitiesin the health of an adolescent is able to detect causes showing health disorders.
4. She is able to make a healthy guess about nature oif bodily disorder and type of treatment required.
5. Applies first aid techniques on whome needed
• Develops skills in identifying, selecting, innovating, organizing, learning experiences pertaining to subject of experiences pertaining to subject of specialization.
• Develops understanding about the psychological principles of growth and development, individual difference and similarities and cognitive, conative and attitudinal learnigs.
• Develops skills in guiding and counselling the learners in academic and vocational subjects growth as well as in their academic and personal problems.
• Understands the role of school , home and peer groups in shaping the persaonality of child and also develops a relationship between school and home to their mental benefits
• Understands the role of school s and teacher in changing socirty.

- Understands the action research/experimental research projectds or investigatory projects to improve his own teaching effectiveness in enabling children to develop their capacities
- To maintain the continuity of elementary education and to prepa

re students for the study of diversified courses and appropriate selection of subjects at the senior secondary stage.

• To empower the prospective teachers to adopt disciplinary approach in teaching, and to develop among students interest in such studies.

• To enable them to understand the implications of liberalization, privatization, globalization (LPG) free market, W.T.O. and Outsourcing etc. on education and adopt precautionary measures against their unsound effects.

• To train them in the use of ICT, its advantages, disadvantages and safeguards,

• To curtail the educational and cultural gap between the rich and the poor the schools meant for them by adopting suitable educational approaches.

• To develop among the prospective teachers love for Indian culture, and its contribution to the world and to inculcate a sense of national pride and identity.

• To enable them to develop the teaching competencies and performance skills for the subjects they have to teach, using appropriate aids including ICT, organize supplementary educational activities and elicit community cooperation,

• To enable them to integrate yogic, health, physical, aesthetic and inclusive education with other educational activities.

• To enable the prospective teachers to orient and sensitize the students with care and caution about Life Skill education. HIV / AIDS preventive education, reproductive health, etc.

Objectives of Teacher Education at Higher Secondary stage

Aims and objectives- the higher secondary stage is

• To develop among teachers an acceptable desired perspective about academic stream and understanding of its nature, purpose and philosophy,

• To make them aware of the philosophy, purpose and teaching learning strategies of the subjects they have to teach

• To enable them to guide learners and prepare them for self – study, independent learning, to develop reference skills, undertake group learning, critical thinking, conceptualization, self – evaluation of their own performance and derive knowledge information from ICT, & mass media

• To develop among them the competencies to communicate abstract and complex ideas and concepts in simple terms

• To develop among them the skills for promoting patriotic feeling national consciousness, social cohesion, communal harmony and universal brotherhood.

•To enable them to orient and sensitize the students about HIV / AIDS, preventive education and to bring attitudinal change in understanding numerous problems relating to healthy life, life skill development, stigma and discrimination etc.

Objectives of Teacher Education at College Level

Aims and objectives – higher education is

- The future teachers for collegiate stage should possess competency to teach the subjects of specialization on the basis of accepted principles of teaching and learning also by striving to keep himself abreast with the latest knowledge in subjects of specialization in the methodology of teaching
- Develops understanding of the aims and objectives of education in general anfd higher education in particular and also aware of his role in building up a democratic, secular and socialistic society in Indian contest.
- Develops skills to make use of educational technology in the teaching of subject of his specialization i.e. vocational and/or academic subjects
- Understands the bio-psycho-social needs of adolescent and s/he is also aware of problems arising out of the infulfilment of these needs and develops skills to help the adolescent to solve academic and personal problems.
- Understands investigation research project, action research, experimental research, research projects to solve problems pertaining to pupil behaviour modifications in and out side the classroom.

- Understands the role of teacher and school in changing the society.

• To impart enriched vocational education which is essential for success in competitive and open market economy,

• • To enable them to design courses and competencies needed for self – employment,

• To enable the prospective teachers to inculcate dignity and morality of work and produce work culture among their students.

Need of teacher education:

The American Commission on Teacher Education rightly observes, "The quality of a nation depends upon the quality of its citizens. The quality of its citizens depends not exclusively, but in critical measure upon the quality of their education, the quality of their education depends more than upon any single factor, upon the quality of their teacher."

In his Call for Action for American Education in the 21 St Century in 1996, Clinton indicated that : ― Every community should have a talented and de dicated teacher in every classroom. We have enormous opportunity for ensuring teacher quality well into the 21St century if we recruit promising people into teaching and give them the highest quality preparation and training".

The need for teacher education is f elt due to the following reasons;

1)It is common knowledge that the academic and professional standards of teachers constitute a critical component of the essential learning conditions for achieving the educational goals of a nation. The focus of tea cher preparation had to shift from training to education if it had to make a positive influence on the quality of curriculum transaction in classrooms and thereby pupil learning and the larger social transformation. The aspects that need greater emphasis are; the length of academic preparation, the level and quality of subject matter knowledge, the repertoire of pedagogical skills that teachers possess to meet the needs of diverse learning situations,   the degree of commitment to the profession, sensitiveity to contemporary issues and problems and the level of motivation. This is not possible if teacher preparation focused only on training. Holistic teacher building is necessary and therefore teacher education needed more emphasis than mere training.

2) Educating all children well depends not only on ensuring that teachers have the necessary knowledge and skills to carry out heir work, but also that they take responsibility for seeing that all children reach high levels of learning and that they act accordingly.

3)People come to teacher education with beliefs, values, commitments, personalities and moral codes from their upbringing and schooling which affect who they are as teachers and what they are able to learn in teacher education and in teaching. Helping teacher candidates examine critically their beliefs and values as they relate to teaching, learning and subject matter and form a vision of good teaching to guide and inspire their learning and their work is a central task of teacher education (Fieman-Nems er, 2001).

4)The National Academy of Education Committee's Report (Darling

- Hammond and Bransford, 2005) wrote that: ―On a daily basis, teachers confront complex decisions that rely on many different kinds of knowledge and judgement and that can involve e high stakes outcomes for students' future. To make good decisions, teachers must be aware of the many ways in which student learning can unfold in the context of development, learning differences, language and cultural influences, and individual temperam ents, interests and approaches to learning‖. In addition to foundational knowledge about the areas of learning and performance listed in the above quotation, teachers need to know how to take the steps necessary to gather additional information that will

allow them to make more grounded judgements about what is going on and what strategies may be helpful. More importantly, teachers need to keep what is best for the student at the centre of their decision making.

5) Teacher education like any other education al intervention, can only work on those professional commitments or dispositions that are susceptible to modification. While we can't remake someone's personality, we can reshape attitudes towards the other and develop a professional rather than a personal role orientation towards teaching as a practice.

6)The Ministry of Education document ―Challenge of Education: A Policy Perspective‖ (1985) has mentioned, ―Teacher performance is the most crucial input in the field of education Whatever policies may b e laid down, in the ultimate analysis these have to be implemented by teachers as much through their personal example as through teaching learning processes.

India has reached the threshold of the development of new technologies which are likely to revolutionise the classroom teaching. Unless capable and committed are teachers in service, the education system cannot become a suitable and potential instrument of national development.The teacher is required to acquire adequate knowledge, skills, interests and attitudes towards the teaching profession. The teacher's work has become more complicated and technical in view of the new theories of psychology, philosophy, sociology, modern

media and materials. The teacher can be made proficient with well planned, imaginative pre-service and in-service training programmes.

Scope of Teacher Education:

The scope of teacher education can be understood 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:

Teacher education reaches teachers at all levels of education, namely Pre-primary, Primary, Elementary, Secondary, Higher Secondary and the Tertiary. The needs and requirements of students and education vary m at each level. Hence level and stage- specific teacher preparation is essential. Teacher education also helps in the development of teaching skills in teachers of professional institutions. The teachers in professional institutions have only the theoretical and practical knowledge of their respective subject They require specialized teacher training inputs to deal with students entering their professions. Teacher education also reaches special education and physical education. Thus where there are teachers, there would be teacher education The knowledge base is adequately specialized and diversified across stages, in order to develop effective processes of preparing entrant teachers for the functions which a teacher is expe cted to perform at each stage.

Triangular Basis of Teacher education:

Construction of the relevant knowledge base for each stage of education requires a high degree of academic and intellectual understanding of matter related to teacher education at each stage. This involves selection of theoretical knowledge from disciplines cognate to education, namely, psychology, sociology and philosophy, and converting it into forms suitable for teacher education. Teacher education derives its content from the disciplines of Philosophy, Sociology and Psychology. These disciplines provide the base for better understanding and application of Teacher education. The Philosophical basis provides insights to the student teachers about the implications of - the various school s of philosophy, ancient and modern philosophical thoughts, educational thoughts of philosophical thinkers on education and its various aspects such as curriculum construction and discipline. The Sociological basis helps the student teachers to understand the role of society and its dynamics in the educational system of a nation and the world at large. It encompasses the

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ideals that influence national and international scenes. The Psychological basis helps the student teachers develop insights into student s' psychological make - up. This enables the student teachers to understand their self, their students and the learning situations such that they are able to provide meaningful and relevant learning experiences to their students.

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). Teacher education is dependent upon the quality of teacher educators.The quality of pedagogical inputsin teacher education programmes and their effective utilization for the purpose of 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. Teacher education, thus, first deals with the preparation of effective teacher educators. Teacher education reaches out to the student teachers by providing the relevant knowledge, attitude and skills to function effectively in their teach ing profession. It serves to equip the student teachers with the conceptual and theoretical framework within which they can understand the intricacies of the profession. It aims at creating the necessary attitude in student teachers towards the

Stakeholder s of the profession, so that they approach the challenges posed by the environment in a very positive manner. It empowers the student teachers with the skills (teaching and soft skills) that would enable them to carry on the functions in the most efficient and effective manner. Teacher education therefore pays attention to its content matter.

Objectives: Vision of teacher education:

Teacher education has to become more sensitive to the emerging demands from the school system. For this, it has to prepare teachers for a dual role of; 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 responsible citizens; and,

An active member of the group of persons who make conscious effort to contribute towards 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 expectation ns suggest that teacher operates in a larger context and its dynamics as well as concerns impinge upon her

functioning. That is to say, teacher has to be responsive and sensitive to the social contexts of education, the various disparities in the background d of learners as well as in the macro national and global contexts, national concerns for achieving the goals of equity, parity, social justice as also excellence. To be able to realize such expectations, TE has to comprise such features as would enable the student teachers to Care for children, and who love to be with them;Understand children within social, cultural and political contexts;View learning as a search for meaning out of personal experience;Understand the way learning occurs, possible ways of creating conductive conditions for learning, differences among students in respect of the kind, pace and styles of learning. View knowledge generation as a continuously evolving process of reflective learning. Be receptive and constantly learning. View learning as a search for meaning out of personal experience, and knowledge generation as a continuously evolving process of reflective learning. View knowledge not as an external reality embedded in textbooks, but as constructed in the shared context of teaching-learning and personal experience. Own responsibility towards society, and work to build a better world. Appreciate the potential of productive work and hands-on experience as a pedagogic medium both inside and outside the classroom. Analyze the curricular framework, policy implications and texts. Have a sound knowledge base and basic proficiency in language. The objectives of teacher education would therefore be to, Provide 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.

Development of Teacher Education in India

The history of teacher education in India is as old as the history of Indian education itself. India has one of the largest systems of teacher education in the world. Education of teachers must have been born

in India in 2500 B.C. The history of Indian teacher education may be divided into five parts:

- Ancient and Medieval Period (2500 B.C. to 500 B.C.)
- Buddhist Period (500 B.C. to 1200 A.D.)
- MuslimPeriod (1200 A.D. to 1700 A.D)
- British Period (1700 A.D. to 1947 A.D.)
- Teacher education in independent India (1947 up to this date)

- Ancient and Medieval Period (2500 B.C. to 500 B.C.)

In the beginning of Hindu civilization teaching was concerned with teaching of „Vedas". Out of four classes of Hindu society, Brahmins

served as teachers of the community devoting themselves to the work of acquisition, conservation and promotion of knowledge and it stransmission to posterity.In the Vedic India, the teacher enjoyed a special status and position. He was held in high esteem by the society and this was due not only to learning and scholarship, but also to qualities of head, heart and hand. The Guru or the teacher was an embodiment of good qualities, a fountain of knowledge and an abode of spirituality. The selection and prep aration of a teacher was done with much rigour. Manu remarked that the son of the teacher sometimes helped his father, by teaching in his father's place. The teacher was

sometimes assisted in his work by some of the older and abler pupils who acted as moni tors. This monitorial system, which was a method

of inducting pupils to the position of teachers, was the contribution

of the ancient education system. Teaching in the Upanishadic period was known for the personal attention paid to the student.

There was an intimate relationship between the teacher and

the disciple. The freedom to accept a disciple rested with the teacher, but once he accepted a disciple it became his moral duty

to see that the disciple grew. Similarly, a disciple or student had the

freedom to choose his teacher. Knowledge was transmitted orally

(since writing developed later)

and explanation was one of the important methods of teaching. The

methods used by teachers wereemulated and adopted by the disciples and handed over from one generation of teachers to another.

The transmission of method through initiation and repetition continued. Good teachers devised their own methods and made the matter interesting and meaningful to students by day to day examples. Listening to the spoken words,c omprehension 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.

Buddhist Period(500 B.C. to 1200 A.D.):

The formal system of teacher"s training emerged during this period. As the importance of teacher education was recognized it got an expansion. The monastic system which was an important feature ofBuddhism required that every novice on his admission should place

himself under the supervision and guidance of a preceptor Upajjhaya). The disciple would 'choose an upajjhaya with much care and showed him the utmost respect. The upajjhaya, on his part,had much responsibility to the novice, the Saddhiviharika. He was to offer spiritual help and promote learning through religion among the disciples by teaching, by putting question to him, by exhortation, by instruction. The teacher was to look after thedisciple fully. The teachers employed other methods besides oral recitation such as exposition, debate, discussion, question answer,use of stories and parables. In Vihars and monastic schools, HetuVidya or the inductive method was adopted and the intellect of the disciple was trained through it. The subject Logic was introducedwhich helped in sharpeningthe intellect of the learner.

Muslim Period(1200 A.D. to 1700 A.D.):

During this period there was no formal system of teacher training. In the holy Koran, education is urged as a duty and in Muslim countries, education was held in high esteem. Education was public affair.

The Mohammedan rulers in India founded schools (Maktabs), Colleges (Madrassahs) and libraries in their dominions. In the Maktab, often attached to a mosque, the students received instruction in the Koran which they had to recite, and reading, writing and simple arithmetic was also taught. The medium of "instruction was Persian but the study of Arabic was compulsory.In Madrassahs the course included grammar, logic, theology, metaphysics, literature, jurisprudence and sciences.The teachers teaching in the Maktabs were mostly moulvis,but in the Madrassahs scholarly persons were employed. The method of teacher preparation was mostly initiation of what the old teachers practiced. Good and experienced

teachers with a discerning eye identified able students and appointed them tutors to look after and teach the junior students in their absence. Thus the monitorial system was in vogue during the medieval times too and was the method of preparing the future teachers. The teachers were held in high esteem and were respected by the society and their students. Cramming and memorising were prevalent during this period.The method of teaching was oral. The teachers adopted the lecture method. Students were encouraged to consult books. Practicals were also conducted in practical subjects like medicine. Analytical and

inductive methods were also used to each subject like religion, logic,philosophy and politics.

British Period (1700 A.D to 1947 A.D.):

The Britishers changed the above educational system according to their own system, their need and philosophy. Advanced system of education was incorporated. Before the arrival of the Britishers in India the European Missionaries first started scholars and later initiated teacher training institutions. The Danish Missionaries established a normal school for the training of teachers at Serampur near Calcutta. In Madras Dr. Andrew Bell started the experiment of Monitorial System whichformed the basis of teacher training programme for the time being. Itwas used in England and known as Bell Lancaster system. Mr. Campbell, Collector of Bellary, in his Minute dated 17th August 1823, commended this system by which the more advanced scholars are asked to teach the less advanced and this was well received in England. Sir Munro, in his Minute dated 13 December 1823, gave so me ideas for the improvement of the education of teachers. He suggested an increase in their allowance and different types of syllabi for Hindu and Muslim teachers. In June 1826, the first normal school was started in Madras under the management and with the finances of the British government Initially it prepared teachers for the district schools. Later, this normal school develop ped into the Presidency College. In 1847,in Bombay a normal school was started in the Elphinstone Institution and in1849, Calcutta too had a normal school.

Teacher Education in Pre Independent India: Monitorial System(1880)

In India, the idea of formal teac her training originated out of an indigenous technique, called „Monitorial System‟. It was based on the principle of mutual instruction. The whole class was splitted into a number of small groups and by placing each group under the charge of a brilliant pupil, called monitor. Teacher'sTraining schools. The first formal teacher‟s training School in India was set up at Serampur in Bengal in the name of "Normal School"by Carey, Marshman and Ward in 1793. In Bombay, the Native Education Society trained a

number of teachers for the improvement of teaching in primary schools. In Bengal the Calcutta School Society did pioneering work for the training of teachers for indigenous schools. The Ladies Society of Calcutta started a training class for training women teachers in the Calcutta Central School for girls. A number of government training schools were also set up in the first half of the nineteenth century.

Wood'sDespatch (1854)

The Wood's Despatch (popularly known as Magna Charta of English

Education in India), an important educational document was released on 19 July, 1854. It was rightly been called the most important document on English education in India. It gave some very valuable suggestions for the improvement of the education of t eachers. It suggested that allowances be given to persons who possess and aptness for teaching and who are willing to devote themselves to the profession of school master.The Despatch urged the estab lishment of training schools in India. The De spatch suggested the introduction of pupil teacher system (as prevailed in England) in India and an award/ stipend to the pupil teachers and a small payment to the masters of the school to which they were attached. On successful completion of the training programmme they were to be given certificates and employment. So the Despatch introduced sufficient incentive for the would be teachers. Lord Dalhousie, Governor General of India also sugge sted implementation of Wood's De spatch whichbrought into existence a numb er of normal schools

Lord Stanley'sDespatch (1859)

In 1959, Lord Stanley, Secretary of State for India, greatly emphasized on teacher training. The Despatch very emphatically stated that the administration should desist from procuring teachers from England and that teachers for vernacular schools should be made available locally.In 1859, the new grant in aid rules provided that salary grants to schools be given to those teachers who had obtained a certificate of teacher training. In 1882 there existed 106 Normal Schools, including 15 institutions meant exclusively for women. About the training of secondary teachers, training classes were added to the following schools:

(i) Government Normal School, Madras (1856)

(ii) Central Training School, Lahore (1877)

In 1886, the first training college to prepare secondary school teachers was set up at Saidapet

in Madras followed by the opening of a Secondary Department in the Nagpur Training School in 1889. Towards the end of nineteenth century, there were only six training colleges in India.

Government of India Resolution on Education Policy (1904)

This is one of the most important educational documents which laid down the policies for the future educational system. Lord Curzon, the then Viceroy of India felt the need of the training of teachers. It made some very vital suggestions for the improvement of the teacher training Programme. These were:

(a) Training Colleges:

The Resolution enunciated that if Secondary Education was to be improved then the teachers should be trained in the art of teaching. There were five teacher training colleges in all at places like Madras, Kurseong, Allahabad, Lahore and Jubbulpur. Intermediates or Graduates could seek admission to these Colleges. The general principles upon which the training institutions were to be developed, were:

(i) To enlist more men of ability and experience in the work of higher training,

(ii) To equip the training colleges well,

(iii)To make the duration of the training programmes two years and for graduates, one year. The course would comprise knowledge of the principles which underlie the art of teaching and some degree of technical skill in the practice of the art,

(iv)The course would culminate in a university degree or diploma,

(v)There should be a close link between theory and practice and practicing schools should be attached to each college. There should be a close link between the training colleges and the school, so that the students do not neglect the methods learnt in the college.

(b) Training Schools: The Resolution recommended opening of more training schools, particular ly in Bengal. The normal schools were mostly boarding schools where students with vernacular education came for training and were given stipends. They received general education combined with the instruction in the methods of teaching and practice in teach ing. The Resolution recommended a minimum course of two years. It mentioned courses of training especially suited for teachers of rural schools.Thus, it can be observed that the recommendations and suggestions of the Resolution were of far reaching importance. Universities instituted B.T. degree for graduate teachers.

The Government ofIndia Resolution on Education Policy(1913)

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The second resolution on educational policy suggested many useful measures with regard to improvement of Primary education. The resolution suggested that teachers should be drawn from the class of the boys whom they will teach and they should have passed the middle vernacular examination and undergone a year's training. It suggested periodical repetition and improvement courses for teachers. The resolution emphasized that no teacher should be allowed to teach without a certificate and that there should be a constant exchange of ideas amongst the training college staff members and that they should visit different colleges.

Calcutta University Commission (1917)

This Commission, known as the Sadler Commission suggested opening of post graduate department of education in Universities, each department with a Professor, a Reader and

a number of assistants and institute a post graduate degree in Education. It recommended the introduction of Education as an optional subject at the Graduation and P.G. level. The recommendations of the Sadler Commission had salutary effect on the teacher training Programme in India Mysore University started a faculty of Education in 1925.

The Hartog Committee (1929)

The work initiated by the Sadler Commission was further carried on by the Hartog Committee. The Committee was primarily concerned with primary education but it made far Reaching recommendations for teacher training as well. It suggested that teachers for rural areas should be inducted from persons who were close to rural society. It also suggested that journals for teacher in the vernacular, refresher courses, confere nces and meetings of teacher associations can do much to brighten the lives of the teachers and improve their

work. For the secondary school teachers too, the committee had the same suggestions. Working on the recommendations of the Sadler Commission13 out of 18 universities set up faculties of education. The Lady Irwin College was setup in New Delhi. Andhra University started a new degree the B.Ed. in 1932. Bombay launched a post graduate degree the M.Ed. in 1936. Some other important changes in the field of education also

took place in the thirties. The Central Advisory Board of Education was revived. Basic Education was started by Mahatma Gandhi in 1937, 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.

The Abbott Wood Report (1937)

This report submitted in 1937 is again a landmark in the field of education. It primarily analyzed the position of vocational education but also made valuable suggestions about teacher education. According to the report the duration of training should be 3 years to enable the pupil to continue with general education along with professional training. It further suggested a refresher course for the teacher so that he could get a wider experience. Although there was improvement in the percentage of trained teachers from56.8% in 1937 to 61.3% in 1942, yet there was much still to be done for achieving qualitative improvement. In 1941, there were 61 2 normal schools out of which 376 were for men and 236 for women. These schools provided one or two years' training. There were 25 training colleges for graduates which were inadequate to meet the needs of the time. In 1941, the Vidya Bhawan teacher's College was started in Rajasthan and the Tilak College of Educationin Poona. Bombay took the lead in starting a doctorate degree in education in the same year.

The Sargent Report (1944)

The Central Advisory Board of Education (CABE) in 1944 presented a scheme of education "Postwar Educational Development in India", popularly known as the "Sergeant Plan"recommended that suitable boys and girls should be picked out into the teaching profession after high school; practical training should be provided, refresher courses be planned and research facilities be provided. It suggested a two year course for preprimaryand junior basic schools (after high school) and a three year course for the senior basic schools. The non-graduate teachers in high schools wereto go for two year training and the graduates for one year training. The first year of the two years training should be devoted to the study of the general and professional subjects. It should be supported by school visits, discussions and other experien ces to kindle the trainee's interest in education. It proposed revised pay scales for all categories of teachers, to attract better teachers. In 1947, the number of secondary teachers training colleges in the country had risen to 41.

Teacher Education in Independent India:

University Education Commission (1948-49)–

The first commission in free India,University Education Commission, in 1948 critically scanned the existing courses in teacher training programme and suggested that the courses

must be flexible and adaptable to local circumstances .In this context, the commission recommended that the courses should be remodeled, suitable schools to be used for practical training and more time to be given to school practice.In 1950, the First Conference of Training Colleges in Indiawas held at Baroda to discuss programmes and functions of

training colleges. In thiscommission, teacher training‟was given a new nomenclature and it became „teacher education‟.

Secondary Education Commission (1952-53) –

This commission suggested reforming of secondary education. It recommended that during one year of training graduate teacher should be trained in methods of teaching in at least two subjects. The practical training should not consist only of practice in teaching, observation, demonstration and criticism of lessons, but should include such subjects as construction and administration of scholastic tests, organization of supervised study and students‟

societies, conducting library periods and maintenance of cumulative records. Ford Foundation Term (1954)–Government of India in collaboration with Ford Foundation appointed an International team of eight experts in 1954 that studied in greater detail the major recommendations of Secondary Education Commission and recommended that the training institutions should organize and conduct demonstration or laboratory schools where experiments are made in curriculum construction and progressive methods of teaching areused.

Pires Committee (1956)–

This committee recommended that practical work should be given as much weightage as the theory portion. The examination papers should be reduced to four as stated below-

1.Principles of Education and School Organisation

2.Educational Psychology and Health Education

3.Methods of Teaching Two School Subjects

4.Current Problems in Indian Education.

Education Commission (1964-66)–

The Education Commission (1964-66) also known as Kothari Commission showed keen interest in teacher education. It observed that a sound programme of professional education for teachers was essential for the qualitative improvement in education at all levels of teacher education to meet the requirements of the national system of education. According to National Policy Statement on Education (1968), of all the factors which determine the quality of education and its contribution to national development, teacher is undoubtedly the most important.Teacher, must therefore, be accorded an honoured place in society. Their emoluments and other service conditions should be adequate and satisfactory with respect to their qualifications and responsibilities.

First Asian Conference on Teacher Education–

This conference, jointly sponsored by Association of Teacher Educators (IATE) and the International Council on Education for Teaching (ICET) was held from 14th to 19th June 1971 at Bangalore. The conference recommended that the programs of school education and teacher education in each country should be modified to meet the new

challenges.'ITEP' Plan of National Council of Educational Research and Training–The teacher education Department of National Council of Educational Research and Training, launched a plan for the comprehensive improvement of teacher training under the name „Intensive Teacher Education Programme" (ITEP) to work cooperatively with the training colleges to bring about desirable changes and improvement in teacher education.

Efforts of Indian Association of Teacher Educators (IATE)–

The Indian Association of Teacher Educators, formerly known as All India Association of Training Colleges, the only national organization of teachers of training institutions, have been organizing annual conferences beginning with their first meet at Baroda in 1950. IATE constituted a study group popularly known as Baroda Study Group

to revitalize the B. Ed. Programme.

National Commission on Teachers–I (1983-85)–In National Commission on Teachers –I (for school teachers), a four year training course after senior secondary, or preferably a 5 year course leading to graduation and training is recommended. For elementary teachers it is desirable to have a two year training course after Class XII. The integrated four year curriculum for a degree in education should consist of general education and professional preparation. Training curriculum for elementary teachers should emphasize on mastering of language and communication skills.

The teacher educators in colleges of education should be drawn from disciplines of various school subjects and educational disciplines like psychology, sociology, philosophy etc. The minimum qualification for a teacher educator should be post-graduate degree in the subject and a B.Ed.,preferably a M.Ed. degree. The minimum qualification for a teacher educator for the elementary training institutes should be a post graduate degree with B.Ed. training.

This commission also suggested that the practice teaching should be replaced by the word„Internship".

 The National Policy of Education (NPE)in 1986 recommended that teacher education is a Continuous process and its pre-service and inservice components are inseparable. The National Policy of Education (NPE), in 1986and its Programme of Action made a strong case for improving the quality of teacher education because it was the prerequisite to improve the

quality of school education. Some training schools were upgraded to District Institutes of Education and Training (DIETS) and some trainingcolleges were upgraded to Colleges of Teacher Education (CTEs) and Institutes ofAdvanced Studies in Education (IASES).

The Acharya Ramamurti Committee (1990)

in its review of the NPE 1986 observed that an internship model for teacher training should be adopted because "...the internship model is firmly based on the primary value of actual field experience in a realistic situation, on the development of teachingskills by practice over a period of time."

Yashpal Committee (1993)

noted that inadequate programme of teacher preparation leads tounsatisfactory quality of learning in school. Therefore, the B.Ed. programme should offer the possibility of specialization in secondary or elementary or nursery education.The duration of the programme should either be one year after graduation or fouryears after higher secondary. The contents of the programme should be restructured toensure its relevance to the changing need of school education. The emphasis in theseprogrammes should be on enabling the trainees to acquire the ability for self-learningand independent thinking. By the year 1998-99 there were 45 District Institutes of Education and Training (DIETS), 76 Colleges of Teacher Education (CTEs) and 34 Institutes of Advanced Studies in Education (IASES). The statutory NCTE further came out with a Curriculum Framework (1998) to provide guidelines in respect of the content and methodology of teacher education. As a result of this, many universities and state governments revised the courses of teacher education. The statutoryNCTE further came out with a Curriculum Framework (1998)to provide guidelines in respect of the content and methodology of teacher education. As a result of this, many universities and state governments revised the courses of teacher education. The National Curriculum Framework (NCF) 2005 for school education places different demands and expectations on the teacher, which need to be addressed by both initial and continuing teacher education. Teacher quality is a function of severalfactors: teacher"s status, remuneration and conditions of work, teacher"s academic andprofessional education.

National Knowledge Commission (2007) has made considerable progress in school education since independence with reference to overall literacy, infrastructure and universal access and enrolment in schools.

National Curriculum Framework for Teacher Education (NCFTE) 2010 highlighted that the education and training of a prospective teacher will be effective to the extent that it has

been delivered by teacher educators who are competent and professionally equipped for the job. To improve thequality of teacher education program, the National Council for Teach er Education (NCTE) took up a number of initiatives during the last decade. It joined hands with the National Assessment and Accreditation Council (NAAC) to foster quality assurance and sustenance.

The Right of Children to Free andCompulsory Education (RT E) Act, 2009, which became operational from 1st April,2010, has important implications for teacher education in the country. To enhancequality of school education Teacher Eligibility Test (TET) for Teachers and PrincipalEligibility

Test (PET) are conducted at both level at state and at central level. For teacher education UGC conducts National Eligibility Test (NET)at national leveland State Level Eligibility Test (SLET/SET)at state level.

Teacher Education in Five Year Plans–

In five year plans teacher education got 10% share of the total education, resulting into an increased output in training schools and training colleges. Output of training schools doubled during 1951 to 1961. It increased three times in 1966. There were 29 institutions in 1966 providing M.Ed. and PhD courses.NCERT was set up in September 1961. NCERT started teacher education programme in 1964. Establishment of SIE (State Institutes of Education) and SIScE (State Institutes of Science Education) took place in 1964 to upgrade science education at high school level. Science Institutes were opened. During 1969 to 1979 priority was given to expansion of elementary education with special emphasis on backward sections and girls. Correspondence and inservice programmes were emphasized. Fourth and Fifth plans provided correspondence courses to about 1, 40,000elementary teachers,17,600 secondary teachers. With the assistance of NCERT and UGC anorganized correspondence and inservice programmes, B.Ed. coursewas started by Himachal University and later by Jaipur University and several universities in South India.There are training colleges which are exclusively run by Government. Regional Colleges are being run by NCERT –Ajmer, Mysore, Bhuvaneshwar and Bhopal.

In Uttar Pradesh there are two types of training colleges –JTC and JBCT. Teachers trained by these JBTC colleges work in Junior High School. JTC worksin primary school. Regional Colleges carried out programme for primary teachers (B.Ed. Primary);training of teachers for pre-primary level and for students like mentally retarded children, physically handicapped children. NCTE Act was passes in 1993 by the Parliament by which it is the responsibility of

NCTE to look after the Teacher Education of the country.The Eleventh plan is quality plan in respect of the education sector. The following specific programmes are proposed to be taken up in teacher education during the Eleventh Plan.

• Strengthening Teacher Education by

(i) Developing teacher education Information Base in Public Domain, (ii) creating additional support systems inthe field, and (iii) strengthening academic capacity. Augmenting teacher educationcapacity in SC/ST and minority areas.

• Professional development of teacher through training programmes.

• Professional development of teacher educators through Refresher Courses and Fellowship programmes.

• Support to NGOs.

• Technology in teacher education.

• Integrating elementary teacher education with higher education.

In the Twelfth FYP, an important thrust area would be to introduce technology in teacher education in order to promote openness for adaptability to new technology for developing professionalism. The Teacher Education Scheme should be

implemented in partnership with states.

Recommendations of Education Commission (1964-66) and NPE (1986, 1992) on Teacher Education

The Report of National EducationCommission (1964-66) states: "The destiny of India is now being shaped in her classrooms."National Policy on Education (1986/92) states: "The status of teacher reflects the socio-cultural ethos of the society; it is said that no people can rise above the level of its teacher".The education commission under the chairmanship of

D.S. Kothari has pointed out clearly the major weaknesses in the existing system

of professional education Visualizing weaknesses in teacher training programm

e. The commission made many recommendations which may be clarified in to follow

ing groups.; -

* Removing isolation of teacher training from the mai

n academic life.

* Improving the quality of teachers training programme.

* Expansion of teacher training facilities.

* Making adequate provision for continuing professional education of all teachers.

- Creating appropriate agencies for the maintenance of standards both at the Centre and States.

National Policy of Education (1986) looked at the role of the teacher and the expectation of teacher education in a holistic perspective. It mentioned that the Government and the community should endeavor to create conditions which will help, motivate and inspire teachers on constructive and creative lines. Teachers should have the freedom to innovate, to devise appropriate methods of communication and activities relevant to the needs and capabilities of students and the concerns of the community.

Conclusion:

Teaching is a highly professional activity which demands specialized knowledge, skill and behaviour. Teacher professionalism comprises competence, performance and behaviourwhich reflect on teacher"s personality in school and society. Professional competence is fundamental in teaching profession which includes preparation of teacher for classroom processes, acquisition of knowledge of subject and facilitates personality development of children. Competencies of an ef-fective teacher include interpersonal communication, pedagogical empowerment and organizational leadership. Professional competence results in performance of teacher in terms of overall development of children.The competent teacher is supposed to perform better in the interest of the children and society as well.

It has been aptly remarked, "If you educate a boy, you educate one individual but if you educate a girl, you educate the whole family and if you educate a teacher, you educate the whole familyand if you educate a teacher, you educate the whole community". Teacher education is not teaching the teachers how to teach. It is to kindle his initiative, to keep it alive, to minimize the evils of the "hit and miss" process and to save time, energy, money and trouble of the teacher and taught.Teacher education is needed for developing a purpose and for formation of a positive attitude for the profession. The success of the educational process depends to a rigid extent on the characteristics and ability of the teacher who is the corner stone of the arch of education.

The expansion of teacher education was observed in terms of quantitative and qualitative aspects. All the above described commissions and report emphasis on the

quality of teachers in general and teacher educator in specific. At present teachers are not the mere transmitters of information but facilitators in the path of students urge for more

knowledge. The existing teacher training institutions of the state has yet lot to do for teachers in order to articulate innovations in terms of approach, pedagogy for qualitative improvement of school education so that they can response to the variousdemands of the student community

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Unit –II

Pre service Teacher Education

Objectives

After going through this unit you will be able to
- State Aims and objectives of Pre-service Teacher Education
- Describe Structure and functions of pre serice teacher education.
- Explain Curriculum structure of the Pre-service teacher education programme.
- Analyze Organization of practice teaching and other practical work,
- Identify strategies for Modification of teacher behaviour

Pre Service Teacher Education

Pre-service teacher education is the education and training provided to student teachers before they have undertaken any teachingTeacher education program in India serve the varying needs of the diploma /degree level of teacher education and prepare teachers fro m Pre primary level to   Institution/University level. In context to Indian contemporary education system different areas like, subject related pedagogical t heory and practical components, community work, practice teaching, internship, etc are being covered under teacher education programs. Teacher education in India prep ares teachers at all levels of education, namely Pre-primary, Primary, Elementary,Secondary, Higher Secondary and the Tertiary. In thecoming paragraphs various stages of pre-service teacher education are discussed along with innovations in v arious stages of pre-service teacher education.

It is a part of our study in teacher education. It refers to academic terms of study in a university level institution with a period of education, generally lasting for the academic session. It consists of combined or alternative studies and the theory and practice of teaching with elements of psychology.

Educational philosophy and sociology of education and some helpful instruction about teaching of certain specific subjects this phase of training exposes the teacher to

psychological, sociological, philosophical and technological aspects and the principles related to education.

This part is carried out with a view to developing in him/her a basic insight into the professional and some key skills required for various teaching-learning tasks. These courses are provided by the college where the student is introduced to the knowledge and skills needed to do a professional job in teaching.

In this phase the trainees are introduced to principles underlying teaching such as the aims of education, curriculum, nature and characteristics of child development, methods of teaching and learning and resources on which pupils and teachers can draw for the purpose of teaching and learning.

The main objectives of pre-service training are:

(i) To provide they would be teacher with proper understanding regarding the aims and objectives of education.

(ii) To promote in prospective teachers a proper understanding of the basic principles of child growth, development and process by which pupils learn.

(iii) To enable them to plan and present subject- matter in a manner which will promote the interest, sense of purpose and an understanding process of pupil's growth.

(iv) To develop communication and psychomotor skills and abilities conductive to human relations for interacting with children in order to promote learning in them both inside and outside the classroom.

(v) To develop understanding, interests, attitudes and skills which would enable him promote all-round development of children under his/her care.

(b) Induction Phase:

The induction phase of training is designed to make newly appointed teachers familiar with the practices and activities of die institution where they are to be appointed. It is usually identified with the period of problem. It is die preparation required to equip a new member of the staff for the duties and responsibilities of his/her specific inlay assignment.

With a systematic manner, it can send several purposes. This is the only activity provide; new teacher with the required knowledge understanding and skill necessary to begin and helpful develop right values towards the school and his neither job. Proper induction benefits schools as it paves the way for proper and full utilization of the teacher's abilities.

The induction phase usually attempts:

(i) To acquaint a new teacher with school organization and its policy.

(ii) To acquaint him with general and s| duties and responsibilities.

(iii) To inform him about "equipment, materials and facilities available in the institution.

(iv) To provide him help in the conduct of various recreational and social activities.

Organizational Structure and Administration of Pre service Teacher Education

The Teacher Education Policy in India has evolved over time and is based on recommendations contained in various Reports of Committees/Commissions on Education, the important ones being the Kothari Commission (1966), the Chattopadyay Committee (1985), the National Policy on Education (NPE 1986/92), Acharya Ramamurthi Committee (1990), Yashpal Committee (1993), and the National Curriculum Framework (NCF, 2005). The Right of Children to Free and Compulsory Education (RTE) Act, 2009, which became operational from 1st April, 2010, has important implications for teacher education in the country.

Legal and Institutional Framework

Within the federal structure of the country, while broad policy and legal framework on teacher education is provided by the Central Government, implementation of various programmes and schemes are undertaken largely by state governments. Within the broad objective of improving the learning achievements of school children, the twin strategy is to (a) prepare teachers for the school system (pre-service training); and (b) improve capacity of existing school teachers (in-service training).

For pre-service training, the National Council of Teacher Education (NCTE), a statutory body of the Central Government, is responsible for planned and coordinated development of

teacher education in the country. The NCTE lays down norms and standards for various teacher education courses, minimum qualifications for teacher educators, course and content and duration and minimum qualification for entry of student-teachers for the various courses. It also grants recognition to institutions (government, government-aided and self-financing) interested in undertaking such courses and has in-built mechanism to regulate and monitor their standards and quality.

For in-service training, the country has a large network of government-owned teacher training institutions (TTIs), which provide in-service training to the school teachers. The spread of these TTIs is both vertical and horizontal. At the National Level, the National Council of Educational Research and Training (NCERT), along with its six Regional Institutes of Education (REIs) prepares a host of modules for various teacher training courses and also undertakes specific programmes for training of teachers and teacher educators. Institutional support is also provided by the National University on Education al Planning and Administration (NUEPA). Both NCERT and NUEPA are national level autonomous bodies. At the state level, the State Councils of Educational Research and Training (SCERTs), prepares modules for teacher training and conducts specialised courses for teacher educators and school teachers. The Colleges of Teacher Education (CTEs) and Institutes for Advanced Learning in Education (IASEs) provide in-service training to secondary and senior 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 Centres (CRCs) form the lowest rung of institutions in the vertical hierarchy for providing in-service training to school teachers. Apart from these, in-service training is also imparted with active role of the civil society, unaided schools and other establishments.

Financing of programmes and activities

For pre-service training, the government and government-aided teacher education institutions are financially supported by the respective State Governments. Further, under the Centrally Sponsored Scheme on Teacher Education, the Central Government also supports over 650 institutions, including the DIETs, CTEs and the IASEs.

For in-service training, financial support is largely provided by the Central Government under the Sarva Shiksha Abhiyan (SSA), which is the main vehicle for implementation of the

RTE Act. Under the SSA, 20 days in-service training is provided to school teachers, 60 days refresher course for untrained teachers and 30 days orientation for freshly trained recruits. Central assistance for in-service training is also provided to District Institutes of Education and Training (DIETs), Colleges of Teacher Education (CTEs) and Institutes of Advanced Studies In Education (IASEs) under the Centrally Sponsored Scheme on Teacher Education. State Governments also financially support in-service programmes. Several NGOs, including multi-lateral organizations, support various interventions, including in-service training activities.

Implications on Teacher Education of the Right of Children to Free and Compulsory Education Act, 2009

The Right of Children to Free and Compulsory Education Act, 2009 has implications on the present teacher education system and the Centrally Sponsored Scheme on Teacher Education. The Act inter alia provides that :

- The Central Government shall develop and enforce standards for training of teachers;
- Persons possessing minimum qualifications, as prescribed by an academic authority authorise by the Central Government, shall be eligible to be employed as teachers;
- Existing teachers not possessing such prescribed qualifications would be required to acquire that qualification within a period of 5 years.
- The Government must ensure that the Pupil-Teacher Ratio specified in the Schedule is maintained in each school
- Vacancy of a teacher in a school, established, owned, controlled or substantially financed by the Government, shall not exceed 10% of the sanctioned strength.

National Curriculum Framework on Teacher Education

The National Council of Teacher Education (NCTE) has prepared the National Curriculum Framework of Teacher Education, which was circulated in March 2009. This Framework has been prepared in the background of the NCF, 2005 and the principles laid down in the Right of Children to Free and Compulsory Education Act, 2009 which necessitated an altered framework on Teacher Education which would be consistent with the changed philosophy of school curriculum recommended in the NCF, 2005. While articulating the vision of teacher

education, the Framework has some important dimensions of the new approach to teacher education, as under:

- Reflective practice to be the central aim of teacher education;
- Student-teachers should be provided opportunities for self-learning, reflection, assimilation and articulation of new ideas;
- Developing capacities for self-directed learning and ability to think, be critical and to work in groups.
- Providing opportunities to student-teachers to observe and engage with children, communicate with and relate to children. The Framework has highlighted the focus, specific objectives, broad areas of study in terms of theoretical and practical learnings, and curricular transaction and assessment strategies for the various initial teacher education programmes. The draft also outlines the basic issues that should guide formulation of all programmes of these courses. The Framework has made several recommendations on the approach and methodology of in-service teacher training programmes and has also outlined a strategy for implementation of the Framework. As a natural corollary to the NCFTE, the NCTE has also developed 'model' syllabi for various teacher education courses.

Reforms in Regulatory Framework

The National Council for Teacher Education (NCTE) was constituted under the National Council for Teacher Education Act, 1993 for achieving planning and coordinated development of teacher education in the country, for regulation and proper maintenance of norms and standards in the teacher education system. In the recent past the NCTE has undertaken various steps for systemic improvements in its functioning and in improving the teacher education system, as under :

- Based on the study of demand and supply of teachers and teacher educators of the various states, the NCTE has decided not to receive further applications for several teacher education courses in respect of 13 States. This has led to substantial rationalisation in the demand-supply situation across States;
- The Regulations for grant of recognition and norms and standards for various teacher education courses were revised and notified on 31st August, 2009. The applications for grant of recognition are now processed strictly in chronological order. The new

Regulations make the system more transparent, expedient and time bound, with reduction in discretionary powers of the Regional Committees;

- e-Governance system has been introduced by way of providing online facility for furnishing of applications and online payment of fees. MIS has been developed to streamline the process of recognition;

- The National Curriculum Framework for Teacher Education has been developed keeping in view NCF, 2005;

- Academic support is being provided through preparation of Manual for the teacher education institutions and publication and dissemination of Thematic Papers on Teacher Education.

- Various quality control mechanisms have been developed, including re-composition of the Visiting Teams, periodical monitoring of the teacher education institutions and de-recognition of institutions not conforming to the Norms and Standards prescribed by the NCTE.

Organizational structure at Central Level. In India the pre service organizational structure is headed by Govt. Of India under which Ministry of Human resource development is there which apex unit of the teacher education. Under MHRD   National council of Teacher Education (NCTE), National Concil of Educational Research and Training (NCERT), Centrally sponsored schemes for restructuring and reorganization schemes, University Grants Commission works for teacher education. Under NCTE regional committees followed by 13867 teacher education institution training 1.1 million teachers annually. Similarly under NCERT five Regionla Institute of Education provide teacher education throughout the country.In the country 29 SCERTs and 555 District Institute of Education and Training cater the need of teacher education in collaboration with Centrally sponsored schemes for restructuring and reorganization schemes. University Grants Commission at state level linked with National University of Educational Planning and Administration, 32 Institute of Advanced Studies in Education and 98 schools of Education followed by 104 college of Teacher Education that conducts teacher educational programmes. .

ORGANISATIONAL STRUCTURE OF TEACHER EDUCATION IN INDIA

Government of India

Ministry of Human Resources Development Central Advisory Board of Education CABE-MHRD

- **National Council of Teacher Education**
  - **Regional Committees**
    - **13867 Teacher Education Institutions training 1.1 million new teachers anually**
- **National Council of Educational Research and Training**
  - **5 Regional Institutes of Education**
- **Centrally Sponsored Scheme for Re-Structuring & Re-organisation of Teacher Education**
  - **29 SCERTs, 555 District Institutes of Education & Training**
- **University Grants Commission**
  - **32 Institutes of Advanced Studies in Education and 98 Schools of Education**
    - **104 Colleges of Teacher Education**
  - **National University of Education Planning & Administration**

In states of country the state Govt Directorate provide teacher Education through

- 74524 Cluster resource centers
- 29 SCERTs
- State institute of Educational Management and Training
- 104 college of Teacher Education (intake 20,031)
- 31 IASE
- 196 Block Institute of Teacher Education (BITE) , under 12th plan
- 6676 Block Resource Center (BRCs)
- 13867 Teacher education Institutes (1.1 million new teache training)
- 555 District Institute of Education and Training (DIETS)

1.1 million new teachers trained in 13867 Teacher Education Institutions annually
3.5 million in-service teachers trained by 6676 BRCs and 74524 CRCs annually

29 State
Councils for Educational
Research & Training
SCERT

555 District Institutes of
Education & Training
DIET

State Institutes of
Educational Management
and Training
SIEMAT

13867
Teacher Education
Institutions with
pre-service intake of
1.1 million students

State
Governments
Directorates
of Education

104 Colleges of
Teacher Education
CTE
intake 20,031

6676
Block Resource Centres
BRC

31 Institutes of
Advanced Studies
in Education
IASE

74524
Cluster Resource Centres
CRC

196
Block Institutes of
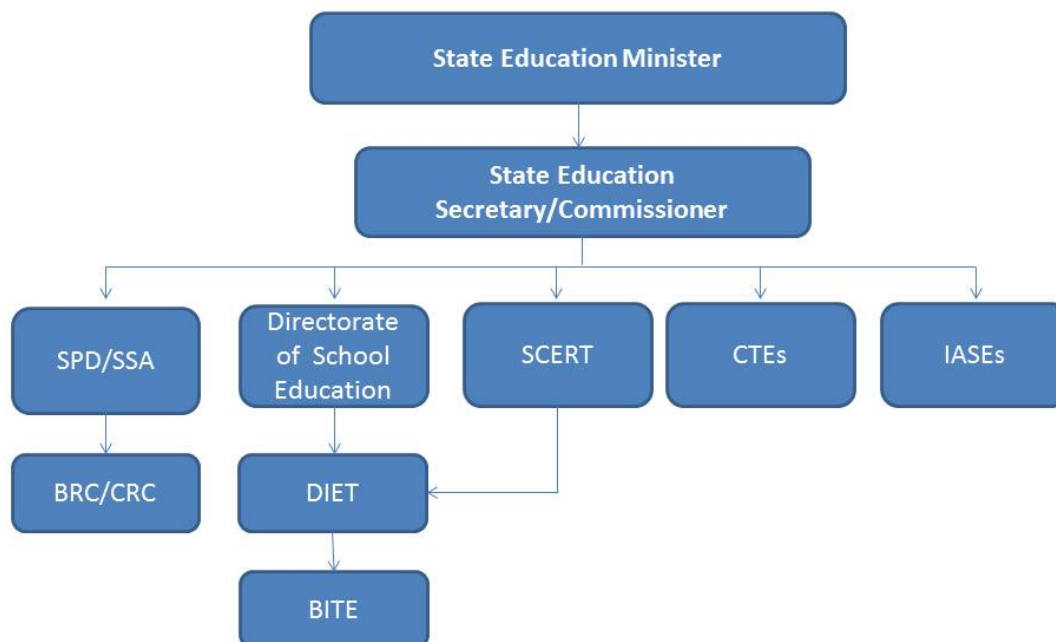Teacher Education
BITE
(new, under
12th Five Year Plan)

Administrative Structure

In the administrative structure of pre service teacher education in India the apex body is Ministry of Human Resource Development)MHRD), execites different programmes of teacher education through autonomous body like NUEPA, NCTE, NCERT, RIEs. Secretary is the highest powering officer under whom Additional secretary, Director, under secretary and section officers works.
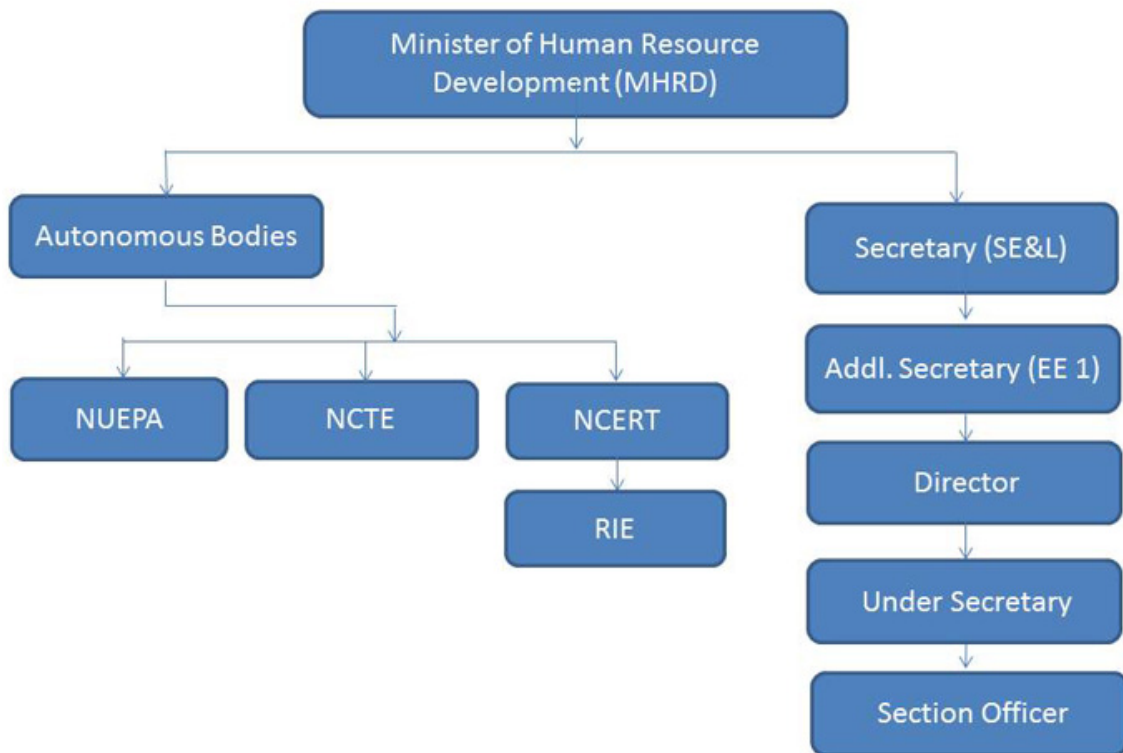
At state level state education officer is the apex authority of tecahe education.Unnder whom State education secretary/Commissioner deal with all the matters related to teacher educatin folloeed by Directorate of school education, SCERT, IASEs, CTEs, Schemes like SSA. Directoirate of Schol education controls and executes different programmes in teacher education. It has direct control over DIETs, BITEs

Pursuant to the recommendations of NPE, 1986, the Centrally Sponsored Scheme (CSS) of Restructuring and Reorganization of Teacher Education was initiated in 1987 in the country, incorporating the establishment of DIETs (Elementary TEIs), CTEs and IASEs (Secondary TEIs). The State of Odisha had rolled out the Centrally Sponsored Scheme for TEIs in 1988-1989, i.e. the initial year of the scheme, in order to improve the quality of Teacher Education in the State and had expanded the same in a phased manner in subsequent plan periods (during 8th, 9th, 10th and 11th plans) in response to the revision of the scheme at the national level, to achieve its targets. The scheme has been recently revised for the 12th Plan (2012-2017).

The first restructuring of the state-run TEIs to centrally sponsored institutions in the state in 1987 had expanded their roles and functions, and broad-based their operational structures thereby creating crucial governance and management challenges for the State to be addressed to.

As a sequel to the first restructuring of TEIs (1988-1989), as centrally sponsored institutions in the state, Government of Odisha, between 1989 and 1993, had abolished, through a bold policy decision (by an Act), the the-then TEIs under private management in the state and closed down the correspondence B.Ed programme as well as Private B.Ed. programme run in three important Universities (Utkal University, Sambalpur University and Berhampur University) to enhance quality and capacity of its Teacher Education system and to meet the quality standard of Teacher Professional Preparation and Professional Development, as envisaged in Centrally Sponsored Guidelines, 1989. Hence,

since 1989, as a matter of policy, governance of TE system in the State has been conducted exclusively through Government mechanism.

☐☐As a major governance initiative to transform, regulate and improve the performance of the centrally sponsored TEIs, the status of the SCERT, established by way of up-gradation of the erstwhile SIE, a way back in 1979, was upgraded to a Directorate and re-designated as the Directorate of Teacher Education and SCERT in 1990.

☐☐Since the date of such up-gradation, all the TEIs (both state-run and centrally sponsored institutions) in the state have been functioning under the administrative control and technical supervision of the DTE and SCERT. Prior to this, the Elementary Teacher Education Institutions (S.T. Schools) except DIETs were under the control of the Director, Secondary Education and the Secondary TEIs (Training colleges, CTEs and IASEs) were under the control of the Director, Higher Education. Teacher Education programme in the state has been operationalized by the DTE and SCERT in collaboration with NCTE as per the CS guidelines, revised from time to time, since such up-gradation.

☐☐The mandates of NCFTE, 2009, guided, particularly, by the two significant developments i.e. the NCF, 2005 and the RTE (RCFCE) Act , 2009 as well as the fundamental tenants of the constitution, has provided necessary space and vision for a congruence between school curriculum and education of the Teachers. The challenge in this regard lies in enabling an appropriate institutional response for the concrete realization of this new vision through five-year plan schemes. It is with this back ground the restructuring of centrally sponsored for the 12th plan period has been conceived and implemented.

☐☐The implementation of the restructured scheme imperatives involves a lot of governance and management reforms, both at the levels of Government as well as the different collaborative institutions. Recent restructuring of the scheme has accorded overriding priority

on : strengthening of the DIETs and extending their mandate for training of teachers at the secondary level; establishment of BITEs as Elementary Teacher Education Institutions in SC / ST / Minority concentration districts; strengthening of CTEs and IASEs as well as creation of new CTEs; strengthening and up=gradation of SCERT, and many other related innovative activities which would necessitate a series of governance & management functions at different levels.

□□The recent JRM report (2013) on Teacher Education in the State has identified certain key issues relating to governance and management of Teacher Education and has given their recommendations in the context of restructuring of Centrally Sponsored Teacher Education Institutions in the state.
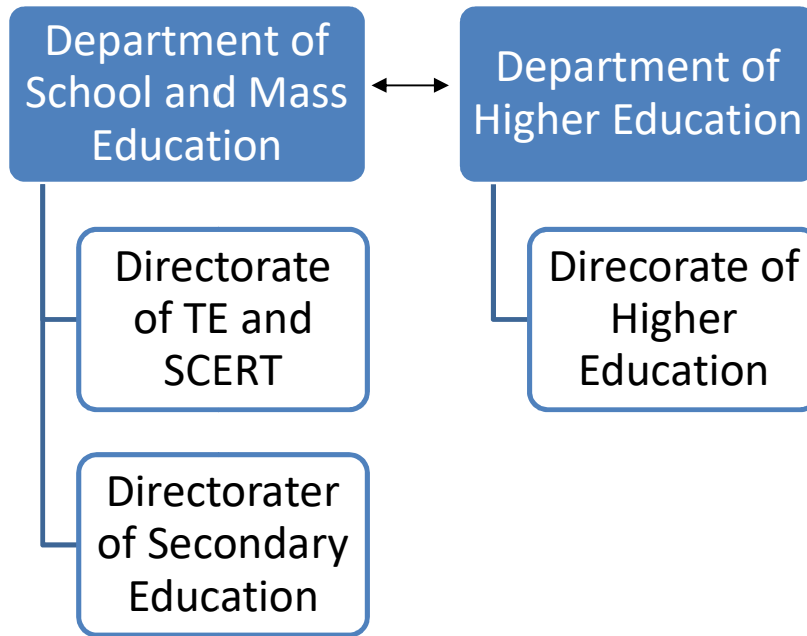
In the above context, the State Government in the Department of School and Mass Education is currently engaged with a serious commitment to transform its Teacher Education system in response to the mandates of the CSS (2012) on Restructuring and Reorganization of Teacher Education. This reform initiative covers a broad spectrum of concerns of which **the Structure and Governance of Teacher Education system in Odisha** is a critical component .

Current Situation in Odisha State

The bifurcation of erstwhile Department of Education and Youth services into two Departments namely, Department of Higher Education & Department of School and Mass Education was made in 1992. In the event of such bifurcation the Teacher Education system remained under the control / jurisdiction of the Department of School & Mass Education and has been continuing till date.

The present governance situation in respect of Teacher Education in the state is portrayed hereunder in terms of administrative structure, level specific institutional arrangements and human resource management.

The administrative structure relating to Governance of Teacher Education System in the state is presented in the following organogram.

```
                  ┌──────────────────┐        ┌──────────────────┐
                  │  Department of   │◄──────►│  Department of   │
                  │ School and Mass  │        │ Higher Education │
                  │   Education      │        │                  │
                  └──────────────────┘        └──────────────────┘
                        │                            │
                        │   ┌──────────────┐         │   ┌──────────────┐
                        ├───│  Directorate │         └───│ Direcorate of│
                        │   │   of TE and  │             │    Higher    │
                        │   │     SCERT    │             │   Education   │
                        │   └──────────────┘             └──────────────┘
                        │   ┌──────────────┐
                        └───│ Directorater │
                            │ of Secondary │
                            │   Education   │
                            └──────────────┘
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Under the administrative control of the Department of School and Mass Education, the Directorate of TE and SCERT is functioning as the executive organ of Government (Head of the Department and Controlling Authority) in respect of Teacher Education in the state. It exercises administrative and technical control over the TEIs, provides technical / academic support to all the TEIs and advises Government in the matter of policy formulation and implementation on School Education and Teacher Education in the state.
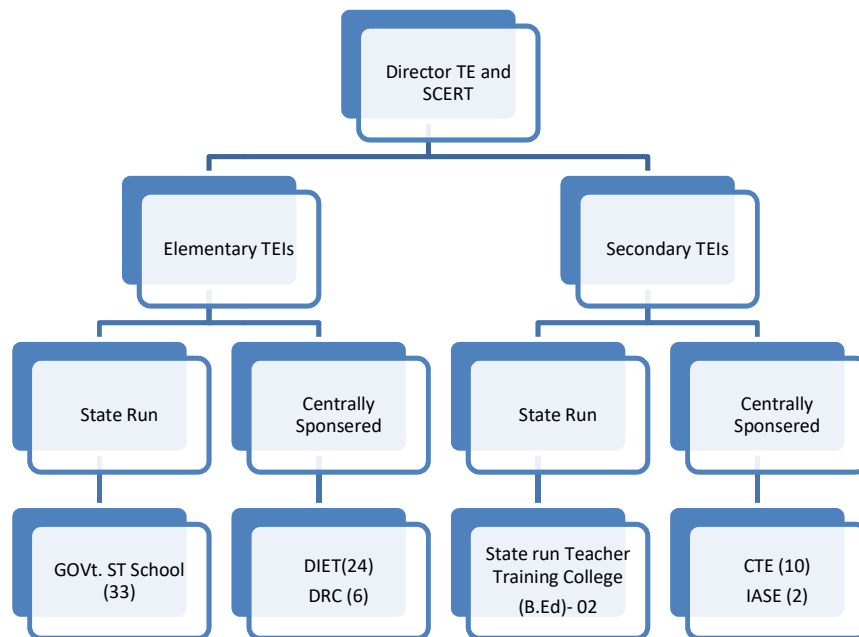
☐☐At present, there are four Deputy Directors (one academic, one administration, one teacher education, one science education) to assist the Director. There are 15 Assistant Directors handling different branches / Departments.

☐☐The Directorate prepares the budget, manages TEIs, admission policy and procedures, Teacher Education curriculum and the standard of teacher preparation and professional development of Teacher Educators.

☐☐The Directorate of Secondary Education supplies manpower (teacher educators) for the state-run elementary TEIs (Government S.T Schools) on receipt of requisition from the DTE and SCERT as per their requirement. Hence, the Directorate of TE and SCERT does not exercise control over the cadre of Teacher Educators working in state-managed Elementary Teacher Education Institutions (S.T. Schools).

Similarly, the Department of Higher Education supplies manpower (Lecturers, Readers, Professors) for state-run Teacher Training Colleges, Centrally Sponsored Institutions namely, CTEs and IASEs as well as in the Directorate of TE and SCERT on receipt of requisition as per their requirement. Hence, the Department of School and Mass Education does not exercise total control over the cadre of the Teacher Educators working in both state-managed and centrally sponsored secondary TEIs in the State.

Similarly, the Department of Higher Education supplies manpower (Lecturers, Readers, Professors) for state-run Teacher Training Colleges, Centrally Sponsored Institutions namely, CTEs and IASEs as well as in the Directorate of TE and SCERT on receipt of requisition as per their requirement. Hence, the Department of School and Mass Education does not exercise total control over the cadre of the Teacher Educators working in both state-managed and centrally sponsored secondary TEIs in the State.

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                          ┌─────────────────┐
                          │ Director TE and │
                          │     SCERT       │
                          └─────────────────┘
                ┌──────────────────┴──────────────────┐
        ┌───────────────┐                      ┌───────────────┐
        │ Elementary TEIs │                    │ Secondary TEIs │
        └───────────────┘                      └───────────────┘
        ┌──────┴──────┐                        ┌──────┴──────┐
  ┌──────────┐  ┌──────────┐            ┌──────────┐  ┌──────────┐
  │ State Run │  │ Centrally │           │ State Run │  │ Centrally │
  │           │  │ Sponsered │           │           │  │ Sponsered │
  └──────────┘  └──────────┘            └──────────┘  └──────────┘
  ┌──────────┐  ┌──────────┐            ┌──────────┐  ┌──────────┐
  │ GOVt. ST  │  │ DIET(24) │           │ State run │  │ CTE (10)  │
  │ School    │  │ DRC (6)  │           │ Teacher   │  │ IASE (2)  │
  │ (33)      │  │          │           │ Training  │  │           │
  │           │  │          │           │ College   │  │           │
  │           │  │          │           │ (B.Ed)- 02│  │           │
  └──────────┘  └──────────┘            └──────────┘  └──────────┘
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At present there are 33 government S.T. school (state-run) and, 24 DIETs and 06 DRCs are functioning as the Elementary Teacher Education Institutions in the state. Apart from this, there are two state-run S.T schools and two B.Ed training colleges functioning under the control of ST / SC department of government. One S.T school for minority group is functioning under private management (missionary trust) over which govt. has no control.

▪ There are 02 state-run B.Ed training colleges, 12 centrally sponsored institutions (10 CTEs and 02 IASEs) in the state to manage the secondary teacher education programme .

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National Council of teacher Education and State Resource of Teacher Education- Their Structure and functions,

NCTE

National Council of Teacher Education (NCTE) :

Kothari commission Report (1964-66) criticized Teacher Education Programme being conventional, rigid and away from reality. Therefore it expressed the need of establishing National council of Teacher Education in order to improve the standard of Teacher Education. In September 1972, Central Advisory Board in Education accepted the said proposal which was supported by fifth National plan. Thereafter by law,Indian Education Ministry established NCTE on 21st May 1973. NCTE has got independent constitutional status since 1993. **National Council for Teacher Education** (NCTE) is an Indian government body set up under the National Council for Teacher Education Act, 1993 (#73, 1993) in 1995 is to formally oversee standards, procedures and processes in the Indian education system.[1][2] This couincil function for the central as well as state governments on all mattter with regards to the Teacher Education and its Secretariat is located in the Department of Teacher Education and National Council of Educational Research and Training (NCERT). Despite the successful functioning in terms of educational field, it is facing difficulties in ensuring the maintenance of the standards of teacher education and preventing the increase in the number of substandard teacher education institutions in the country.

Objectives

- To achieve planned and coordinated development of teacher education system throughout the country.
- To regulate and properly maintian the Norms and Standards in the teacher education system and for matters connected therewith.
- To work especially towards planned and coordinated development of teacher-education.
- To improve the standard and functioning of teacher-educators.

It aims at training individuals for equipping them to teach pre-primary, primary, secondary and senior secondary stages in schools, non-formal and part-time education, adult education (correspondence) and distance education courses

Functions :

According to the Act 1993, NCTE performs the following functions :

•Undertake survey and studies relating to various aspects of teacher-education and publish the results.

•Making recommendations to the center and State government Universities, the U.G.C and other institutions in the preparation of plans and programmme's in the field of teacher education.

•Coordinating and monitoring teacher education and its development in the country.

•Preparing a guideline with regard to minimum qualifications for the candidates to be employed as teacher- educators at different levels.

•Developing norms for any specified category of courses or training in teacher-education, including minimum eligibility criterion for admission.

•Preparing a guideline and specified requirements for starting new courses and programmes under teacher education.

•Developing a guideline for general teacher-education programme.

•To advise central government on ma

tters like teacher - education (in building pre-service / in-service training), evaluation of the curricula for teacher -- education and periodical review with respect to revision of curricula.

•To advise state governments on any matter of their concern.

•To review the progress of planof teacher- education, submitted by central   state governments.

•To advise the government on ensuring adequate standards in teacher - education.

•To give approval to teacher - education institutions.

•To lay down norms for maintaining standards of teachers - education.

•Promoting innovations and research studies and organize them periodically or annually.

•Supervising the teacher education programmes and providing

financial assistance.

•Enforcing accountability of teacher development programmes in the country.

•Preparing a programme for in-service teacher education for orienting teachers for latest development.

NCTE functions through the following standing committees :

•Pre – Primary, primary teachers' education committee.

•Secondary college - teacher education committee.

•Special education - teacher education committee.

•In-service - teacher - education committee.

Activities of NCTE are with respect to :

•Research - Extension services.

•Development programmes.

•Training.

•Evaluations.

Programme Administration of Pre service Programme

State Resource of Teacher Education

To enhance quality of education and quality of educational institutions, to update educational methodology and to offer publicity to educational innovations by conducting various types of educational research every state establishes some institutes, council and associations. In this unit, we will discuss the role andfunctions of the following state agencies :

State Institute of Education (SIE)

State Council of Educational Research andTraining (SCERT)

State Board of Teacher Education(SBTE):

Kothari Commission for the first time in 1966 recommended for establishing SBTE, whose main function was to develop teacher education in the state to be administered by the state board. State boards were established in M.P in 1967, and Maharashtra, Jammu And Kashmir and Tamil Nadu in 1973. Ministry of Education forced states to have SBTE suggestions NCERT such boards almost all states established.

Functions

- Determine the standards of TE Institutions.
- Modifying and improving the curriculum, text books and the system of TE of the state.
- Developing the criterion for the recognition of the TE institutions.

- Organizing the guidance facility of TE institutions.
- Developing the criteria for admission in TE and evaluating the teacher efficiency of pupil teachers.
- Preparing the plan for the qualitative and quantitative development of teacher education
- Providing guidance to the Universities and State institutes for improving and modifying curriculum, textbooks and examination system of teacher-education.
- Determining the educational and physical conditions of the teacher education institutions for affiliations.
- Developing the sense of cooperation among university departments and other training institutions
- Providing financial assistance –different facilities for TE at different levels.
- Provide suggestions for the development of state teacher-educators.

SCERT

State Council of Educational Research and Training
(SCERT):
In many states a state institute of Education (SIE) modified to SCERT.
For quality improvement of school education it(SCERT) carries the responsibility of teacher education, research and evaluation.

Objectives :
It's objectives are :
To enhance quality of education by conducting various types of educational research.
To improve teacher education
To enhance quality of educational institutions
To upgrade educational methodology
To offer publicity to educational innovations.

Structure :
It is headed by Director of education. It's various departments are looked after by second class gazzeted officer. It has an advisory Board presided by Education Minister of the State.

Role and Functions :
The Role and functions are primarily concerned with ensuring quality in respect of Planning Management Research Evaluation and Training

Its functions are as under:

To improve school -education, continuing education, non-formal education and special education.

To impart in service -training to the inspectors of pre primary to higher secondary education.

To impart in service -training to the teachers from pre-primary to higher secondary schools.

To make available extension -services to teacher -education -institutions and co-ordinate the same.

To prepare teaching aids for educational institutions.

To motivate teachers to undertake /investigative research regarding content cum methodology.

SCERT functions through following departments :

Teacher -education department.

Extension services department.

Research department

Evaluation department

curriculum development department

Population Education department.

Publicity Department.

Teacher Education Department of SCERT

It relates to different academic activities pertaining to the teacher education programmes. It provides leadership and coordinates different types.

- Objectives:

- Coordinate the academic activities on teacher education.

- Develop Curriculum Frameworks and Model Syllabi.

- Prepare guidelines for conducting academic activities in Teacher Education Institutions (TEIs).

 - Conduct Research in the field of Teacher Education. - Provide Resource support in the field of teacher education.

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- Develop database on various aspects pertaining to the teacher education

Functions of CTE

It is envisioned that CTEs play the major role in the field of secondary teacher education and development, also guiding the various secondary teacher educationinstitutions in the districts under them.

•They have to see themselves as Centre's for developing excellence in secondary teacher education and in secondary classrooms at school.

•The CTEs, in order to improve the quality of secondary education, shall conduct training need analysis and base line surveys for organizing training programs.

•They shall prepare context specific teacher handbooks and training modules for quality training.

•They shall also undertake the impact studies to study the effect of training programs on classroom processes and learning outcomes.

•They shall prepare implementation guidelines for conducting plan activities including training and projects for ensuring optimum utilization of funds with financial accountability.

•They should design a training program that is open-ended, leaving more scope for the trainee for self-learning and to equip himself/herself to meet the challenging needs and demands of the profession.

•Another point to be examined is whether it is possible and desirable to have an omnibus type of teacher training which would equip the teacher at different levels

.

•A program of teache rpreparation derives its theoretical sustenance from a basic philosophy of education ,the historical, sociological forces shaping education and psychological view-Points on how human beings learn. The philosophical andsociological considerations havealready been referred to before. What remains to be done is a consideration of the different theoretical stances of psychology regarding the understanding of humanbehaviour and its modification especially as they influence teacher education practices.

- Organize pre-service teacher education courses for preparation of secondary teachers.
- Organize subject oriented (3-4 weeks duration) and short theme-specific (3-10 days duration) in-service teacher education programmers at least one subject-oriented

training course every 5 years, apart from short term specific courses.

- Provide extension and resource support service to secondary schools, school complexes and individual teachers
- Conduct experimentation and innovation in school education
- Provide training and resource support for new areas of educational concern, e.g. value-oriented education, population education, education technology, computer literacy, vocational section and Science Education

Functions of IASE

- Provide support to professional bodies
- Encourage community participation in teacher preparation program.
- In addition to the above functions, these institutions will perform the following functions:
- Conduct programs in elementary teacher education, so as to prepare elementary teacher educators
- Conduct in service courses for (i) elementary and secondary teacher educators, (ii) principals of secondary schools, (iii) persons involved with supervision of secondary schools etc.
- Organize pilot programs in teacher education
- Conduct advanced level fundamental, applied and experimental research in education, especially of inter-disciplinary nature, e.g. sociology of education and economic development, educational psychology etc.

University Departments of Education (UDE) :

Education is now considered anindependent field of study; UGC provides the grants to the University Department of education. Higher level training is essential for teachers for their development. Department of Education (DOE) provide training for educational administrators and curriculum specialists to improve evaluation procedures as well examination system. University DOE organize the M.Ed, B.Ed, and M.Phil classes as well as research work for Ph.D and D.Litt degree in education. In 1917, first education department was started at Calcutta University. At present there are departments of education in all the Indian Universities for M.Ed and Ph.D Degrees.

Functions :

•Develop the post graduate studies and research work.

•Organize training for school teachers.

•Provide solid programmes for teacher education and developing research work.

•Starting and organize some programmes for post graduate teachers which are not organized at other centers.

•Developing language laboratory, preparing instructional material and use new innovations and practices in TE.

•Encouraging the interdisciplinary courses and interdisciplinary research studies so that the requirements of other departments can be fulfilled.

•Organize extension lectures and programmes to encourage the teachers and research workers to contribute in the discipline of education.

•Providing awareness of new methodology and technology to

upgrade the standard of TE.

•Developing the effective procedure of evaluation of theory and practicals in education.

A very strong academic and administrative machinery at the state level should further aim ateconomy and integration of divergent elements, avoid duplication of efforts, consider and examine the needs of different types of institutions, give a proper turn to arising ideologies and tendencies and eliminate corruption and exploitation. There should be a University of teacher education in every state on its own. It should be unitary as well as affiliating for all the teachers', colleges at graduate and post graduate levels within the state.

University Grants Commission (UGC) :

Established on 28thDecember, 1953, at New Delhi. UGC was given

autonomy by govt. of

India in 1956.

Functions :

•It provides financial assistanceto universities and colleges to meet their requirement.

•It extends the financial aid for the development of Universities and maintenance

.

•It provides a guide-line to Centerand State Govt. for giving grant to a University.

•It provides the grants for five years to establish as new University

in the state. It provides the grants for five years to start new department or any academic programme in the University but now state concurrence is essential.

•It encourages higher level research work and teaching activities by providing financial assistance.

•It provides the grants for higher education and new programmes

in the Universities and colleges.

•It provides the fellowship for teachers and project work for University and college teachers.

Teacher Education Committees :

•To upgrade the standard of education Teacher-education committees were formed consisting of seven members for two years duration.

•It provides awareness of new innovations and research in teacher-education.

•The national fellowship and teacher fellowship are granted for encouraging research and teaching work.

•UGC provides travel grants to the university lecturers for attending international conferences and seminars.

•Visiting professors are appointed from among the University professors for inter change programmes and delivering lectures.

•Residential facilities for universityand college teachers are also provided.

•

Research associates are appo

inted for post doctor work.

Research :

•UGC is giving substantial grantsto University teachers for conducting their own researches. In 1953-54, Ministry of Education initiated a scheme providing grants to teachers, colleges and departments of education in the Universities in order to enable them to carry out research on educational problems selected by them and approved by the central ministry.

•The main purpose of the scheme is to provide facilities for research which, in many instances, has been held up owing to dearth of funds. It is to be carried on by the staff of the training colleges assisted by some researchfellows assigned to them and some financial facilities. Equipment is provided to facilitate the completion of the projects.

Centre for Advanced Studies (CASE) :

•For the improvement of standards of teaching and research in India.UGC has set up CASE in different branches of knowledge. It selected the faculty of Education and Psychology, Baroda as the CASE in Education which functions on an all India basis and aims at raising standards of teaching and research in education. It has built up its programme in collaboration with research

workers from outside

National Institute of Educational Planning and

Administration: (NUEPA/ NIEPA) :

Functions :

As the highest organization ofeducational planning and Administration- has the following functions to perform:

•Providing training of educational planning and administration to develop the abilities and competencies in the educational administration as the in-service program.

•Providing training facilities ineducational planning and administration at state level and regional level to develop efficiency at their level.

•Integrating educational studies and researches under the area of educational planning and administration and make co ordinations in these activities.

•Encouraging the teachers to solve the problems of educational planning and administration by organizing seminars and workshops.

•Arranging extension programs for new developments and innovations in the area of planning and administration.

•Establishing contact with other countries to understand the developments and innovations of the developed countries.

•Providing guidance at National and State levels in the area of planning and administration.

•Multi –dimensional activities- under extension programs– journal on educational planning and administration and other books are published.

•Review of educational planningand administration of other countries- used to develop our educational system and solve educational problems.

•Orientation programs for educational administrators- provide awareness of new developments in this area.

•Educational research reports are published. The publication unit established the coordination between theory and practice.

•Seminars and workshops are organized and their discussions and results are published.

•Training Institutions for special fields for school and colleges- these provide elementary in special fields like- computers, educational technology and fine arts.

Language Institutions :

•Kendriya Hindi Sanasthan.

•Central Institute of English, Hyderabad,

•Central Institute of Indian Languages, Mysore. Language training is given.

NCERT - National Council of Educational Research and Training :

Introduction :

•Due to knowledge explosion, there is a spread of education not only in India, but all over the world. Due to this change, social needs have changed accordingly.A teacher is expected to face the new changes by undergoing through training for new trends in education. Such training - needs are satisfied by following National level agencies of Teacher Education programme NCERT and NCTE.

National Council of Educational Research and Training

(NCERT) :

Establishment :

Ministry of Education of Indian Government established NCERT in 1961. NCERT is an autonomous - organization, working as an academic wing of the Ministry of Education. It assists the said ministry in the formulation and implementation of its policies and programmes in the field of Education. It is expected to encourage student teachers and teacher educators to conduct educational research. In order to fulfill these main objectives, it has established National Institute of Education (NIE) at Delhi and 4 regional colleges of education at Ajmer, Bhopal, Bhubaneswar and Mysore. It also works in collaboration with the departments in the states, the universities and institutes, following objectives of school education. It also maintains close-contact withsimilar national and international institutions throughout the world.It communicates results of its researches to a common man by publishing books and journals.

Objectives :

•To launch, organize and strengthen research works in various aspects of education.

•To arrange for pre-service and in-service training at the higher level.

•To publish necessary textbooks, journals and other literature for achieving the objectives.

•To organize extension centers intraining institutes with the cooperation of state governments and extend facilities pertaining to new methods and technologies among them.

•To establish a National Institute of Education and manage for the

development of research and higher training for educational administrators and teachers.

•To provide guidance and counselling services on a large scale.

a) Major function of NCERT are as under/ Role of NCERT :

•To monitor the administration of NIE /Regional colleges of Education.

•To undertake aid, promote and co-ordinate research in all branches of education for improving school-education.

•To organize pre-service and in-service education programmes for teachers

•To prepare and publish study material for students and related teacher's handbooks.

•To search talented students for the award of scholarship in science, Technology and social sciences.

•To undertake functions assigned by the Ministry of education (Now HRD) for improving school –education It is quite interesting to know how following constituent institutes works.

•National Institute of Education (NIE) In order to fulfill the objectives of NCERT, NIE Functions through 9 departments, 7 units and 2 cells as Under :

Departments of NIE :

•Academic Depts.

•Production Department.

•Dept of Maths Education

•Dept. of textbooks

•Dept of Teacher education

•Dept of Teaching Aids

•Dept of Educational Psychology Publication Department.

•Dept of Educational Psychology Workshop Department

•Dept of Text - books.

Units of NIE

Cells of NIE

•National Talent Search unit Primary Curriculum

•Survey and Data processing Unit Journals cell

•Policy, planning and Evaluation Unit

•Library and Documentation Unit

•Vocationalisation of Education Unit

•Examination Reform unit

•Examination Research unit

b) Central institute of Educational Technology (CIET) : Functions of CIET are as under –

•To encourage the use of Educational technology in the spread of education.

•To organize training programmes in connection with school-broadcasting and Educational Television.

•To develop learning aids based on Educational technology.

C) Regional Institutesof Education (RIE) :

•NCERT established Institutes of Education asmodel institutes in different regions of the country.

•Besides Teacher Education programme (4 years integrated B.Ed Course), these college conduct programme with respect to in-service - training, extension services and Research.

•They run 4 years B.Ed. course with a view that Education is a professional subject like engineering, medicine and B.Ed. student should be trained in the content and methodology simultaneously.

•This course offers B.Sc. B.Ed. (Science) and BA, B.Ed (languages) degree.

•These colleges conduct one-year B.Ed. course especially in science, agriculture, commerce and languages.

•They also run M.Ed course.

•These. Colleges are situated at Ajmer, Bhopal, Bhubaneswar and Mysore as centers of excellence for the four regions of India.

The role of NCERT in Indian Education :

•NCERT organizes / conducts various programmes with respect to Research, Development, Training, Extension-services, publishing study - material, and evaluation.

•It aims at qualitative improvement of school - education.

•It aims at qualitative improvement of school - education rather than quantitative expansion.

•It wants to make our education relevant to national objectives and social needs.

•Besides researches conducted atNIE, NCERT offers financial aid to research projects of the teachers.

•It also organizes summer Institutes to school teachers and teacher - educators for attaining their professional growth. Through these measures NCERT wants to achieve qualitative improvement in Education.

GENCIES AT THE INTERNATIONAL LEVEL :

UNESCO :

At no time in human history was the welfare of nations so closely linked to the quality and outreach of their higher education systems and institutions. (World Conference on Higher Education Partners, June 2003). As the only United Nations agency with a mandate in higher education, UNESCO facilitates the development of evidence-based policies in response to new trends and developments in this field emphasizing its role in achieving the Millennium Development Goals and particularly poverty eradication. The Organization fosters innovation to meet education and workforce needs and examines ways of increasing higher education opportunities for young people from vulnerable and disadvantaged groups. It deals with cross-border higher education and quality assurance, with a special focus on mobility and recognition of qualifications, and provides tools to protect students and other stakeholders from low-quality provision of higher education.

UNESCO promotes policy dialogueand contributes to enhancing quality education, strengthening research capacities in higher education institutions, and knowledge sharing across borders. Teacher education :

•Global leadership on teachers,

•Their status,

•Their professional training,

•Their management and administration and key policy issues.

•The UNESCO/ILO Recommendations concerning the Status of Teachers and provide the framework for the same.

•The Teacher Training Initiative for Sub-Saharan Africa (TTISSA) is a core initiative addressing key issues in the African context.

What UNESCO is doing for Teacher Training- (ROLE AND FUNCTIONS) :

UNESCO promotes the development of a professionally-trained corps of teachers who provided the human contact, understanding and judgment necessary to prepare our children for the world of tomorrow. UNESCO and Teachers :Good teachers are the cornerstone of

quality education. On a daily basis, teachers contributeto sustainable development by building its human foundation – nurturing each child's capacity and desire to learn. Without teachers Education for All (EFA) by 2015would be an unobtainable dream. Teachers : Creating hope for tomorrow :

•Teachers are at the very heart of UNESCO's work. Each day, over 60 million teachers care for 1 billion children, cultivating their souls and minds. Any process that attempts to improve the quality of education promote peace and harmony and eliminate discrimination requires teachers. Teachers work with children who will be the leaders of tomorrow.

•But for teachers to be effective,they must be well-trained, motivated, have a decent work environment, good pay and an attractive career path. UNESCO enables the world's teachers by building on the standards for the professional, social, ethical and material concerns of teachers set in the 1966 and 1997 recommendation concerning the status of teachers and education personnel.

•There is currently a severe shortage of teachers worldwide. UNESCO helps adjust national policies to reverse teacher flight, teacher drop-out and assists countries with the professionalization of "volunteer"teachers recruited by hard-pressed governments to fill crisis-level gaps. UNESCO and Teacher Education :

•Emphasizing the essential role teacher training and education policy play in national development goals.

•Producing and disseminating policy guidelines on open and distance learning, e-learning, and use of ICTs in teacher education.

•Advocacy to improve the training and status of teachers worldwide.

•Integrating international standards regarding HIV/AIDS and life

skills into national teacher education policies.

•Promoting exchange of good national practices and lessons learnt within groups of countries with common teacher-related agendas through networking and exchange.

•UNESCO promotes the development of a professionally-trained corps of teachers who providedthe human contact, understanding and judgment necessary to prepare our children for the world of tomorrow.

UNESCO's Teacher Training Initiative in Sub-Saharan Africa :

•UNESCO's Teacher Training Initiative is a new 10-year project to dramatically improve teacher training capacities in 46 sub-Saharan countries.

•The programme is designed to assist countries to synchronize their policies, teacher education, and labour practices with national development priorities for Education for All and the Millennium Development Goals (MDGs) through a series of four-year cycles. Teacher training for the achievement of Education for All :

•The acute shortage of qualified teachers has been identified as one of the biggest challenges to EFA. If EFA is to be achieved by 2015, then between 15and 30 million more teachers are needed worldwide. In sub-Saharan Africa, 4 million additional teachers will be needed by 2015 to meet the goal of Universal Primary Education alone. Additional teachers will be needed for non-formal education and literacy training, as well as in-service training of teachers.

•UNESCO recognizes that teacher education is integrally related to quality education and closely linked to curriculum renewal, improved learning outcomes, and a positive school environment. At the end of four years, eachcountry participating in the Teacher Training Initiative isexpected to integrate a comprehensive teacher education plan into the national education plan, improve the quality of training in teacher education, address the issues of severe teacher shortage and the status of teachers, and implement an internationally prescribed standard and national policy regarding HIV prevention education.

UNESCO's teacher training activities :

•Dynamic national information mapping completed in Angola, Zambia, and Niger and in progress in Burundi

•Providing of a full-time country-designated expert in seventeen countries for the first phase of the Initiative

•Establishing and maintaining comprehensive and integrated national databases concerning the state of teacher education

•Assisting countries in analysing their teacher shortages and in implementing policies and strategiesto increase the number of qualified teachers and professionalize currently under qualified teachers

•Encouraging consultations between governments and teachers in planning and implementing fully EFA reforms

•Sharing and distributing good teacher policies and practices

•Coordinating relevant research to guide EFA policies and disseminating good teacher policies and practices

•UNESCO's Teacher Training initiative is aimed at redirecting policies, improving institutional capacity, improving teacher quality, and stemming the teacher shortage in order to achieve Education for All by 2015.

•The UNESCO Chair for Teacher Education is an addition to theUNITWIN / UNESCO Chairs Programmethat is already well established in the region. The Chair has been established in East China Normal University,Shanghai, PR China. The purpose of the Chair is to promote an integrated system of research, training, information and documentation in the field of teacher education and training, and educational research. It will serve as a means of facilitating collaboration betweenhigh-level, internationally recognized researchers and teaching staff of the East China University and other institutions in China, and South East Asia region.

Curricular structure, Practice Teaching and Other Practical Activities in Pre Service Teacher Education

For pre-service training, the National Council of Teacher Education (NCTE), a statutory body of the Central Government, is responsible for planned and coordinated development of teacher education in the country. The NCTE lays down norms and standards for various teacher education courses, minimum qualifications for teacher educators, course and content and duration and minimum qualification for entry of student-teachers for the various courses. It also grants recognition to institutions (government, government-aided and self-financing) interested in undertaking such courses and has in-built mechanism to regulate and monitor their standards and quality.

The literal meaning of structure is building, construction , arrangement of parts or particles in a substance, manner of organization and an logical manner or form. The structure of teacher pre service teacher education means the logical arrangement of the units or components of educational courses, their objectives, modes of admission etc. which serves as means to attend the ends. NCTE IN 2014 has provided following structure and curriculum of teacher education in the country.

In 2012 – Justice Verma Commission report. May 2014 – NCTE constituted a Committee for reviewing the existing regulatory functions of NCTE regarding grant of recognition and related functions under the Chairpersonship of Prof. Poonam Batra. In July 2014 following

Views / Comments / Observations on the Report of Committee constituted for implementation of Recommendations No. 2,3,6,9 and 11 of Justice Verma Commission.

Highlights of Prof Poonam Batra Report

• Duration of the B.Ed course (and other courses)

 • Student intake suggestions

• Curriculum revision

• Practicum and School internship

• Assessment

 • B.Ed faculty qualifications and requirements

 The B.Ed. programme shall be of duration of two academic years including a minimum period of school internship of 16 weeks. At least 200 working days should be dedicated. Eeach year exclusive of admission and inclusive of the period of classroom transaction, practicum, school internship and examination. The institution shall work for a minimum of thirty six hours in a week (five or six days). Duration and number of working days

 Student Intake Basic unit of One hundred (100) students divided into two sections of fifty (50) each for general sessions and not more than twenty (20) students per teacher tor a school subject or methods courses and other practical activities of the programme to facilitate participatory teaching and learning.

 Distribution of students Suggested constitution

Mathematics : 20 Students

 Social Studies : 20 Student

 First Language : 20 Students

 General Science : 20 Students

 English Language : 20 Students

☐ **Fees** The institution shall charge only such fee as prescribed by the provisions of NCTE (Guidelines for Regulations of tuition fees and other fees chargeable by unaided teacher education institutions) Regulations, 2002, as amended from time to time .

☐ **Curriculum** Three broad curricular areas: 1. Foundations of Education. 2. Curriculum and Pedagogy 3. School Internship.

☐ Curriculum Studies Courses designed in knowledge and curriculum with units of study that include the syllabi of graduation level as the case may be in each of the major disciplines of language, mathematics, social sciences and natural sciences. The courses shall aim to develop in students an understanding of the school curriculum, linking school knowledge with community life.

☐ **Colloquia** Colloquia would form an integral part of the B.Ed. programme. Colloquium provides for a platform where students draw theory-practice connections in order to interact with children and prepare resources for them. Students are expected to present term papers, practicum reports and participate in group discussions. Colloquia shall include a school contact programme,☐ literature for adolescents, theatre in education, developing a resource centre in schools…

☐ **School Internship** :Minimum duration 16 weeks for a two-year programme including an initial phase of one week for observing a regular classroom with a regular teacher and would also include peer observations, teacher observations and faculty observations of practice teaching lessons.

☐ The Internship shall be conducted in two phases The first year would include 4 weeks of orientation, of which: one week is to be dedicated to classroom observations, one week for community experiences and two weeks for unit planning & teaching in opted teaching subject.

☐ The Internship shall be conducted in two phases Teaching during the second year of school internship would be spread over 12 weeks spread over secondary and/or senior secondary level. In the second year, interns will be expected to: be in school for 4 continuous days of a week. 2 days in a week shall be dedicated to planning, developing materials, reflective journal writing, and interacting with faculty at the institute. One faculty to support a maximum of 7 students in a school for feedback, support, guidance and assessment

☐ Programme Implementation Enter into an MoU with at least ten schools indicating their willingness to allow the internship as well as other school based activities of the programme.

☐ Assessment in the B.Ed. Programme For each theory course, at least 30% shall be☐ assigned for continuous internal assessment and 70% for external examination.

☐ Academic Faculty For intake of 100 students, the faculty-student ratio shall be I:15

☐ Profiles of Faculty Required Foundations Courses (2 posts) Post-graduate degree in Psychology/Sociology Or M.Phil/Ph.D. in areas of the area of psychology /sociology of education (Degree of education is a desirable qualification for these posts)

☐ Curriculum and pedagogy – science, mathematics, social science, language education Post-graduate degree in the subject (language, science, maths etc) and M.Ed./M.A.(Education) Or Post-graduate degree in subject and B.Ed The faculty appointed on these qualifications shall be appointed subject to the condition that an M.Ed. degree shall be acquired in the subsequent five years or a Ph.D. degree in a relevant area shall be acquired in the subsequent eight years from the date of their appointment. Or Research degree (M.Phil./Ph.D.) in the area of relevant Education (science education, social science etc)

☐ Physical infrastructure and equipment The minimum essential space for an institute offering B.Ed programme includes: an administrative wing, an academic wing and other amenities.The institutions shall possess: 3000 sq mts of exclusive well demarcated land for the initial intake of one hundred students out of which 2500 sq mts shall be the built up area and the remaining space will be for lawns, play-fields etc..

☐ Physical infrastructure For an additional intake of thirty five students or part thereof it shall possess additional land of 500 sq m. For an annual intake beyond two hundred and upto three hundred, it shall possess land of 3,000 sqm.

☐ Classrooms Classrooms: The Institute shall have three classrooms, with space and furniture to accommodate 100 students. Tutorial Rooms: Institute shall provide a minimum of five rooms of the size of 30 sqm.

☐ Library Shall have a seating capacity for at least fifty percent students equipped with minimum 1,000 titles and 3,000 books. These include text and reference books related to all☐ courses of study, readings and literature related with the approaches delineated in the

B.Ed. Programme, educational encyclopedias, electronic publications (CD ROMs) Minimum five professional research journals of which at least one shall be an international publication.

 Library resources will include books and journals published and recommended by NCTE, NCERT and other statutory bodies. There shall also be provision of space for reading and reference in the library that can accommodate at least sixty persons at a time. At least a hundred quality books will be added to the library every year. The library shall have photocopying facility and computer with Internet facility for the use of faculty and students. Library

 The Resource Centre Teacher Education Institute shall provide an integrated Resource Centre for science, mathematics, arts. psychology. lCT, health and physical education Audiovisual equipment's - TV, DVD Player, LCD Projector, films (documentaries, children's films, other films of social concerns, issues of conflict, films on education); camera and other recording devices. It shall have multiple sets of science apparatus required to preform and demonstrate the experiments prescribed in the syllabus for secondary/senior secondary classes. Chemicals, etc. should be provided in the required quantity.

  Health and Physical Education Centre: Adequate games and sports equipment for common indoor and outdoor games should be available. Multipurpose Hall: Institute shall have one seminar hall with seating capacity of one hundred and minimum total area of 190 sqm.T his hall shall be equipped for conducting seminars and workshops.

  Faculty Room: A faculty room, with individual workspaces, a functioning computer spaces shall also be provided. Administrative Office Space: Institute shall provide an adequate working space for the office staff with furniture, storage and computer facilities. Common room(s): Institute shall provide at least two separate common rooms, for women and men.

 Toilets: A minimum number of four toilets shall be provided by the Institute, two for students (one each for women and men) and two for faculty members. Store: Adequate space for storage shall be provided.

 2VIEWS/COMMENTS/OBSERVATIONS on the Report of Committee constituted for implementation of Recommendations No.2,3,6,9 and 11 of Justice Verma

☐ Background For the purpose of implementing the recommendations 2,3,6,9 and 11 of Justice Verma, the NCTE constituted a Committee under the Chairpersonship of Prof. Poonam Batra. The Committee had since finalised its report and submitted to NCTE for further consideration – this is available on the NCTE portal. All the stakeholders/ general public are requested to kindly go through the report and submit their comments/ observations on the report of the Committee by 5th August 2014

☐ Recommendation 3 "Teacher education should be a part of the Higher Education system. The duration of programme of teacher education needs to be enhanced, in keeping with the recommendations of the Education Commission (1966), the implementation of which is long overdue." (P.95, JVC Report)

☐ 32. Recommendation 4 "It is desirable that new teacher education institutions are located in multi- and inter-disciplinary academic environment. This will have significant implications for the redesigning of norms and standards of various teacher education courses specified by the NCTE. This will also have implications for employment and career progression of prospective teachers. Existing teacher education institutions may be encouraged to take necessary steps towards attaining academic parity with new institutions." (P.95, JVC Report).

☐ Modalities of implementing Recommendations No. 3 and 4 This Committee proposes that the restructuring of TE in line with the Justice Verma Commission recommendations is to be done in a phased manner over five years. It will cover five academic cycles beginning with the year 2015-16 and concluding with the academic year 2019-20.

☐ University Affiliation All existing Teacher Education Institutions (TEIs), governmentand private, shall obtain affiliation from local universities by the academic year 2016-17. This is mandatory as the first batch of students studying the new☐ curriculum will commence the programme in that academic year. TEIs must meet the requisite norms laid down by the affiliating institution including norms on infrastructure, faculty and support staff, academic accreditation, instituting internal processes.

☐ Multi and Inter-disciplinary Institutions   TEIs merge with existing composite institutions/colleges offering degrees in liberal arts, sciences, social sciences and humanities. or TEIs/colleges start programmes in liberal arts, sciences, social sciences and humanities. or TEIs partner with existing composite institutions/colleges offering programmes of liberal arts, sciences, social sciences and humanities in a phased manner.

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⬜ Structural and Institutional aspects Stop admissions to 1-year B Ed. programme in 2015.June 2014 should be the last batch admitted – 2015 will be a 'gap' year for admissions which will be used to prepare for the 2-year programme to be launched in 2016. States may exercise the option of admitting the first batch of a two-year programme in 2015 provided institutes are fully prepared to do so. Offer 2-year B Ed. Programme in June 2016.

⬜ Recommendation No. 6 "In keeping with the recommendations of the Education Commission (1966), every pre-service teacher education institution may have a dedicated school attached to it as a laboratory where student teachers get opportunities to experiment with new ideas and hone their capacities and skills to be become reflective practitioners" (p. 95, JVC Report).

⬜ Modalities for Implementing Recommendation No. 6: A Roadmap All teacher education institutions, private as well as government, shall be required to have a dedicated school attached to it. It is recommended that an attached school is either located within the campus of the institute conducting pre-service teacher education or in close proximity (within 2 km) to the institute. The association between the school and the teacher education institution could be made on the basis of a MoU that delineates specific aspects that allow both institutions to benefit from the collaboration. By Academic Year 2015-16, all TEIs are required to have entered into MoU with the attached school.

⬜ Recommendation No. 11 "The idea of creating opportunities for teaching practitioners to teach in teacher education institutions, as visiting faculty, may be explored. Similarly, teacher educators could be considered as visiting faculty in schools." (p. 96, JVC Report).

⬜ Modalities for Implementing Recommendation No. 11 The exchange of faculty members from both institutions, TEIs and schools, shall be done mutually or otherwise. During the course of one academic year, a maximum of two faculty exchanges shall be permitted. The duration of each exchange shall be from within a range from three months to one year, with provision of extension, during the regular academic session. School Teachers should be deputed to TEIs with which the school has entered into an MoU. Teachers shall be offered opportunities to take up a range of activities within TEIs. Teacher educators shall be offered opportunities to be associated with schools for a given duration and in different capacities.

Structural and administrative as well as curricular aspects of pre service teacher education in Indian context are as follows.

❖ **Diploma in early childhood education programme leading to Diploma in Pre-school Education (DPSE):**

- This pre school education aims at the total child development in a learning environment that is joyful, child centred, play and activity based.
- Aims at preparing teachers for preschool programmes such as nursery, kindergarten and preparatory schools.
- Duration : Two academic Year (Maximum 3 years)
- Working Days: 200 days excluding admission and examination. Instituton should work minimum 36 hours per week for 5 to 6 days
- Attendance 80% for course work and practicum and 90% for internship
- Intake: Basic unit of 50 students for each year. Two basic units are permissible initially.
- Qualification :50% marks in higher secondary or in equivalent examination. Reservation and relaxation to SC/ST//OBC/PWD according to normsof state.central govt.
- Admission Process: Marks based on qualifying examination
- Fee: According to state Govt. and NCTE Norm 2002
- Curriculum: Curriculum consist of Theory, Practicum and Internship
- Theory:Theory course categorized as Foundation course, content and pedagogy keeping in view the integration.
- Foundation course includes Early childhood care and education in india, understanding child and childhood, Health and nutrition of child, Gender, Diversity and discrimination,
- Content and pedagogy courses shall include pre school education curriculum: principles and priorities, methods and materials for pre school education, development of mathematical concepts in education, development of language and literacy in children, developing understanding of environment, planning and organizing pre school education programme, working with children with special need, working with parents and community
- Practicum:Each theory course shall associated with practicals that aims at enabling student teachers to internalise or understand theorybetter through linking it with field situation, develop appropriatepedagogical competencies

and skills, activities supplementing theory include observing children, family, institutes, doing case studies, creating and practising use of teaching learning materials, aids and activity plans, planning , conducting activities related to different developmental and subject domain , planninhgg designing continuing and comprehensive evaluation.

- School Internship: It envisaged as a three stage process that includes observation of pre school classes in different setting , planned practice teaching i school clkasses for part of day, full time internship or immersion in pre school programmes across range of provision public private, NGO.A minimum of 20 weeks of ointernshipin pre school shall be organized during 2 year duration of this four weeks would be dedicated to classroom observation of during first year and 16 weeks during the second year for internsjhip in pre schools.. it is desirable thayt it has attached pre school of its own. The institution shall make arrangement with atleast 10 pre school/pre primary schools indicating their willingness to allow internship as well as other school based activities of the programme.The pr schools shall form basic conbtact point for all practicum activities and related work during the course of the programme. The district,block office of the stat education department may allot schools to different TTIs.

- Assessment : 20% 30 % for continuous internal assessment and 70 % to 80% by examination

Elementary teacher education programmes leading to Diploma in Elementary Education (D.EI.ED).

- ➢ It aims to prepare teachers for elementary stage of education from class I TO VIII
- ➢ Duration : Two academic Year (Maximum 3 years)
- ➢ Working Days: 200 days excluding admission and examination. Instituton should work minimum 36 hours per week for 5 to 6 days
- ➢ Attendance 80% for course work and practicum and 90% for internship
- ➢ Intake: Basic unit of 50 students for each year. Two basic units are permissible initially.

- Qualification :50% marks in higher secondary or in equivalent examination. Reservation and relaxation to SC/ST//OBC/PWD according to normsof state.central govt.
- Admission Process: Marks based on qualifying examination
- Fee: According to state Govt. and NCTE Norm 2002

- **Curriculum :** The D.El.Ed programme designed the study of childhood, social context of education, curric=ulum and pedagogic course, and there shall be a optional course in pedagogy. The theory course shall include foundation, perspectives of education in three broad rubrics namely child studies, contemporary studies and educational studies,. The theory course shall also include language proficiency and communication, relevant field based units of study. Including assignments and projects. The curriculum and pedagogy courses include pedagogy for primary and upper primary curriculum area. Pedagogy courses in language, mathematics, environmental studies for primary stage are compulsory. Optional pedagogy courses in social science education, language education, mathematics education and science education are offered for teaching at upper primary stage.

- Practicum: Field engagement course s are designed to give opportunities to acquirema repertoire of professional skills and capacities in craft, fine arts, work and education, creative drama, there is education, self development, children's physical and emotional health, school health and education.

- School Internship: A minimum of 20 weeks of ihnternship in school during the course of which 4 weeks would be dedicated to classroom observation etc during the first year. Second year school internship will be for minimum period of 16 weeks in the elementary classes including primary and upper primary.

- **Bachelor of Teacher elementary education programme leading to Bachelor of elementary education (B.EI.ED)degree.**
  It aims to prepare teachers for elementary stage of education from class I TO VIII. In addition the programme prepare students with professional and academic options in elementary education including teaching in elementary schools with special orientation forgovernment schools, leading elementary school system with various capacities, , teaching and research in govt. and non Govt. elementary sectors, pursuing post graduate and research studies in education and other disciplines, and working as

teacher educator in various state institute and university Department and college offering programmes in elementary education

This programme is offered only in a constituent or affiliated college of university offering undergraduate studies in liberal arts, humanities, social sciences, commerce, mathematics and sciences.or a or affiliated college of university offering multiple teacher education programme or a university with multidisciplinary faculties.

- Duration : Two academic Year (Maximum 3 years)
- Working Days: 200 days excluding admission and examination. Instituton should work minimum 36 hours per week for 5 to 6 days
- Attendance 80% for course work and practicum and 90% for internship
- Intake: Basic unit of 50 students for each year. Two basic units are permissible initially.
- Qualification :50% marks in higher secondary or in equivalent examination. Reservation and relaxation to SC/ST//OBC/PWD according to normsof state.central govt.
- Admission Process: Marks based on qualifying examination
- Fee: According to state Govt. and NCTE Norm 2002
- Curriculum:The b.Ed.Ed is designed to integrate the study of subject knowledge, human development, pedagogical knowledge and communication skilkl.The programme comprised of compulsory and optional theory courses, compulsory practicum course and a comprehensive school internship.
- Theory Courses: The theory course cpomprise of perspectives in education or foundation courses, discipline based courses and curriculum and pedagogic courses. The theory course shall include relevant field based units of study including assignments and projects. The theory and practicum courses allotted weightage in the proportion of 60:40. The theory course include following course types:

   (a) Perspectives pore foundation course should design to provide an in depth study possesses of child development and learning concepts and perspectives in education, socio political context in which education is situated, processes and approaches of school organisation and management, contemporary issues related to society and educationand a repertoire of professional capacities to relate ans communicate.

(b) Courses in Curriculum and pedagogic Studies are designed to develop core teaching perspectives and skills specific to teaching of children (6 to 14 years)Three compulsory courses focus on pedagogic approaches in language, mathematics and environmental studies at primary stage (I– V). Course focusing on upper primary stage (VI-VIII) in language, mathematics, natural sciences, social sciences are offered as optionalcourses for special lization in one subject.

(c) The discipline based courses designed to enrich student teacher's knowledge base and allow for further studynin the concern discipline.

- Practicum: Practicum courses designed to allow variety of work experience with children within and outside elementary schools and opppertunities for self reflection and development of analytical skills, scientific enquiry and understanding social realities.Courses designed to give opportunities to aquire a repertoire of professional capacities and skills uin craft, creative drama, music and theatre in education, children's literature and story telling, developing and analysing curricular material;s, classroom management, systematic observation, documentation and evaluation.

- Self development Workshops: Activities and workshops are designed to provide opportunities to students for self reflection and analysis.

- School Engagement: The interface with school is designed to vary focus, the purpose and nature of engagement with school children. The components should include establishing contact with school, observing children, developing materials, visiting center of innovation in education, working with communities and school management committees and teaching school children.

- School Internship: Students are acti=vely engaged in teaching for atleast 16 weeks in the final year of programme including an initial one week of observing regular classroom with regular teacher. They would be engaged in teaching at two levels, namely, primary class (I – V) and upper Primary (VI- VIII). They should be provided opportunities to teach in Govt. and private schools with sustained engagement , systematic supervisory support and feedbacks from faculty.

- **Bachelor of Education Programme leading to bachelore of education (B.Ed) degree.**

- It aims to prepare teachers for upper primary or or middle level (VI-VIII), secondary level (IX-X), senior secondary, level (XI-XII).

- Duration : Two academic Year (Maximum 3 years)

- Working Days: 200 days excluding admission and examination. Instituton should work minimum 36 hours per week for 5 to 6 days

- Attendance 80% for course work and practicum and 90% for internship

- Intake: Basic unit of 50 students for each year. Two basic units are permissible initially.

- Qualification :50% marks in higher secondary or in equivalent examination. Reservation and relaxation to SC/ST//OBC/PWD according to normsof state.central govt.

- Admission Process: Marks based on qualifying examination

- Fee: According to state Govt. and NCTE Norm 2002

  Curriculum: The B.Ed curriculum desined to to integrate the study of subject kbowledge, human development , pedagogical knowledge and communication skills. The programme shall compriose three broad curricular areas such as perspectives in Education, Curriculum and pedagogic studies, and Engagement with the world.. Information and Communication Technology (ICT) , gender , yoga education, and disability. / inclusive education are form an integral part of B.Ed. curriculum

  (i)Theory Courses

  (a) **Perspectives in Education:** Perspectives in education includes courses in the study of childhood, child development and adolescence, contemporary India in education, philosophical and sociological perspectives in education, theoretical foundation of knowledge and curriculuim, teaching and learning, gender in the context of school and society and inclusive education.

  (b) **Curriculum and Pedagogic Courses:** Courses in curriculum and pedagogic studies   includes aspects of language across thew cxurriculum and communication, understanding of discipline, social history of a school subject, nd its pedagogical foundation with a focus on learner and a course on the theoretical perspectives on assessment for learning.

(ii)Engagement in field/Practicum: The B.Ed. Progreamme provides for sustained engagement with self, the child, community and school at different levels and through establishing close connection between different curricular areas. This curricular area would serve as an important link between abovebtwo broad curricular area through its three components such as tasks and assignments that run through all the courses, school internship, courses on enhancing professional capacities (Language and communication, drama and art, self development and ICT).

(iii) School Internship: School internship is a part of broad curricular area of engagement with the field and designed to lead to development of a broad repertoire of perspectives, professional capacities, teacher sensibilities and skills.. Students are to be engaged actively for 16 weeks in the final year of course. They have to engage at two levels such as upper primary (VI-VIII) and secondaruy (IX-X) or senior secondary with atleast 16 weeks in secondary/senior secondary classes.Hence internship in school is for a minimum of 20 weeks for a two year programme (4 weeks in the first year and 16 weeks in second year.This should also include, beside practice teaching an initial phase of one week for observing a regular classroom with a regular teacher and would also include peer observations, teacher observations and faculty observations of practice lessons.

- **Master of Education Programme leading to Master of education (M.Ed) degree.**
- It aims to prepare teacher educators and other educatoiponal professionals including curriculum developer, educational policy analyst, planner, administrators, supervisors, school principals, researchers. It has a specialization either in elementary education or in secondary education.
- Duration : Two academic Year (Maximum 3 years)
- Working Days: 200 days excluding admission and examination. Instituton should work minimum 36 hours per week for 5 to 6 days
- Attendance 80% for course work and practicum and 90% for internship

- Intake: Basic unit of 50 students for each year. Two basic units are permissible initially.

- Qualification :50% marks in higher secondary or in equivalent examination. Reservation and relaxation to SC/ST//OBC/PWD according to normsof state.central govt.

- Admission Process: Marks based on qualifying examination

- Fee: According to state Govt. and NCTE Norm 2002

- Curriculum: The M.Ed . programme is designed to provide opportunities for students to extend as well as deepen their knowledge and understanding of education, specialize in selected areas and also develop research capacities, leading to specialization in either elementary education or secondary education. The curriculum of 2 year M.Ed. course comprise of the following components:

1. A commom core that includes perspective courses, tool courses, teacher education courses, and a self development component.

2. Specialisation branches where students choose to specialise in any one of the school level/area such as elementary, secondary, senior secondary.

3. Research leading to dissertation

4. Field immersion/attachment/Internship: There shall be core course (which shall have about 60% of credits) and specialised course in elementary education or secondary education and dissertation with about 40% of credits.

   (a)Theory: The theory courses are divided into core courses and specialisation courses. The main core courses include perspective odf education, tool courses and teacher education courses. **Perspective course is the area of philosophy of education, sociology-**history- Political – economic of education, psychology of education, education studies and curriculum studies. Tool courses comprise of rearch, academic /professional writing and communication skill, educational technology including workshops/courses in ICT.. Teacher education course which are also lonked in field internship is also included in core.

   The specialization components offers to students a specialilisation in one of the school stage elementary or secondary and senior secondary. In these stages thematic specialisations are curriculum, pedagogy and assessment, policy economics and planning, educational management and administration.

Critical reflection on gender, disability, ICT is also given.

(b) Practicum: Organisation of practicum activities and seminar to enhance professional skills and understanding of the students is the part of courses.

(c) Internship and Attachment: Field attachment /internship/immersions are facilitated with organization s and institutions working in education. These would aim at engaging students with field based situation and work in elementary and other level of educationand to provide opportunity for reflection and writing on the same.

- **Diploma in Physical Education Programmes leading to Diploma in Physical Education (D.P.Ed).**

- It aims to prepare physical education teachers for elementary stage of education from class I TO VIII

- Duration : Two academic Year (Maximum 3 years)

- Working Days: 200 days excluding admission and examination. Instituton should work minimum 36 hours per week for 5 to 6 days

- Attendance 80% for course work and practicum and 90% for internship

- Intake: Basic unit of 50 students for each year. Two basic units are permissible initially.

- Qualification :50% marks in higher secondary or in equivalent examination. Reservation and relaxation to SC/ST//OBC/PWD according to normsof state.central govt.

- Admission Process: Marks based on qualifying examination

- Fee: According to state Govt. and NCTE Norm 2002
Curriculum: This programme is designed to integrate study of childhood, social context of education, subject knowledge , pedagogical knowledge, aims of educarion and communication skills. Information and Communication Technology (ICT) , gender , yoga education, and disability. / inclusive education are form an integral part of . curriculum

- Theory: The theory course comprise of perspectives in physical education, curriculum and sports pedagogy, child psychology. Theory courses in first year includes history and principles of Physical education, foundation of physical education, basic anatomy and physiology, yoga education, methods of physical education, organisation and administration in physical education, recreation, health education, environmental

studies, value education. Second year includes sports, training, child psychology, sociology, information technology, education technology, test and measurement, sportsd injuries and rehabitation, youth leadership and social welfare, nutrition and neurpathy.

- Practicum: The practicum course designed to give opportunity to acquire professional skills and capacities in various games, sports, physical activities, yogic experiences suitable to primary school children.

- School Internship: The programme includes basic skills in sports and games and indigious activities, giving exposure to teacher in teaching learning process.A minimum of 20 lessons in schools during the course of which 4 lessons would be dedicated to classroom observation etc. during the firast year and during the second year there will be minimum 10 lessons for the elementary classes

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Bachelor of Physical Education Programmes leading to Bachelor of Physical Education (B.P.Ed) Degree.

- It aims to prepare physical education teachers for class VI to X and conducting physical education and sports activities in class XI-XII.

- Duration : Two academic Year (Maximum 3 years)

- Working Days: 200 days excluding admission and examination. Instituton should work minimum 36 hours per week for 5 to 6 days

- Attendance 80% for course work and practicum and 90% for internship

- Intake: Basic unit of 50 students for each year. Two basic units are permissible initially.

- Qualification :50% marks in higher secondary or in equivalent examination. Reservation and relaxation to SC/ST//OBC/PWD according to normsof state.central govt.

- Admission Process: Marks based on qualifying examination

- Fee: According to state Govt. and NCTE Norm 2002

  Curriculum: This programme is designed to integrate study of childhood, social context of education, subject knowledge , pedagogical knowledge, aims of educarion

and communication skills. Information and Communication Technology (ICT) , gender , yoga education, and disability. / inclusive education are form an integral part of . curriculum

- Theory: The theory course comprise of perspectives in physical education, curriculum and sports pedagogy, child psychology. Theory courses in first year includes history and principles of Physical education, foundation of physical education, basic anatomy and physiology, yoga education, methods of physical education, organisation and administration in physical education, recreation, health education, environmental studies, computer application, theory of sports and games, officiating and coaching.. Second year includes contemporary issues in physical education, - fitness, wellness, Olympic movement, nutrition and weight measurement, sports physiology and sociology, kinesiology, biomechanics, sprts medicines, physiotherapy

- And rehabitation, measurement and evaluation, sports management and curriculum design, research and statistics, research projects.

- Practicum: The practicum course designed to give opportunity to acquire professional skills and capacities in various games, sports, physical activities, yogic experiences suitable to school children.It includes track and field, swimming, yoga, gymnastics, aerobicsm, racket sports, team games, combative sports, wrestling, recreational games, indigeous sports, activities of national importance, mass demonstration etc

- School Internship: The programme includes basic skills in sports and games and indigious activities, giving exposure to teacher in teaching learning process. A minimum of 30 lessons in schools during the course of which 20 lessons would be in schools and 10 lessons are coaching lessons in college/institutions/department itself.

Master of Physical Education Programmes leading to Master of Physical Education (M.P.Ed) Degree.

- It aims to prepare physical education teachers for senior secondary (XI-XII) stage as well as assistant professor/director//sports officers in college/universities and teacher educator in college of physical education and universitiesdepartment of physical education.

- Duration : Two academic Year (Maximum 3 years)

- Working Days: 200 days excluding admission and examination. Instituton should work minimum 36 hours per week for 5 to 6 days

- Attendance 80% for course work and practicum and 90% for internship

- Intake: Basic unit of 50 students for each year. Two basic units are permissible initially.

- Qualification :50% marks in higher secondary or in equivalent examination. Reservation and relaxation to SC/ST//OBC/PWD according to normsof state.central govt.

- Admission Process: Marks based on qualifying examination

- Fee: According to state Govt. and NCTE Norm 2002

  Curriculum: This programme is designed to integrate study of childhood, social context of education, subject knowledge , pedagogical knowledge, aims of educarion and communication skills. The programme comprised of compulsory and optional theory courses and compulsory internship in school /college/asports organization/sports academy/sports club.

  Theory: The theory course comprise of perspectives in physical education, curriculum and sports pedagogy, child psychology. Theory courses in first year includes research process in physical education and sports science, applied statistics in physical education and spoors, test, measurement and evaluation, yogic sciences, scientific principles of sports and training, sports technology, physiology of exercise, sports psychology, sports biomechanics and kinesiology, sports medicine. In second year the course includes sports management curriculum design in physical education, atheletic care and rehabitation, sports journalism and mass communication technology, sports engineering, physical fitness and wellness, values and environmental education, education technology in physical education, health education and sports, nutrition and dissertation.

  Practicum: The practicum course designed to give opportunity to acquire professional skills and capacities in various games, sports, physical activities, yogic experiences suitable to students.

- School Internship: A minimum of 30 lessons out of which 10 teaching , 10 coaching and 10 officiating in school/college/institution/department are conducted.

Diploma in elementary education programmes through Open and Distance Learning System leading to Diploma in Elementary Education (D.EI.Ed).

- It aims to upgrade professional competence of working (in service) teachers in elementary schools (I-VIII). It is useful for those students who entered this profession without formal training.

- Duration : Two academic Year (Maximum 3 years)

- Working Days: 200 days excluding admission and examination. Instituton should work minimum 36 hours per week for 5 to 6 days

- Attendance 80% for course work and practicum and 90% for internship

- Intake: Basic unit of 50 students for each year. Two basic units are permissible initially.

- Qualification :50% marks in higher secondary or in equivalent examination. Reservation and relaxation to SC/ST//OBC/PWD according to normsof state.central govt.

- Admission Process: Marks based on qualifying examination

- Fee: According to state Govt. and NCTE Norm 2002

- Curriculum :The syllabus of D.El.Ed. offered through the face to face made shall be transformed into distance mode consisting of blocks/units per credit hours of study. The self learning materials developed by the institution shall approved by distance education council/bureau.

- Implementation by curriculum based audio video resouurses, face to face as well as blended mode that is mixing resources with self learning, Self learning materials, personal contact programmes, academic counselling, workshops, teaching practice etc.

- **Bachelor of education programmes through Open and Distance Learning System leading to Bachelor of Education (B.Ed) Degree.**

- It aims to upgrade professional competence of working (in service) teachers in upper primary(VI-VIII), secondary (IX-X), senior secondary level (XI-XII) who entered this profession without formal training.

- Duration : Two academic Year (Maximum 3 years)

- Working Days: 200 days excluding admission and examination. Instituton should work minimum 36 hours per week for 5 to 6 days

- Attendance 80% for course work and practicum and 90% for internship
- Intake: Basic unit of 50 students for each year. Two basic units are permissible initially.
- Qualification :50% marks in higher secondary or in equivalent examination. Reservation and relaxation to SC/ST//OBC/PWD according to normsof state.central govt.
- Admission Process: Marks based on qualifying examination
- Fee: According to state Govt. and NCTE Norm 2002
- Curriculum :The syllabus of B.Ed. offered through the face to face made shall be transformed into distance mode consisting of blocks/units per credit hours of study. The self learning materials developed by the institution shall approved by distance education council/bureau.
- Implementation by curriculum based audio video resouurses, face to face as well as blended mode that is mixing resources with self learning, Self learning materials, personal contact programmes, academic counselling, workshops, teaching practice school based activities etc.
- **Diploma in Arts Education (Visual Arts) programme leading to Diploma in Arts Education (Visual Arts).**
- It aims to prepare teachers to teach visual arts upto class VIII
- Duration : Two academic Year (Maximum 3 years)
- Working Days: 200 days excluding admission and examination. Instituton should work minimum 36 hours per week for 5 to 6 days
- Attendance 80% for course work and practicum and 90% for internship
- Intake: Basic unit of 50 students for each year. Two basic units are permissible initially.
- Qualification :50% marks in higher secondary or in equivalent examination. Reservation and relaxation to SC/ST//OBC/PWD according to normsof state.central govt.
- Admission Process: Marks based on qualifying examination
- Fee: According to state Govt. and NCTE Norm 2002
- Curriculum: Two year curriculum has the following components

(A) Theory which consist of core courses such as child studies, contemporary studies, educational studies, language proficiency and communication, appreciation of arts, visual arts (painting/sculpture/applied arts/Heritage crafts/Design)

(B) Practicum: Exploring with medium and and techniques the studies can opt their way of expression, Students are equipped to cater the needs of diverse learners in school. The programme includes practices in each field of visual/arts. The students teacher explores different pedagogical processes in various mediums and materials which are appropriate for children upto secondary school.

(c) School Internship: In both the years the student teachers are sent to school for observations and organizing classrooms and out of classroom activities. The duration of school internship should be at least 16 weeks.

(D) Workshops, Visits, Project, displays and performances:workshop wit eminent artist or craft person , visit to local monument, museum, art galleries, local fair and festivals etc. and conducting discussions, writing reports or giving seminar after the experience are their art experience. There should be process oriented projects based on social, cultural or environmental themes can be given individually or in group.

- **Diploma in Arts Education (Performing Arts) programme leading to Diploma in Arts Education (Performing Arts).**
- It aims to prepare teachers for teaching performing arts upto class VIII
- Duration : Two academic Year (Maximum 3 years)
- Working Days: 200 days excluding admission and examination. Instituton should work minimum 36 hours per week for 5 to 6 days
- Attendance 80% for course work and practicum and 90% for internship
- Intake: Basic unit of 50 students for each year. Two basic units are permissible initially.
- Qualification :50% marks in higher secondary or in equivalent examination. Reservation and relaxation to SC/ST//OBC/PWD according to normsof state.central govt.
- Admission Process: Marks based on qualifying examination
- Fee: According to state Govt. and NCTE Norm 2002
- Curriculum: Two year curriculum has the following components

(A) Theory which consist of core courses such as child studies, contemporary studies, educational studies, language proficiency and communication, appreciation of arts, special courses such as Music (vocal and instrumental), Drama/theatre, dance

(B) Practicum: Practicum in music, drama/theatre. Dance are available in this course.

(c) School Internship: The duration of school internship should be at least 16 weeks each year..

(D) Workshops, Visits, Project, displays and performances

- **4-yr integrated programme leading to B.A.B.Ed /B.Sc.B.Ed Degree.**

  ➢ It aims to prepare teachers for upper primary and secondary stage of education .

  ➢ It aims at integrating general studies comprising sciences B.Sc.B.Ed and social sciences or humanities (B.A.B.Ed) and professional studies comprising of foundation of education, pedagogy of school subjects, practicum related to tasks or functions of school teacher

  ➢ Duration : Two academic Year (Maximum 3 years)

  ➢ Working Days: 200 days excluding admission and examination. Instituton should work minimum 36 hours per week for 5 to 6 days

  ➢ Attendance 80% for course work and practicum and 90% for internship

  ➢ Intake: Basic unit of 50 students for each year. Two basic units are permissible initially.

  ➢ Qualification :50% marks in higher secondary or in equivalent examination. Reservation and relaxation to SC/ST//OBC/PWD according to norms   liberal programme in sacience and arts stram and supportive courses, pedagogical courses practicum including school experience and internship in teaching.of state.central govt.

  ➢ Admission Process: Marks based on qualifying examination

  ➢ Fee: According to state Govt. and NCTE Norm 2002

  ➢ Curriculum: The B.Sc. B.Ed. and BAB.Ed programme consist of content courses according to undergraduate liberal programme in science and arts stram and supportive courses, pedagogic courses and practicum including school experience and internship in teaching.. Information and Communication Technology (ICT) , gender , yoga education, and disability. / inclusive education are form an integral part of curriculum. Hence it consists of theory courses such as perspectives in

education, curriculum and pedagogic studies, language and communication and development of self education. The practicum and school internship are integral part of this course. The duration of internship is 20 weeks involving 4 weeks in the third year and 16 weeks in the fourth year.

- **Bachelor of Education Programme 3-yr (Part-Time) leading to Bachelor of Education (B.Ed) Degree**.
- **It aims to prepare teachers for elementary stage of education from class I TO VIII**
- Duration : Two academic Year (Maximum 3 years)
- Working Days: 200 days excluding admission and examination. Instituton should work minimum 36 hours per week for 5 to 6 days
- Attendance 80% for course work and practicum and 90% for internship
- Intake: Basic unit of 50 students for each year. Two basic units are permissible initially.
- Qualification :50% marks in higher secondary or in equivalent examination. Reservation and relaxation to SC/ST//OBC/PWD according to normsof state.central govt.
- Admission Process: Marks based on qualifying examination
- Fee: According to state Govt. and NCTE Norm 2002

3-yr integrated programme leading to B.Ed.M.Ed.(Integrated) Degree.

- It aims to prepare teachers for various level of schooling namely upper primary or middle level (vi-viii), secondary level (IX-X), senior secondary (XI-XII). The programme is offered in a staggered manner during a period of three years combining face to face teaching, internship, school based activities.
- The programme shall provide opportunities to persons employed as a teacher in secondary school teaching classes VI-XII to acquire professional qualification
- Duration : Three academic Year (Maximum 5 years)
- Working Days: 200 days excluding admission and examination. Instituton should work minimum 36 hours per week for 5 to 6 days
- Attendance 80% for course work and practicum and 90% for internship

- Intake: Basic unit of 50 students for each year. Two basic units are permissible initially.

- Qualification :50% marks in higher secondary or in equivalent examination. Reservation and relaxation to SC/ST//OBC/PWD according to normsof state.central govt.

- Admission Process: Marks based on qualifying examination

- Fee: According to state Govt. and NCTE Norm 2002

- Curriculum:The curriculum of the programme comprise of core and specialisation components. The core have the following four components: (i) Persspective courses(ii) Researcxh , tools and self development component including dissertation, taught course and workshops (iii) Teacher Educationcomponent including taught course and internship/attachment with teacher education institute. (iv) school related field experience. The specialization component have 2 levels where students choose to specialise in (a) one of the school level/area (elementary/secondary/senior secondary) and content cum pedagogy in school subject area which will comprise the core within the specialization. And (b) within the school level choosenthe students select one domain/theme based area for specialization(such as education administration and management, education policy, inclyusive education, curriculum , pedagogy and assessment, educational technology, foundation of education, higher education, early childhood education)

- Practicum includes organisation of workshops, practicum activities, projects and seminar that enhance professional skills and understanding of the students.

- Internship and attachment: At least 30 weeks of six days each of three year programme sre devoted to field based activities. It is categorized into following activities:

    1. School based attachment as per the school level specialization which include school and classroom observation, classroom teaching practice and focused assignments/projects (16 weeks)

    2. Working with community

    3. Working in an in service teacher education context as per the school level specialization and in a pre service teacher preparation context as per the school level specialization (4 weeks)

4. Exposure to a curriculum and /or textbook agency, policy making body statew educationdepartment etc. relevant to understanding educational practice at sites other than schools and

5. Working in a field situation related to the thematic or focus area of specialization (4 weeks)

These experience are supplemented with opportunities for reflection, action research and writing.

Modification of teaching behavior

Teachers are the backbone of society as they provide education to the future citizens of the country . through their proper instructional activities and behavioral pattern. It is very essential that teacher must effective to perform adequate behavior to achieve teaching learning objectives. However if teacher shows inadequate behavioral sequences in the classroom the teaching learning objectives could not be achieved. Hence while preparing teacher through pre service and in service teacher education it is needed to implement proper technique to modify teacher's incompetent behavioral pattern into more refined one .

Behavior is defined as something a person does at a particular situation.. Behavior may be increased by following the behavior with a favorable consequence or positive reinforcement. Teacher's behavior: Teacher's behavior is defined as the behavior or activities of persons as they go about doing whatever is required of teachers, particularly those activities that are concerned with the direction of guidance of the learning of others. .An implication of definition is that teacher behavior is social behavior. Not only do teachers influence student behavior, but students influence teacher behavior as well. Teaching is an intimate contact between teacher, a more mature personality and student is less mature personality. In the process of education, teacher helps in developing the student personality by his intimate contact. Behavior Modification: Behavior Modification is a discipline that makes use of learning principles to help pupil cope with or cure a wide range of psychological problems.

In a teacher training program or in service program in the shape of theory and practice is always aimed for bringing the needed modification and improvement in the existing teaching or teacher behavior of the concerned pre-service or in-service teacher. In the field of pedagogy and teacher education program a number of innovation and techniques have been introduced for modification and improvement of teacher's behavior and teacher's communication. These are especially concerned with the process of modifying the ways of interaction with the students and improving one's behavior as a teacher.

Teacher behavior refers to the behavior or communication (verbal and non-verbal communication) maintained and demonstrated by a teacher at the time of carrying out his teaching activities in the classroom along with his students. The term modification and improvement of teaching or teacher's communication and behavior refers to the attempts adopted for bringing desirable improvement in the existing entry behavior of a teacher for helping him to attain the desired terminal behavior in order to exercise his professional duties as

effectively as possible. It can be properly modified through the adoption of a variety of techniques including micro-teaching, Flander's interaction analysis category system and etc.

The principles of behaviour modification is "When a behaviour or response is aroused by a stimulus of a situation on a number of occasions, there is great likelihood of the recurrence of that behaviour when the same stimulus of situation is presented later at any other place" There are various feedback devices which are used for the modification of teacher behavior on the basis of this principle.. In teacher education programme behavior modification is done by training on teaching skills , value, pedagogical practice through different technique such as Microteaching, Flender's interaction analysis and Simulation.

Team Teaching

Team teaching involves a group of instructors working purposefully, regularly, and cooperatively to help a group of students of any age learn. Teachers together set goals for a course, design a syllabus, prepare individual lesson plans, teach students, and evaluate the results. They share insights, argue with one another, and perhaps even challenge students to decide which approach is better.

Teams can be single-discipline, interdisciplinary, or school-within-a-school teams that meet with a common set of students over an extended period of time. New teachers may be paired with veteran teachers. Innovations are encouraged, and modifications in class size, location, and time are permitted. Different personalities, voices, values, and approaches spark interest, keep attention, and prevent boredom.

The team-teaching approach allows for more interaction between teachers and students. Faculty evaluate students on their achievement of the learning goals; students evaluate faculty members on their teaching proficiency. Emphasis is on student and faculty growth, balancing initiative and shared responsibility, specialization and broadening horizons, the clear and interesting presentation of content and student development, democratic participation and common expectations, and cognitive, affective, and behavioral outcomes. This combination of analysis, synthesis, critical thinking, and practical applications can be done on all levels of education, from kindergarten through graduate school.

Working as a team, teachers model respect for differences, interdependence, and conflict-resolution skills. Team members together set the course goals and content, select common materials such as texts and films, and develop tests and final examinations for all students. They set the sequence of topics and supplemental materials. They also give their own interpretations of the materials and use their own teaching styles. The greater the agreement on common objectives and interests, the more likely that teaching will be interdependent and coordinated.

Teaching periods can be scheduled side by side or consecutively. For example, teachers of two similar classes may team up during the same or adjacent periods so that each teacher may focus on that phase of the course that he or she can best handle. Students can sometimes meet all together, sometimes in small groups supervised by individual teachers or teaching assistants, or they can work singly or together on projects in the library, laboratory, or fieldwork. Teachers can be at different sites, linked by video-conferencing, satellites, or the Internet.

Breaking out of the taken-for-granted single-subject, single-course, single-teacher pattern encourages other innovations and experiments. For example, students can be split along or across lines of sex, age, culture, or other interests, then recombined to stimulate reflection. Remedial programs and honors sections provide other attractive opportunities to make

available appropriate and effective curricula for students with special needs or interests. They can address different study skills and learning techniques. Team teaching can also offset the danger of imposing ideas, values, and mindsets on minorities or less powerful ethnic groups. Teachers of different backgrounds can culturally enrich one another and students.

Advantages

Students do not all learn at the same rate. Periods of equal length are not appropriate for all learning situations. Educators are no longer dealing primarily with top-down transmission of the tried and true by the mature and experienced teacher to the young, immature, and inexperienced pupil in the single-subject classroom. Schools are moving toward the inclusion of another whole dimension of learning: the lateral transmission to every sentient member of society of what has just been discovered, invented, created, manufactured, or marketed. For this, team members with different areas of expertise are invaluable.

Of course, team teaching is not the only answer to all problems plaguing teachers, students, and administrators. It requires planning, skilled management, willingness to risk change and even failure, humility, open-mindedness, imagination, and creativity. But the results are worth it.

Read more: Team Teaching - Advantages, Disadvantages - Students, Teachers, Teacher, and Single - StateUniversity.com http://education.stateuniversity.com/pages/2493/Team-Teaching.html#ixzz43ydtVV00

Teamwork improves the quality of teaching as various experts approach the same topic from different angles: theory and practice, past and present, different genders or ethnic backgrounds. Teacher strengths are combined and weaknesses are remedied. Poor teachers can be observed, critiqued, and improved by the other team members in a nonthreatening, supportive context. The evaluation done by a team of teachers will be more insightful and balanced than the introspection and self-evaluation of an individual teacher.

Working in teams spreads responsibility, encourages creativity, deepens friendships, and builds community among teachers. Teachers complement one another. They share insights, propose new approaches, and challenge assumptions. They learn new perspectives and

insights, techniques and values from watching one another. Students enter into conversations between them as they debate, disagree with premises or conclusions, raise new questions, and point out consequences. Contrasting viewpoints encourage more active class participation and independent thinking from students, especially if there is team balance for gender, race, culture, and age. Team teaching is particularly effective with older and underprepared students when it moves beyond communicating facts to tap into their life experience.

The team cuts teaching burdens and boosts morale. The presence of another teacher reduces student-teacher personality problems. In an emergency one team member can attend to the problem while the class goes on. Sharing in decision-making bolsters self-confidence. As teachers see the quality of teaching and learning improve, their self-esteem and happiness grow. This aids in recruiting and keeping faculty.

Disadvantages

Team teaching is not always successful. Some teachers are rigid personality types or may be wedded to a single method. Some simply dislike the other teachers on the team. Some do not want to risk humiliation and discouragement at possible failures. Some fear they will be expected to do more work for the same salary. Others are unwilling to share the spotlight or their pet ideas or to lose total control.

Team teaching makes more demands on time and energy. Members must arrange mutually agreeable times for planning and evaluation. Discussions can be draining and group decisions take longer. Rethinking the courses to accommodate the team-teaching method is often inconvenient.

Opposition may also come from students, parents, and administrators who may resist change of any sort. Some students flourish in a highly structured environment that favors repetition. Some are confused by conflicting opinions. Too much variety may hinder habit formation.

Salaries may have to reflect the additional responsibilities undertaken by team members. Team leaders may need some form of bonus. Such costs could be met by enlarging some class sizes. Nonprofessional staff members could take over some responsibilities.

All things being considered, team teaching so enhances the quality of learning that it is sure to spread widely in the future.

Role Playing

Meaning

Role Playing is considered a kind of an assumption or initiation of a particular appearance or form.It is a a strategy where pupil teachers have to imitate the act or role of student, teacher, parents, community members and observer. The essence of role playing is the personal experiencing of emotions, and perceptions by assuming a role in a defined situation and acting out its relevant behaviour.In classroom situation role playing can be considered as as a teaching learning technique or strategy in which a well planned situation is dramatized by a group of students by playing specific roles under the direction of teachers for deriving useful educational experiences. For example pupil teacher can learn school management, classroom management, organization of meeting with community members, teaching skills etc. by playing different roles. Role playing is a socio dramatic educational strategy in classroom.

For making role playing strategy to attain its desired objectives, it is essential to meet the following conditions:

- The pupil teacher who engage in role playing must understand clearly the situation and roles to be played by them for depicting the scene of that situation.
- The role must be portrayed or played with quality.
- The role or situation must have a real life quality.
- All the members of the group should closely and actively be attachedto the role playing either as role players or observers.

Steps Involved:

The role playing strategy according to Joyce and Weil (1980)/, may follow the following nine specific phases or steps in any classroom situation:

1. **Warming up stage**: It is considered as as the creation of problematic situation or citing of problematic experiences. At the beginning stage the student teacher may get a situation like disciplinary problem in classroom situation..

2. **Selection of Role player**: It is regarding the selection of role play according to demand of situation. Here some prospective teachers may play indiscipline students. By providing instruction to student teacher he plays the role of teacher trying establish discipline in class and some other prospective teachers may play the role of indiscipline students.

3. Setting of Stage for role playing: It is about making necessaty environmental setting for role playing activities. After assigning the roles , the necessary arrangement related with indiscipline activities and controlling it by prospective teachers will be created. Real like students sitting arrangement will be done.

4. Preparing of the Observer: It is concerned with the assignment of role of observers to the prospective teacher who are not being assigned any specific role in this activity. They have to only watch this process closely.

5. Enacting , story, role , situation: In this actual role playing process, the role players may be asked to enact ytheir specific roles as demand ed by the situation. In this step the role players as well as the observers may be asked to enact their respective roles as demanded in this discipline management inside classroom.

6. Discussion and Evaluation: It is about free and frank discussion about qualities ofthe roles. After enacting the process of managing discipline in classroom activity, there will be a free and flexible discussion discussion of whole process of role playing with a view of critical judgement of qualituies of the role played, difficulties experienced and lesson drawn etc.

7. Enacting Again: It is regarding the re enaction of role playing activities in the light of the modification suggested in step 6. Since there have been many gaps and shortcomings regarding the stage and role playing by prospective teachers, these may be rectified by providing fresh opportunities for enacting the specific roles. Here the teacher may point out the requirements essential for a free and fair election and precaution to be taken for this purpose.

8. Redirection and Evaluation: It is connected with the discussion about the specific roles, the effects as generating responses and deriving useful implication leading to solid conclusions and educational experiences. The re enacting the role s may

further be discussed and evaluated in the light of the final objectives to be realized for such role playing .

9. Deriving Generalization: It is about making relevant generalization and learning useful lesson applicable to real life situation.After going through the above activity prospective teachers may be made to derive useful information about discipline management inside classroom such as skills and techniques to be used . to manage discipline class, communication skills to manage discipline , importance of managing discipline etc.

Role playing steps can be condensed as

- Selecting the situation for role playing.
- Setting the stage and assigning roles.
- Preparing for Actions (Planning)
- Enacting the roles (Execution)
- Discussion and evaluation.
- Generalization.

Advantages of Role Playing

Role playing strategy carries following advantages:

1. It provides opportunities to the students to learn about a subje t from the inside. It makes them feel the intensity of the situation by enacting it.
2. It increases prospective teacher's interest, motivation and efforts for learning about a subject or phenomena.
3. The students derive useful real like life experiences through playing specific roles of the player or observers and in turns prepare themselves for future life experiences.
4. It provides training in verbal and motor communicationbof behavioural acts by expressing as spontaneously and freely as possible..
5. The student teacher get opportunity to imbibe useful qualities for social participation and cooperation by giving due regards to others feeling and point of view.

6. It can provide due insight into real life problems and develops problem solving abilities of students.

7. It can be used for illustrating and explaining various phenomena and incidents related to classroom teaching of various subjects.

Limitations

Role playing strategy has following limitations:

1. The students may not understand the problems or the situation for playing the roles with needed effectiveness.

2. The role playing strategy become effective when the players and observers truly believe in the story or the situation to be enacted.

3. The students who act the assigned role effectively are not easily available making the strategy a success.

4. The role playing strategy expects too much from teacher as he is one who has to create a life like problematic situation or story plot, prepare and draft the role playing activities, select the role players and watch the role playing activities for some useful educative gain.

Micro teaching

Micro teaching was first introduced at Stanford University, USA in 1963. The Stanford teacher education program staff members sought to identify isolate and build training programmes for critical teaching skills. There are general teaching skills that can be applied at many levels, for teaching many different subjects. Microteaching, has since then, been refined and applied not only in teacher training but also business, nursing and the army. Research in India and other developing countries have shown that conventional micro teaching methods help to improve teaching competencies.

The teacher in the class room uses several techniques and procedures to bring about effective learning in his /her students, these activities include introducing, demonstrating, explaining or questioning. The teacher could make use of non-verbal behaviours such as smiling, gesturing and nodding these group of activities are called teaching skills. The teacher trainee is introduced to a wide range of teaching skills. Microteaching allows the teacher

trainee to practice any one skill on his/her own, and then combine it with others when it has been mastered.

Definitions

Microteaching has been defined in several ways Allen D.W and Eve, A.N. (1968) defined microteaching as "a system of controlled practice that makes it possible to concentrate on specific teaching behaviour and to practice teaching under controlled conditions"

Allen, D.W (1966) defined microteaching as "a scaled down teaching encounter in class size and class time"

Buch, M.B (1968) has given a comprehensive definition of microteaching as a "teacher education technique which allows teachers to apply clearly defined teaching skills to carefully prepared lessons in planned series of 5 to 10 minutes. It encounters with a small group of real students, often with an opportunity to observe the results on videotape"

Passi,B.K(1976) writes that "the most important point in microteaching is that teaching is practiced in terms of definable, observable, measurable and controllable teaching skills"

A composite definition of microteaching technique would thus be

Microteaching is a teacher training technique involving a specific teaching behaviour/skill for short duration of 5 to 6 minutes for a small class comprising 5 or 6 fellow teacher trainees/peer group on a single concept of subject matter.

Some characteristics of microteaching

1. In microteaching the trainee can concentrate on practicing a specific, well-defined skill.
2. Microteaching provides for pinpointed immediate feedback.
3. As microteaching is scaled down teaching, there is no problem of discipline.
4. Less administrative problems arise as teaching sessions are organized with peers.
5. Microteaching provides an opportunity to under take research studies with better control over conditions and situations.
6. Microteaching can be used as an integral part of teacher training in India as sophisticated gadgetry is not a must.

Meaning

Micro teaching represents an appropriate innovative technique for helping the pupil teacher's being trained in the colleges of education in their acquisition of the desired teaching skills. We can define micro teaching as a sort of specialized training technique that provides appropriate opportunities to the pupil teachers for the practice and development of some specific teaching skills by organizing teaching it its micro form- miniature in terms of class size, time duration and content to be covered. It is a device of imparting training to the inexperienced or experienced teachers for learning the art of teaching by practicing specific skills through a "scaled down teaching encounters", i.e. reducing the complexities of real normal teaching in terms of size of the class, time and content.

The use of micro-teaching technique in reference to the teacher education program adopted in our country may prove advantageous on account of the specific features and characteristics inherent in this technique, such as, (i) non-dependence over the practicing schools and their students for the practice of skills, (ii) providing opportunity for the practice of one teaching skill at a time, (iii) reducing the complexities of the normal classroom teaching, (iv) providing appropriate opportunities for systematic observation of the teaching and immediate feedback to bring improvement in one's teaching skill, and (v) providing opportunity to the teacher trainees for the development of their teaching skills in the laboratory like controlled conditions. The micro-teaching procedure adopted for practicing teaching skills in our teacher Microteaching is a method which enables teacher trainees to practice a skill by teaching a short lesson to a small number of pupils. Usually a micro lesson of 5 to10 minutes is taught to four or five fellow students. A supervisor, using an appraisal guide, usually rates the lesson and then discusses it with the teacher trainee, where closed circuit television (cctv) is available the appraisal guide may be redundant. The teacher trainee may alter his/her approach if necessary and later re teaches the lesson to another group of pupils. This lesson is also rated by the supervisor and then analysed and discussed with the teacher- trainee.

The steps in a microteaching session are

1. PLANNING

This involves selection of the skill to be practiced, awareness of components of the skill, selection of a suitable concept, writing of micro lesson with specific objectives.

2. TEACHING

The following setting is suggested for the microteaching technique.

Time: 5 minutes
Students: peer group-5 or so in number
Supervisors: 1or 2

If possible, use of CCTV facility could be made to enable the teacher trainee to get a first hand look at his weaknesses

3. FEEDBACK

This is a vital aspect of the microteaching cycle. To be effective it must be clearly related to the model of the teaching skill used. Appraisal guides add to the comments of the supervisor and fellow students, they focus the feedback on to specific behaviours and can be used for the analysis session or be just given to the teacher trainee with a written comment or rating of his/her skill performance.

4. REPLAN

Keeping in mind the feedback received from the supervisor the teacher trainee replans his/her micro lesson writing another micro lesson plan or editing the existing one.

5. RETEACH

The teacher trainee re teaches, incorporating the suggested changes with the same students or another group of 5 students. Supervisor checks to see whether there is any improvement in skill attainment.

6. REFEEDBACK

The supervisor assesses the lesson again pointing out the improvements and lapses.

Indian model of microteaching

The Indian model of micro teaching has the following salient features.

1. The micro lesson is taught /demonstrated under normal conditions with minimum electronic gadgetry; available infrastructure (space, material and equipments) is used   as the micro teaching laboratory.

2. Immediate feedback is provided to the trainee teacher by the observers.

3. The duration of the micro teaching cycle is as follows

Teaching	6minutes
Feedback	6 minutes
Replan	12 minutes
Reteach	6 minutes
Refeedback	6 minutes
	36 minutes

The Indian model has been successfully tried out and is used in many of the teacher training institutions in India.

Microteaching Skills

The major premise underlying the concept of microteaching is that the complex teaching act can be split into component skills; each simple, well – defined and limited. These skills can be identified, practiced, evaluated, controlled and acquired through training

A teaching skill has been defined in various ways. A few definitions will clarify the meaning of the term

McIntyre, et al (1977) define teaching skill as "asset of related teaching behaviour which is specified types of classroom interaction situations tend to facilitate the achievement of specified types of educational objectives"

Characteristics of A Teaching Skills

1. A teaching skill is a set of strictly overt or observable behaviours

2. Purely cognitive skills such as problem solving is not considered as teaching skill

3. Teaching skills have three basic components, viz perception, cognition, and action

4. Teaching skills have three dimensions

i) Non-verbal behaviour

ii) Openness, and

iii) Nature of moves in teaching to which the skill belongs Openness, Non verbal behaviour, Nature of moves

A large number of skills have been identified. The first effort made by Allen and Ryan resulted in identifying fourteen skills. Singh, L.C(1979) makes reference to twenty two general teaching skills. Menon, et al (1983) have suggested a list of seventy four skills. These skills have been chosen as they foster teacher – pupil interaction, particularly as they belong to the four areas of motivation, presentation, recapitulation and questioning. These are the skills of set induction, demonstration, blackboard writing, explaining, stimulus variation, questioning and reinforcement.

Skills of Teaching Used in Microteaching

Skill of stimulus variation

- The skill of stimulus variation covers the activities the teacher can introduce to vary the presentation methods used in a lesson. This skill is concerned with three main areas of teaching, they are

  1. The manner, voice and teaching style of the teacher
  2. The media and materials used during teaching
  3. The teacher/ pupil relationship during the class.

Components

1. Movement

2. Gestures

3. Voice modulation

4. Focussing

5. Change in interaction style

6. Pausing

7. Oral- visual switching

Skill of reinforcement

- Reinforcement skill can increase student's involvement in their lessons in a number of positive ways. The skill is being used when the teacher reinforces good behaviour with a smile, when the teacher praises a good answer, or encourages a slow learner. Such positive reinforcement strengthens desirable behaviour, increases student participation. Negative reinforcement, on the other hand weakens undesirable behaviour.

Components

1. Positive verbal

2. Positive nonverbal

3. Negative verbal

4. Negative non verbal

5. Wrong use of reinforcement

6. Inappropriate of reinforcement

Skill of explaining

- Explaining can be defined as an activity to bring about a concept, principle, etc. It is an activity to fill up a gap in someone's understanding. The skill of explaining aims at making sure that the explanation is understood. All teachers should strive to perfect the skill of explaining accurately and effectively.

Components

- **Desirable behaviour**

  1. Beginning statement

2. Explaining

    Clarity

    Fluency

    Planned repetition

3. Concluding statement

4. Questions to test pupils understanding

- **Undesirable behaviour**

1. Irrelevant statement

2. Lacking in continuity

3. Inappropriate vocabulary

4. Lacking in fluency

5. Vague words and phrases

Skill of probing questions

- Probing is used when the students reply is correct but insufficient, because it lacks depth. Asking a number of questions about the response given to the first question. Such techniques that deal with pupil responses to your question are included in the skill of probing questioning.

The five components of the skill of probing questioning are

1. Prompting technique

    Prompting is a technique of probing or going deep into the pupil's initial response and leading him from no response to the expected response. This involves the teacher to give clues or hints to the pupil and ask leading questions.

2. Seeking further information

    It consists of asking the pupil to supply the additional information to bring initial response to the criterion level or the expected level.

3. Refocussing

    This technique consists of enabling the pupil to view his response in relation to other similar situations. It requires the pupil to relate a completely acceptable answer to other topics already studied by him.

4. Re direction technique

Redirection technique involves putting or directing the same question to several pupils for response. This is mostly used for the purpose of probing and for increasing pupil participation.

5. Increasing critical awareness technique

This technique mainly involves asking "how" and "why" of a completely correct or expected response. It is used to elicit a rationale for the answer.

Advantages of micro teaching

- Micro teaching is useful for developing teaching efficiency in pre service and in service teacher education programmes.
- Micro teaching can be either in real class room conditions or in simulated conditions.
- The knowledge and practice of teaching skills can be given by the use of micro teaching.
- Microteaching is a training device for improving teaching practice and prepares effective teachers.
- It focuses attention on teaching behaviour to modify and improve in the desired direction.
- Micro teaching is an effective feedback device for the modification of teacher behaviour.
- Microteaching minimizes the complexities of the normal classroom teaching by scaled down teaching.
- Micro teaching permits increased control and regulates teaching practice.
- The demonstrations of model lessons in micro teaching are possible through video- lessons and short films.

Drawbacks (limitations) of micro teaching

- Micro teaching tends to reduce creativity of teachers.
- Its application to new teaching practices is limited.
- It requires competent and suitably trained teacher educators for its successful implementation.
- Micro teaching alone may not be adequate. It needs to be supplemented and integrated with other teaching techniques.
- Microteaching is very time consuming technique.
- The list of skills is not exhaustive and does not apply to all subjects.

- Too much fragmentation of skills is not considered convention or practical for training.
- Some skills tend to overlap each other.
- Different skills are required for different stages and for different subjects which are difficult to formulate and achieve. Only a few basic skills such as questioning, explaining, stimulus variation, management of class are common and can be developed.

Simulation

Here Students deal with hypothetical or social situations and various processes to help their decision-making skills. Progression to an end goal or specified understanding or outcome is plotted. Simulation technique is utilized to induce certain behavior in a artificial environment. In this technique pupil teacher need to play several roles such as teacher, student and supervisor. It involves practice based social drama. Simulation is utilized to introduce the novice teacher into teaching in non stressful condition. It is defined as mechanism of feedback devices to induce certain desirable behavior among pupil teacher by playing the role of teacher in their own groups an artificial situation of classroom teaching.

Assumptions

- The teacher behavior can be modified by feedback devices
- There are certain behavioural Pattern is required for effective teaching which can be strengthened by practice like a skill.
- The teacher behavior has its own taxonomy.
- Social skills are developed by practiceand imitation in a group. All members in a group have an opportunity to practice in controlling and improving their own behavior for teaching purpose.

Steps.

- The pupil teachers are assigned with certain roles such as teacher, student, and observer.
- Social skills are discussed which are to be practiced with respect to concerned topic.
- Schedule of simulation is organized with respect to design of the artificial activities and distribution of responsibility is done. For example in a

simulation programme it is decided that who will do what at what situation and time.

- The procedure and technique of observation is decided.

- The schedule is followed for first practice session. The teaching is organized and observations are taken for evaluating the teaching tasks   of   the performer. The teaching is followed by discussion and demonstration to provide feedbacks to pupil teacher by giving the awareness of social skills of teaching and suggestions for further improvement.

- The next step is by changing the topic, teacher, pupil, observer and social skills the next simulation will be started. The topic and social skills should be challenging one.

Elements

The elements of a simulation activity include teacher, pupil and observer. They have three functions such as Diagnosis, Prescription and evaluation.

Advantages

- This technique enables the pupil teacher with close link between theory and practice.

- Student teacher can get opportunity to analyze and identify problems appearing in teaching .

- Student teachers Acquire classroom manner thought and feelings.

- Student teacher can identify classroom level behavioral problems and Students can develop insight and strategy to counter those problems.

- This technique makes the student teacher more confidence and motivate them to develop teaching skills and avoid the risk of actual classroom encounter.

Model Teaching

In this type of behaviour modification of teachers more emphasis is given to teacher educators' model teaching on content and pedagogy through demonstration. By direct teaching teacher educator develops distinctive predetermined patterns of behavior. Here an expert shows a novice how to do teaching. This is readily used in teacher education institutions and in situations where there are gradations of apprenticeship toward a desired skill or goal of teaching. Model teaching can by done by teacher educator in specific subject

matter as well as demonstrating the uses of different teaching skills, methods, approaches of teaching. Prospective teachers have to observe, memorise and practice those skills performed by experts.This approach set a standard for the student teacher to understand the scopes and limits available to practice teaching in a cognitive, affective, psychomotor framework by going through the one qualitative model teaching .

Modeling is an instructional strategy in which the teacher demonstrates a new concept or approach to learning and students learn by observing.

Theory of modeling as an instructional strategy

Research has shown that modeling is an effective instructional strategy in that it allows students to observe the teacher's thought processes. Using this type of instruction, teachers engage students in imitation of particular behaviors that encourage learning.[1] According to social learning theorist Albert Bandura, "Learning would be exceedingly laborious, not to mention hazardous, if people had to rely solely on the effects of their own actions to inform them what to do. Fortunately, most human behavior is learned observationally through modeling: from observing others one forms an idea of how new behaviors are performed, and on later occasions this coded information serves as a guide for action."[2]

Research has shown that modeling can be used across disciplines and in all grade and ability level classrooms.

Types of modeling

Disposition modeling

In disposition modeling, teachers and students convey personal values or ways of thinking. Although teachers must be careful not to offend and to be inclusive when modeling dispositions, this type of modeling is important for facilitating the development of character and community. Teachers can model desired personal characteristics by acting with integrity and empathy and by setting high expectations. "Teachers who are creative, diligent, well-prepared, and organized model the kinds of strategies needed to succeed in the workforce."[3]

Task and performance modeling

Task modeling occurs when the teacher demonstrates a task students will be expected to do on their own. This type of modeling generally precedes activities like science experiments, foreign language communication, physical education tasks, and solving mathematical equations. This strategy is used so that students can first observe what is expected of them, and so that they feel more comfortable in engaging in a new assignment.

Metacognitive modeling

Metacognitive modeling demonstrates how to think in lessons that focus on interpreting information and data, analyzing statements, and making conclusions about what has been learned. This type of modeling is particularly useful in a math class when teachers go through multiple steps to solve a problem. In this type of modeling teachers talk through their thought process while they do the problem on the board or overhead. "This thinking-out-loud approach, in which the teacher plans and then explicitly articulates the underlying thinking process… should be the focus of teacher talk."[4] This type of modeling can also be done in a reading class while the teacher asks rhetorical questions or makes comments about how to anticipate what is coming next in a story.

Modeling as a scaffolding technique

When using modeling as a scaffolding technique, teachers must consider students' position in the learning process. Teachers first model the task for students, and then students begin the assigned task and work through the task at their own pace. In order to provide a supportive learning environment for students who have learning disabilities or English language learners, teachers will model the task multiple times.[5]

Student-centered modeling

Teachers can often call on students to model expected behaviors or thought processes. In student-centered modeling, teachers engage students who have mastered specific concepts or learning outcomes in the task of modeling for their peers. This type of modeling makes the class less "teacher-centered," which, in some cases, provides a more supportive learning environment for students.

Chapter- III

In-service Teacher Education

Objectives

After going through this unit you will be able to

- State Needs, aims and objectives of inservice teacher education
- Explain organizational structure and administration,
- Identify Agencies for organizing inservice teacher education
- Describe Methods of various inservice programmes, **In-service Training:**

In-service teacher education and training means the form of lifelong education of professional workers in education, which, in addition to study courses for the obtaining of education and for their improvement, pr--ovides professional workers the opportunity for refresher, dissemination and deepening of knowledge and pairs them with the developments in the profession or serve to obtain a basic license (the so-called pedagogical and andragogical education). The basic objective of in-service teacher education and training is the professional development of professional workers in education, thereby increasing the quality and effectiveness of the entire educational system (Devjak, and Polak, 2007).

This phase is expected to be the longest and relatively more important. The education provides only the basic minimum knowledge and teaching skills required for the profession. But continue working effectively, a teacher requires continuous personal and professional renewal in knowledge and teaching skills and redirection of tasks and expertise as the changing society necessitate None of the teacher should and could not be satisfied with the initial and induction training that he has received.

IN-SERVICE TEACHER EDUCATION – MEANING

The moment a teacher has completed his training in a college of education, it does not mean that he is now trained for all times to come. A teaching degree, like B.Ed makes him enter into service as a teacher. Thereafter his job continues well only if he continues his studies everyday in the classroom situations and outside the classroom, he comes across problems and side by side he is a expected to sort them out. There is need of more and more knowledge, more and more education for making him a better teacher.

There are formal an informal programmes of in-service education organized from time to time. The higher authorities concerned with education want to ensure that the standards of education are properly maintained. That is possible only if the teachers refresh their knowledge and keep it up to the mark. The different agencies, therefore keep on organizing teacher education programmes for enriching the knowledge of teachers and also for over all proficiency and betterment.

According to Lawrence, "In-service education is the education a teacher receives after he has entered to teaching profession and after he has had his education in a teacher's college. It includes all the programmes – educational, social and others in which the teacher takes a virtual part, all the extra education which he receives at different institutions by way of refresher and other professional courses and travels and visits which he undertakes.

HISTORY OF IN-SERVICE TEACHER EDUCATION

In-service education and training of teachers has its own historical roots. Its journey from pre-independence to post independence period is characterized by numerous policy statements recommendations of different commissions regarding its content and strategies for implementation it has grown from a concept to a process and gained its importance for preparing teachers towards professional growth and development. The root of in-service education can be traced back to pre-independent period of 1904 in Lord Curzon's resolution of educational policy which stated, "The trained students whom the college was sent out should be occasionally brought together again in seeing that the influence of the college makes itself felt in the school." Hartog committee and sergeant committee referred to in-service education as refresher courses and recommended for their organization on a continuing basis. The secondary education commission was more specific in recommending the programme of extension services for secondary teachers.

NEED AND IMPORTANCE OF IN-SERVICE TEACHER EDUCATION

In our country, the trend is that once a teacher has joined service as a teacher, he continues to be so, through he may or may not study. It is not like that in countries like

U.S.A. There the teacher has to face the screening committee to his re-appointment as a teacher after two or three years. In-service education is badly needed for all types of teachers in India. The following points indicate its need and importance.

1**. EDUCATION- A LIFELONG PROCESS:-**

The teacher who does not study side by side can't remain a good teacher. Training of a teacher is a lifelong process. He should continue making efforts in this direction for the whole life. Rabindra Nath Tagore has rightly stated, "A lamp can never light another lamp unless it continues to burn its flame. " According to secondary education commission "However, excellent the programme of teacher training may be, it does not by itself produce an excellent teacher. Increased efficiency will come through experience critically analyzed and through individual and group effort and improvement.

2. **PROFESSIONAL GROWTH:-**

Every teacher is a expected to be professionally bound, for the professional growth, he always needs the guidance and help of others. The efficiency of the teachers must be covered up. So the teacher need be up to the mark in every way.

3**. EDUCATION IS DYNAMIC:-**

Education is very dynamic. It depends upon the society which is fast changing. Due to the advancement in the field of science and technology, there is explosion of knowledge. Accordingly the curriculum and syllabus are also being changed with a good speed. Continuous in-service education of the teacher can save the teacher from facing dire consequences.

4. **MAKES DEMOCRATIC**

In-service education helps the teacher in becoming fully democratic. By in-service education programmes, the teacher is able to meet people of all types and he is also able to share his experience with others.

The major purposes for this phase are:

(i) To provide adequate professional training for effective teaching.

(ii) To keep teachers abreast of new developments in the profession.

(iii) To upgrade academic qualifications ol teachers.

(iv) To develop skills and attitudes responsive to emerging national development goals and programme!

(v) To develop necessary skills and attitudes to enable them to be effective change agents in the community.

(vi) To disseminate specific information and undertake educational innovations, such as curriculum change, SUPW, population education and environmental education etc.

(vii) To find the solutions for the problems encountered whole functioning in a school.

Objectives

The teacher needs orientation in various fields of education. This is necessary to enable him the light of progress and new developments in the field of education. The teacher-education achieves the follow objectives:

i. To equip the teachers with the latest content or subject matter their specialized fields.

ii. To initiate the teachers in the habit of self-study with ultimate aim of keeping them be the latest developments in their own and allied filed.

iii. To help the teachers learn economical and effective methods of teaching.

iv. To develop suitable and varied programmes to meet individual needs, school needs, needs of the state with regard to educational extension.

v. To follow-up the teachers who undergo in-service education to reinforce the objective training.

Professional development is the enrichment training provided to teachers over a period of time to promote their development in all aspects of content and pedagogy. Professional development for teachers should be analogous to professional development of other

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professionals. Becoming an effective teacher is a continuous process that stretches from pre-service experiences to the end of the professional career. It is conceptually divided into pre-service and in-service teacher training. It is not simply a time-bound activity or series of events, but a continuous process. From this perspective, the conventionally divided in-service and pre-service activities should be viewed as seamless components of the same process. It is the tool by which policy makers' visions for change are disseminated and conveyed to teachers. The ultimate beneficiary of In-Service Teacher Professional Development (ITPD) is the student though the receiver is the teacher. Professional development for teachers is more than training or classes as it functions as an agent for change in their classroom practices. The growth of a teacher's skill and understanding is developed through personal reflection, interactions with colleagues and mentoring which gives confidence by engaging with their practices and reaffirming their experiences. It could have a positive impact on teachers' pedagogical content knowledge as many teachers feel challenged with teaching of curricular subjects due to lack of previous experience with hands-on activities, lack of content knowledge, lack of interest to acquire the resources needed to create appropriate learning environments and lack of confidence.

In the last few years, major in-service professional development programmes have been conceptualised and implemented. DPEP and subsequently SSA have brought in the possibility of continuous capacity building exercise for teachers. We need to review and analyse participation of state level and national level organisations in these efforts and the extent to which meaningful progress in design and implementation of the professional development programmes were made, analyse the scope of participation and involvement of agencies working in the field of secondary education and the availability of capable pedagogues.

6.2 Concerns

The main concerns that need to be looked into in the secondary education sector
include:

1.Evolving a shared perspective on the purpose of in-service teacher

professional development. Evolving a mechanism/strategy by which effective programmes of continuous teacher professional development can be initiated for large number of teachers spread over a variety of areas and dealing with very different situations. Because each major centrally sponsored scheme namely SOPT, PMOST, DPEP and SSA used a different strategy for teacher training. The strategies remained traditional and they are 'one-time affair'.

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3.Maintaining the enthusiasm of personnel implementing the teacher professional development programmes.

4.Evolving a model for the continuous professional development for building the capacity of individuals who plan, implement and are engaged in this effort.

5.Ensuring that teachers who are involved in developing their professional capacities are motivated to contribute and to learn from these programmes so that they can implement these in their classrooms.

6.Identifying and developing appropriate themes, and interaction mechanisms, procedures, norms and logistics and acquiring appropriate learning resources.

7.Reviewing and analysing the systems for large scale professional development activities.

8.Identifying and evolving the possibility of the extent to use ICT in the trainings through cascade and other models.

9.Analysing the different aspects of in-service teacher professional development and exploring the possibilities that make teachers engage with diversity among the children (such as marginalised, children with special needs) with confidence and competence.

Aims

The aims of ITPD are to:

1.Enrich and update teachers' knowledge in their discipline, pedagogy and other areas of school curriculum continuously.

2.Develop a culture of shared learning and accountability such that teachers are not mere recipients of training conceptualised in a top down manner but are engaged with the task to develop their own and the group's knowledge.

3.Evolve a mechanism by which effective programmes of teacher professional development can be initiated for large number of teachers in vastly different areas and to deal with a range of diverse learners for inclusive education.

4.Research and reflect on the gaps in students' learning and their progress

5.Understand and update their knowledge on social issues

6.Apply Information Communication Technology (ICT) in their classrooms for better student learning.

7.Motivate and regenerate enthusiasm of teachers to inculcate interest in innovations.

The following strategies may be taken up for achieving the above aims:

1.Faculty of SCERTs, IASEs, CTEs and University Education Departments would be involved as master trainers and mentors for the following activities:

2.Development of a network among institutions and individuals of SCERTs/SIEs, IASEs and CTEs and University Education Departments.

3.Organisation of workshops for content and pedagogy enrichment.

4.Developing training capacity for action research projects and ICT applications (computer, radio and TV)

5.Development of a set of indicators and benchmarks to track in-service professional development of teachers and the institutions which organise them.

6.Development of short-term courses for continuous professional development and upload on the websites.

7.Devise open and distance learning (ODL) strategies for concurrent/perennial professional development.

The existing pre-service teacher education programmes are of not up to the expected quality in many parts of the country. They need to be more effective to provide pre-service teachers with sufficient understanding that could lead to reflective practice in the classrooms. As many state governments have recruited untrained para-teachers/vidya volunteers in different kinds of formal schools and non-formal centres, it is necessary to take steps to design in-service teacher professional development programmes to address the needs of such teachers to bring quality in secondary education. Different strategies have to be adopted for different states/UTs regarding recruitment policy of teachers and training strategies e.g., most of the teachers in North eastern region and Sikkim are untrained. Para teachers are also appointed in many states/UTs.

Design

The design of in-service teacher professional development programmes would depend on the aims of the programme, given a vast variation in the context. Some general principles with regard to the content and pedagogical approach would need to be thought out during the designing and implementation across the programmes.

1. The Context

Professional development can succeed only in settings, or contexts, that support it. Probably the most critical part of that support must come from administrators. The outcome of every professional levelopment initiative will depend ultimately on whether its administrators consider it important.

2. The Content/Curriculum

Curriculum is more than a list of topics to be covered by an educational programme. Curriculum is first of all a policy statement about a piece of education and secondly, an indication as to the ways in which that policy is to be realised through a programme of action. In practice, though, a curriculum is more than even this; it is useful to think of it as being much wider. In-service programmes have to be linked to pre-service programmes and also to be linked to the changes that are brought out in the school curriculum from time to time. We need to identify and analyse the curriculum of the in-service training programmes in terms of expectations, long-term plans, balance between conceptual and functional capacity building versus sharing of 'limitations', building capacity of teachers to learn and teach rather than directing them what they should or can do. This is needed because RMSA emphasizes the need for providing quality learning environment tochildren, as mentioned in National Curriculum Framework – 2005. It also emphasises on the diversity and plurality aspects of the country and emphasises multilingualism as a learning resource. There is a need to consider possibility of this and share experiences related to such efforts. NCF-2005 also recommends integrated and interdisciplinary approach in teaching-learning. Keeping these in mind, designs are to be developed to select the content for the professional development programmes. To be effective, professional development programmes should be based on curricular and instructional strategies that have a high probability of affecting students' ability to learn and in turn students' learning achievement (Joyce and

Showers, 2002). In addition, professional development should:

1.enrich teachers' knowledge of the subjects being taught

2.sharpen teaching skills in the classroom

3.keep up with developments in the individual fields, and in education generally

4.generate and contribute new knowledge to the profession

5.increase the ability to monitor students' work, in order to provide constructive feedback to students and appropriately redirect teaching.

Professional development programmes should always address the identified gaps in student achievement. For example, it would not be useful to offer these to increase student performance in mathematics if students are doing well in mathematics but poorly in reading or writing. The content of professional development should centre on subject matter, pedagogical weaknesses within the organisation, measurement of student performance, and inquiry regarding professional questions that are relevant to the setting in which the professional development is delivered. By staying within this frame of reference, teacher

professional development can focus on real issues and avoid providing information that may not benefit the participants. Most importantly, professional development should focus on instructional strategies that are proven to impact student performance. Moreover, professional development should be delivered using those strategies – which takes us to the process of professional development.

3 The Process

Professional development should be designed around research-documented practices that enable educators to develop the skills necessary to implement what they are learning (Joyce & Showers, 2002). These practices should also be applied to the improvement of teacher effectiveness through professional development. The process of professional development should also be based on sound educational practice such as contextual teaching. Contextual teaching presents information in familiar contexts and incontexts in which the information is useful. It is effective because it takes advantage of the fact that learning occurs best when learners process new information or knowledge in such a way that it makes sense to them in their own frames of reference.

Models/Approaches for Professional Development of Teachers

In-service teacher professional development programs follow a wide variety of patterns ranging from programs based on single schools to those that involve the clustering of schools for mutual activities and support. The curricula and content varies from informally arranged programmes to highly structured programmes that complement the instruction given in pre-service teacher education courses. They include a variety of instructional delivery systems including print and non-print such as modules, radio support and multi-media kits. They are generally participatory in organisation and facilitation. Depending on the particular instructional needs, teacher professional development models/approaches can be divided into three broad categories.

Standardised teacher professional development

a) Cascade Model: This is a more centralised approach and is best used to disseminate information and skills among large teacher populations. This approach includes mostly the cascade model of scaled delivery through workshops and training sessions. This approach generally focuses on the exploration of new concepts and the demonstration and modeling of skills. In the cascade model, a small group of teachers are selected to receive intensive training and then they provide training to their peers i.e., they serve as 'master teachers or

champion teachers'. It has tremendous potential particularly with regard to support provision at school level. In thismodel, the training is a one-time event and in one location without on-going support, it rarely results in effective changes for teaching learning. Cascade training flows down through levels of less experienced trainers until it reaches the target group and in the process, the important information tends to be lost.

b) Reflective Teaching Model (RTM):This model is used with a focus on reflection of teachers to help them implement reform teaching strategies. This model is grounded in the theories of constructivism. It recommends consistent, on-going sessions of joint planning, teaching and reflecting. It relies on a pair of teachers being able to model effective practice, share authority and reflect on practice. Either member of the team (team may be of two teachers or a teacher and a teacher educator) may teach the lesson created during shared planning sessions or both may co-teach the lesson. Reflecting on one's own practices

requires a form of deep thinking in which one poses questions and solve problems. Thisreflection is encouraged in the planning and debriefing phases of the RTM.

SplitModel: This is similar to reflective teaching model. It consists of 6-8 day training at district/block level, then practicing the inputs received in the professional development programme two or three months in actual classroom situation, and a short follow-up training of two to three days at district/block level wherein the teachers share their experiences through reflective and open discussions. Reflective discussions include integration of theory and practice, integration of context and pedagogy etc.

- The Education Commission (1964-66) recommended that in-service training for teachers should be organised by universities and teacher organisations to enable every teacher to receive two or three months of in-service training once in five years. The Report of the National Commission on Teachers (1983-85) gave the idea of Teachers' centres that could serve as meeting places where teaching experiences can be shared. It suggested that teachers could go to centres of learning on study leave. National Policy on Education (1986) stated that pre-service and in-service teacher education is inseparable for the professional development of teachers. The Acharya Ramamurthi review committee (1990) recommended that in-service and refresher courses should be related to the specific needs of teachers and that evaluation and follow-up should be part of the scheme.

- Rashtriya Madhyamik Shiksha Abhiyan Framework states that in-service teachers and heads of schools will be trained for five days every year. It also states that subject-wise teachers are required to be deputed in every school. Besides, the specialised teachers for physical education, Art/Craft and culture are also required to be deputed. There is great regional disparity in the provision for secondary teacher training institutions in the country e.g., some of the north-eastern states have very less number of institutions for secondary level teacher training. Hence, careful state-level planning is necessary for ensuring adequate number of trained teachers and their continuous enrichment. Besides these training programmes, it is necessary to develop a mechanism whereby secondary school teachers can share their expertise and experiences and learn from one another, there by developing a learning community and culture.

Site-based teacher professional development

This includes intensive learning by groups of teachers in a school or region to promote profound and long-term changes in instructional methods. The site based approach may assume a variety of forms as given below:

Observation/Assessment model:In this model, teacher professional development provider, a master teacher in a school or a specialist working district-wide, observes teachers in their classrooms, assessing their instructional practices and providing structured feedback. Observation/assessment may be used as a support measure following workshops or periodically throughout the school year as a peer coaching form of TPD.

Open Lessons: In this model, teachers develop lessons and invite colleagues to observe the lesson and provide feedback in a post-observation session. The focus of this model is on'teacher behavior'.

Lesson Study: In this model, teachers collaboratively plan, develop or improve a lesson, field test the lesson, observe it, make changes and collect data to see the impact of the lesson on student learning. This approach focuses on 'student actions'

Study Groups:Within 'Study Groups' teachers collaborate as a single large group or in smaller teams, to solve a common problem or create and implement a plan to attain a common goal. During the collaboration process they may use print-based resources,classroom materials and their experiences, as part of their approach to the problem. Variations of the Study Group approach occur in TDP workshops, in which teachers must

plan an activity to take back to their school or create an action plan to address a particular school-based problem.

*Inquiry/Action Research:*In an inquiry/action research approach, teachers form teams based upon a common interest. They select an issue, investigate and research it, plan possible actions to remedy it, take action, observe and document results, reflect on outcomes and create an action plan to address this issue.

Mentoring:

In this model, older or more experienced teachers guide and assist younger or novice teachers in all areas of teaching.

- *Self-directed teacher professional development*

This includes independent learning, sometimes initiated at the learners' discretion, using available resources that may include computers and internet. In this approach, teachers are involved in initiating and designing their own professional development and would share materials and ideas as well as discuss challenges and solutions.

Plan of Action for Professional Development of In-Service Teachers and Teacher Educators

Sl no	Programmes and Activities	Nodal Agencies	Modalities
1	rientation of Resource Persons (RPs)at National level	NCERT and other Experts (National Level	Face to Face mode: Five (05) days
2	Professional Development of Master Trainers/KRPs	NCERT Resource Persons (RPs) (National Level)	1. Face to Face mode: Ten (10) days training in two phases for content and pedagogy enrichment and for national, social and systemic concerns. 2. Open Distance Learning mode.
3	Continuous	Master	1.

	Professional Development of Teachers	Trainers/KRPs SCERTs/SIEs/ CTEs/IASEs / University Education Departments	Face to Face mode: Ten (10) days training for all secondary teachers for content and pedagogy enrichment and for national, social and systemic concerns. 2. Open Distance Learning mode. 3. Using ICT 4. Mentoring 5. Study Groups
4	Monitoring and Feedback	SCERTs/ SIEs/ CTEs/IASEs / University Education Departments SRG DRG	States to formulate
5	Induction Training for newly recruited teachers	State to decide the duration	States to work out modalities as per need
6	Deputing untrained teachers for getting professional degree	State level	States to work out modalities. Applicable only to the concerned states/UTs where untrained teachers are made permanent. States/UTs to develop a plan for next

			two years for untrained teachers to obtain professional degree.
7	Programme Evaluation	Involving National/ State level institutions (State level)	Will be seen as an ongoing and continuous process as a part of managing quality interventions in respective states/UTs.
8	Impact studies	Involving National/Sta te level institutions (State Level	Will be seen as an ongoing and continuous process as a part of managing quality interventions in respective states/UTs.

Rammurthi Review Committee(1990) has statedthat teachers will have multiple roles to perform. Initial and in-service training will be made mandatory for faculty members and adequate training resources will be provided. Staff development programmes will be integrated at the state, and coordinated at regional and national levels.It may be noted that the in-service programmes have drawn their themes from the emerging needs and concerns of education as faced from time to time. As a result, these programmes have, at best, been awareness programmes in respect of specific concerns, and not teacher development programmes, as visualized. Asa sequel to the National Policy on Education(1986), orientation of school teachers gained momentum on a mass scale. Efforts have been initiated over the past few years to gradually develop network of institutions like DIETs, IASEs, and CTEs with themandate of providing in-service education to primary and secondary school teachers respectively. So far, 500 DIETs, 87 CTEs, 38 IASEs and 30 SCERTs have been set up as teacher education resource institutions in the country. In the case of IASEs and CTEs, only a handful of institutions have started in-service education programme for secondary school teachers. During the last decade, satellite interactive television-based activities have been provided for teacher upgradation as part of SOPT and DOEO projects

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The majority of them, however, continue to perform their legacy functions (NCERT, 2004).National Knowledge Commission(2008) stresses the need to strengthen the teaching community qualitatively.It states the following:

Professional Development

According to the Educational Resources Information Centre (ERIC) database, professional development refers to "activities to enhance professional carrier growth.Such activities may include individual development, continuing education, and in-service education, as well as curriculumplanning, peer collaboration, study groups, and peer coaching or mentoring.Fullan (1991)expands the definition to include "the sum total of formaland informal learning experiences throughout one's career from pre-service teacher education to retirement".

Considering the meaning of professional development in the technological age,Grantsuggests a broader definition of professional development thatincludes the use of technology to foster teachers growth."Professional development goes beyond the term 'training' with its implications of learning skills, and encompasses a definition that includes formal means of helping teachers not only to learn newskills but also develop new insights into pedagogy and their own practice, and explore new or advanced understandings of content and resources. Thisdefinition of professional development includes support for teachers as they encounter the challenges thatcome with putting into practice their evolving understandings about the use of technology to support inquiry-based learning Current technologies offer resources to meet these challenges and provide teachers with a cluster of supports that help them continue to grow in their professional skills, understanding, and interests.'When a teacher begins career, the knowledge and skills acquired in college serve only as basic necessities or minimal requirements to launch the work. The first few years of teaching will lead the new teacher to identify, re-examine and evaluate the goals of subject teaching, methods, the nature of the content and one's own personal aspirations. An excellent education for subject teaching can merely provide the basic tools for the creative teacher to implement, supplement, and modify knowledge to meet the everyday challenges of young people in a school classroom.

The Subject teacher, like any other professional, does not commence with a complete understanding of methodology of teaching the subject to the students. It is necessary to learn not only from day-to-day teaching experience but also from the many opportunities that are available. In order to remain in touch with the latest development in the field andin the world around, the teacher can take the following measures:

• Attend seminars, workshops, conference

•Pursue higher qualifications

•Exchange of teaching position, either in the same school or through exchange programmes

•Visit other schools to study different methods of teaching, the facilities, etc.

•Write articles, for professional journals.

•Participate in refresher courses to get acquainted with the latest developments in the field.

•Participate in the National Integration camps which are being introduced for primary school teachers organized in different parts of the country. Each camp is attended by primary school teachers drawn from different states and regions

Summer Institutes for Science Teachers

•Unitary institutes: In these institutes courses are held once in 3 year in science subject to update teachers on the developments in different fields of science as well as in new techniques in teaching.

•Sequential institutes: A follow-up of the unitary institutes, the purpose of the sequential institute is to prepare a team of resource persons for state level summer institutes. Hence, the best five teachers in the unitary institutes are trained in imparting instruction both in content and in methods by an intensive programme.

• Special institutes: These institutes stress on improvement of textual material for the use of training colleges in science and on the development of improved techniques of teaching in educationaltechnology.

•Project technology institutes: These institutes provide intensive training in laboratory work and workshop skills. Teachers are encouraged to develop improvised aids using indigenous resource materials and audio-visual materials.

Current State of Affairs in India

Most initiatives of the 1990s have focused on `in- service' training of teachers at the elementarystage. In-service training of teachers in the DPEP, for example, ranged from three to a maximum of twenty days and included a range of topics, with little focus on the teaching –learning process. Information on the education of teacher training in the eleven DPEP I and II States is fragmented and imprecise. The impact of these trainings still remains to be understood in spite of a massive infrastructure and investment that went into creating them.One of the key fallouts of the undue emphasis on sporadic,short-term training of in-service teachers has been the accentuation of the divide that already exists between pre-service and in-service teacher education. These continue to function as insular mechanisms

despite the fact that both coexist in universitydepartments for Secondary Education (IASEs) and are also the joint responsibility of DIETs in the country. A centrally sponsored scheme to establish Institutes of Advanced Studies in Education (IASE) and upgrade university departments of Education (offering B.Ed., and M.Ed., programmes) was started post-NPE 1986 to initiate the in-service training of secondary school teachers. IASEs were mandated towork constantly on elementary education as well. This objective, however, is yet to be realized, as reiterated in the Tenth Five Year Plan for Teacher Education. One pioneering effort in this regard came into effect with theestablishment of the Maulana Azad centre for E lementary and Social Education(MACESE) in the Department of Education of the University of Delhi, as a modified IASE, MACESE is the only IASE that initiated concerted work in Elementary Education, leading to the creation of the Bachelor of Elementary Education (B.EI.Ed) Programme in 1994. Under the centrally sponsored scheme DIETs were establishe d as premier institutions to work in elementary education.Mass Orientation of School Teachers (MOST)School teachers are being given orientation on a mass programme in regard to the new perspectives under the NPE. During 1985-87, nearly a million teachershave been oriented. The objective of the scheme, known as the Programme of Mass Orientation of School Teachers, is to sensitise teachers to the emerging concerns in education, UEE, use of learner-centered approach, action research, the emerging role and responsibilities of teachers, enrichment of their knowledge in curricular areas, and other thrust areas enlisted in the NPE. The duration of training is 10 days. The programme during 1986-90 covered about 1.8 million teachers. The training programme was strengthened by media support. Films relating to various modules constituting the training print package were telecast on the national

network for the benefit of teachers in different parts of the country. Each viewing session was preceded and followed by discussion. A participatory, interactive approach was followed in the training. The programmeis implemented by the NCERT in collaboration with the SCERTs in different states.

Special Orientation Programme for Primary School Teachers

Special Orientation Programme for Primary School Teachers (SOPT) was launched in the year 1993-94 to improve the quality of primary/elementary education as part of the strategy to achieve UEE. The main focus of this programme is implementing the MLLs identified for the primary stage, training in the use of Operation Blackboard materials provided to primary school teachers, and encouraging teachers to adopt a child –centered approach to teaching. It envisages covering 0.45 million teachers every year. During the past few years, these two

schemes of mass orientation have covered more than 2 million teachers. Like PMOST, this programme, too, is strengthened by media support. Films on various themes 39 covering the course design are shown to teachers during training programmes.

Administration

For in-service training, the country has a large network of government-owned teacher training institutions (TTIs), which provide in-service training to the school teachers. The spread of these TTIs is both vertical and horizontal. At the National Level, the National Council of Educational Research and Training (NCERT), along with its six Regional Institutes of Education (REIs) prepares a host of modules for various teacher training courses and also undertakes specific programmes for training of teachers and teacher educators. Institutional support is also provided by the National University on Education al Planning and Administration (NUEPA). Both NCERT and NUEPA are national level autonomous bodies. At the state level, the State Councils of Educational Research and Training (SCERTs), prepares modules for teacher training and conducts specialised courses for teacher educators and school teachers. The Colleges of Teacher Education (CTEs) and Institutes for Advanced Learning in Education (IASEs) provide in-service training to secondary and senior 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 Centres (CRCs) form the lowest rung of institutions in the vertical hierarchy for providing in-service training to school teachers. Apart from these, in-service training is also imparted with active role of the civil society, unaided schools and other establishments.

Agencies for organizing inservice teacher education programmes, DIETS, CTEs, IASEs, SCERT and NCERT

DIET

Teachers education programmes are being revamped by the establishment of DIETs. These institutes give training and resource support to primary school teachers. Existing institutes are upgraded by provision of appropriately qualified staff to ensure professionalism. They are also being provided infrastructure support in terms of buildings and equipment. Wherever there is need, new institutes are being set up too.DIETs are nodal institutions for improving

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the quality of elementary education in the district. They were mandated to transact pre-service and in-service training programmes for elementary school teachers.

Before implimenting the trainings DIETs/CTEs have got autonomy

1. To conduct the surveys of techer identified needs and trainer identified needs.
2. To Design the training module according to the local needs

DIETs are expected to provide training inputs to the following personnel of the district

i.) Elementary school teachers. (Pre and In-service)

ii.) Heads of schools, school complexes and educational officers at the cluster and block levels.

iii.) Instructors and supervisors of adult education.

iv.) Members of District Education Council, Members of SDMC,CAC, social leaders,women of self help groups and youths and volunteers who are involved in educational programmes.

v.) Identified Resource persons who can be utilised by DIETs for its programmes.

CTEs are expected to provide training inputs to the following personnel of the district

i.) Secondary school teachers. (Pre and In-service)

ii.) Heads of schools, school complexes and educational officers at the district levels.

iii.) Members of SDMC,CAC,Council, social leaders,women of self help groups and youths and volunteers who are involved in educational programmes.

iv.)Establishing Co-ordination with Universities.

v.) Identified Resource persons who can be utilised by CTEs for its programmes.

NCERT

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National Council of Educational Research

and

Training

Introduction

Ministry of Education,

Government of India established NCERT in 1961. NCERT is an autonomous organization, working as an academic wing of the Ministry of Education. NCERT assists the said ministry in the implementation and formulation of its policies and programmes in the field of Education. It is expected to encourage studentand teacherto conduct educational research. In order to fulfill these main objectives, it has established National Institute of Education (NIE) at Delhi and 4 regional educationalcolleges at Ajmer, Bhopal, Bhubaneswar and Mysore. It also works in collaboration with the departments in the states, the institutes and universities. It also maintains close contact with similar national and international institutions throughout the world and communicates results of its researches to a common man by publishing books and journals.

a)**Major function of NCERT**

•Monitoring the administration of Regional colleges of Education.

•Undertaking aid, co-ordinate and promote and research in all branches of education for improving school education.

•Organizing pre-service and in-service education programmes for teachers

•Preparing and publishing study material for students and related teacher.

•Searching talented students for the award of scholarship in science, social science and technology.

•Undertaking functions assigned by the Ministry of education for improving school education.

•Organizing various programmes with respect to Research, Training, Research, Development, Extension-services, evaluation and publishing study -material.

•Qualitative improvement of school –education rather than quantitative expansion.

•Making our education relevant to national objectives and social needs.

•Offering financial aid to research projects of the teachers.

•Also organizes summer Institutes to school teachersfor attaining their professional growth.

Through these measures NCERT wants to achieve qualitative improvement in Education

The National Council of Educational Research and Training (NCERT) maintains a network of field offices to keep a close liaison with State Government. At present, these offices have been established in different States and Union territories. State Council of Educational Research and Training (SCERT) is one of these offices. It came into existence on 5th January 1979 as a result of transformation and upgradation of the former State Institute of Education (SIE).

Functions of SCERT:

The State Council of Educational Research and Training discharges the following functions:

1. To organize and implement the special educational projects sponsored by UNICEF, NCERT and other agencies for qualitative improvement of school education and teacher educators.

2. To prescribed curricula and textbooks for the school and teacher training institutions.

3. To produce instructional materials for the use of teacher- educators.

4. To arrange in-service training for different categories of teachers, inspecting officers and teacher-educators and coordinate the work of other agencies operating at the state level.

5. To organize programmes including Correspondence-cum- Contact Courses for professional development of teachers, teacher-educators and inspecting officers.

6. To supervise the working of the Teacher-Training Colleges, Secondary Training Schools and Elementary Training Schools.

7. To provide extension service to Teacher-Training Institutions at all levels in the state.

8. To conduct studies and investigations on the various problems of education.

9. To evaluate the adult and non-formal education programmes entrusted by the Government.

10. To conduct the public examinations specially at terminal stages like the end of Class HI and Class IV etc. with a view to selecting candidates for scholarships through such examinations.

The State Council of Educational Research and Training has a Programme Advisory Committee under the chairmanship of the Education Minister. There are also Special Advisory Committees for programmes like Population Education, Educational Technology and Non-formal Education.

The SCERT has the following departments:

1. Department of Pre-School and Elementary Education.

2. Department of Non-formal Education.

3. Department of Curriculum Research and Special Curriculum Renewal Projects.

4. Department of Science and Mathematics Education.

5. Department of Population Education.

6. Department of Teacher and Inservice Education.

7. Department of Educational Technology.

8. Department of Examination Reform and Guidance.

9. Department of Research coordination.

10. Department of Art and Aesthetic Education.

11. Department of Adult Education and Education for Weaker Sections.

12. Department of Publication.

The Director is the head of the Council and he is assisted by one Deputy Director in administration and other in academic matters. Besides, there are four Class I Officers, three in

the OES (Colleges) Cadre and one in OES (Field) Cadre, 23 Class II officers in the OES Cadre of both College and School branch and some assistants.

The Director of Education maintains a close and personal touch not only with the district level officers but also with principals and teachers so as to provide them with necessary guidance and intellectual stimulation.

The State Council of Educational Research and Training (SCERT) is established and maintained in order to improve the standard of education in the state. The primary objective of the Council is to help through suitable programmes of research, training and extension. It plays an important role in Orissa in implementing the training programmes and orientation courses for different types of workers for introducing changes in the system of examination.

At present the SCERT has been working as the academic wing of the Department of Education and Youth Services, Government of Orissa. It has been acting as the Directorate of Teacher Education. The appointment, transfer and promotion of the teaching and non-teaching staff of the Institute of Advanced Studies in Education (IASEs), Colleges of Teacher Education (CTEs), Training Colleges, District Institute of Education and Training (DIETs), Training Schools etc. are done by the Government in consultation with the Director of SCERT.

All kinds of academic programmes are coordinated, streamlined and maintained by the SCERT. Periodical revisions and upgrading of curricula, preparation of text books, teachers' guidance and other teaching and learning materials and improvement in methods of teaching and evaluation are also undertaken by the SCERT.

The Ministry of Education and Youth Services Government of Orissa performs most of the functions through the SCERT So the SCERT provides guidance to the State Government in the field of education.

PROGRAMMES OF IN-SERVICE TEACHER EDUCATION

In-service teacher training may be understood as professional development, or sometimes

as part of wider professional development or growth. The career development is understood as growth through natural promotion, from one stage of teacher's professional career to another. The notion of the experiential growth is usually anchored in a succession of a few clearly delimited stages. This category is directly related to the professional and personal maturing of the teacher. In –service teacher training is usually defined as the provision of organized programmes for practicing teachers, meant to help them as one of the possible systematic steps to support their development. These systematic steps, or planned situations, offers, possibilities and events supporting teachers' professional development have been becoming more and more varied in the last two decades. New information technologies, modern learning theories, a much better mobility of teachers, and many more factors, is what makes for a variety of in-service teacher training programmes expanding study of texts and other documents in the Internet, e-learning discussion forums, international visits, student exchange programmes and mainly in-school activities, such as action researches, project work, supervision, visits, team teaching, discussion groups, and so on.Peretti et al(1998) includesthe following options of in-services training into the "plan of education".

- Visits to colleagues' classes;

- Education through meetings with colleagues from other schools;

- Exchange of experience, excursions, and joint events;

- Internal formation at school, organized for teacher teams by external instructors;

- Team formation at school through work on specifically school-targeted projects or studies;

- Self-study;

- Individual or team formation of school, in line with external offers (Seminars, courses, Visits);

- Internal formation at school, organized by the staff;

- Open formation at school for groups of teachers, parents, and pupils (e.g. on perspectives, professional orientation, work methods, etc.).

So, besides their own study, teachers can participate in events organized outside their schools or within. The options of in-service teacher training have a lot of internal forms, differing in how thoroughly organized or how much formal they are. A lot of attention is devoted to activities arranged by external subjet

SEMINAR- In a seminar some problems of education are taken up and there is collective thinking. Discussions are held and conclusions are arrived at all under the guidance of some experts.

REFRESHER COURSES: - A refresher course means an educational programme organized for refreshing the knowledge of in-service teacher. Generally they acquire the teachers with the new development in the field of education. With the coming up of new education policy, refresher courses were arranged all around for teachers of different categories.

WORKSHOPS: - Workshops are organized for giving in-service education to teachers. They involve more of practical work and less theoretical discussion. These types of programmes are more useful for the teachers. The teachers have to work practically and come out with final materials to be seen by others. Organization of workshops consumes more time than a seminar or conference.

CONFERENCE: - In a conference, there is a broad discussion of subjects of practical interest. Generally there is a central theme around which several sub topics are given. Teachers as per their interest, present paper at the time of conference. The session ends with the concluding remarks of the president

STUDY GROUPS: - Forming study groups and using them as a technique for in-service education for teachers can work wonders. A group of teachers of the same subject and a subject expert in the college of education are combined and start working. They choose some topics of common interest (or) it may be a problem related to their teaching subject. Discussion is started under guidance and they continue thinking, studying and discussing that subject. If need arises, someone may be invited for extension lecture. The study groups may be meeting once in a week or even once in a month.

A STUDY CENTRE OF PROFESSIONAL WRITINGS: - Generally the materials are not under the reach of teachers. The college of education, the extension service departments can help in this direction. Various publications of N.C.E.R.T, some good books, materials produced by different centers of education may be produced in the college library. The study of reading materials will help the teacher to acquire sufficient knowledge in their subjects.

EXPERIMENTAL SCHOOLS: - The College of education should have their demonstration school and experimental school. These are actually practicing schools where some experiences can be performed. Whatever is taught in theory, which is put into practice by carrying out experiments?

The experimental schools become centers of learning for in-service teachers. Innovations done in these schools may be advocated among the teaching staffs of other schools.

Regional colleges of education affiliated to N.C.E.R.T have their experimental schools where those colleges are showing leadership to the working teachers of other schools in their areas. Other colleges have their practicing schools but they don't have any experimental schools or demonstration schools.

CORRESPONDENCECOURSES:

Correspondence courses can be designed for giving in-service education to teachers. A few universities have already started working in the area of in-service teacher education programmes. Central Institute of English and Foreign Languages at Hyderabad provides post graduate certificate course and diploma course through correspondence.

Distance education

It is beyond any doubt that teachers acquire a decisive position in society as they prepare and construct future prospective citizens by imparting required knowledge, value, skill, attitude to students. They shoulder the responsibilities to provide quality education to students. Quality of School education dependent on the teachers' appropriate performance and ability to utilize relevant knowledge, attitude, skill, values properly. In other words teacher must be pedagogically enough competent to carry out teaching performance effectively in concerned subject within and beyond classroom situation. In this scenario role of pre service and in service teacher education is crucial as it is committed to construct qualitative force of teachers for society. As it requires inculcation of practical proficiencies among the teachers mostly face to face mode of transactional strategies are implemented worldwide. However to make teacher education expand without physical, infrastructural barriers as well as make it universalize distance mode of instruction can be considered as one of the relevant approaches to construct effective teachers for the nation. Universities, organization like IGNOU provide two years of B.Ed., course through distance mode. In addition to this SCERTs also arrange in distance service teacher education programmes to make teachers update at school level.

Teacher education through distance mode in country has been viewed by several committees and commissions. NCFTE (2009) opined that "Open Education as a concept, coupled with

modalities associated with Distance Education, does not stand as an exclusive transactional modality. There are several aspects of ODL which will get meaningfully translated only if the boundaries between direct human engagement and ODL tend to get diffused to the extent possible and perhaps, desirable. A modular approach to the development of teacher education curriculum along with a focus on independent study and on-line offering involving interactive modes of learning and the consequent modification in the approaches to assessment and evaluation has indeed a potential to make education reach the unreached. It is recognized that ODL can be strategically employed in continuing professional development of teachers, particularly with a view to overcoming the barriers of physical distance, especially making use of independent study material, on-line support and two-way audio-video communication. Of particular relevance are those elements of ODL which involve independent study. However, the primacy of direct human engagement and actual social interaction among student teachers as the core process of initial teacher preparation needs to be emphasized. ODL, as a strategy, can be a powerful instrument for providing continued professional support to the teacher practitioner". However according to justice Verma report (2012)distance mode of teacher education is declining the quality. The report states that "With increasing pressure to recruit teachers that fulfil RTE norms of qualification, many states are instituting distance learning programmes to meet the demands of large numbers of professionally qualified teachers. Evaluation studies indicate that poor quality of training through distance mode. In many cases the provisioning of distance education for teacher preparation is the only measure available, leading to the dilution of the need for the quality initial teacher education and dismantling of existing structure of pre service teacher education in some states". However the report emphasized that distance education including ICT can be utilized for continued professional development of teachers.

Present Status of Teacher Education through Distance Mode

For pre service teacher education in country NCTE approved institutes are providing B.Ed., courses.NCTE has now issued guidelines which have been approved by the UGC for B.Ed course through distance mode.

The salient features of the guidelines are:

- The duration should be 24 months exclusive of the time taken for completing admission formalities
- The admissions should be made on the basis of a written admission test

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- Admissions should be given only to regular teachers serving in recognised schools (primary, secondary, and higher secondary level) within the jurisdiction of the university and possessing a minimum two years of teaching experience
- No university should admit more than 500 candidates in a given academic year
- For every 500 students, there should be a full time core faculty and additional complement of ten part-time faculty members.

Among the universities which have been permitted to offer the B.Ed course through distance learning mode are

- Himachal Pradesh University (Shimla)
- Maharshi Dayanand University (Rohtak)
- Punjabi University (Patiala)
- Kurukshetra University (Kurukshetra)
- Karnataka State Open University (Bangalore)
- Indira Gandhi National Open University (IGNOU) (New Delhi). The IGNOU course is open to full-time teachers of recognised schools with two years of regular teaching experience

In Addition to pre service teacher education through distance mode, in service education can be implemented effectively in several apex institutions like NCERT, SCERTs, NCTE, CIET, ISRO, etc take major initiatives to educate teachers working at primary as well secondary level by coordinating with SCERTs, DIETs, BRCs, CRCs. .Electronic media and production centre.(EMPC), a constituent centre of IGNOU is a nodal agency to coordinate the activities related to broadcasting education programme on 24 hour channel named as Gyana Darshan.

Concerns in Distance Teacher Education

- *Use of Technology*: The technological strategies for imparting in service teacher education includes one way and two way video conferencing, teleconferencing, audio/video programmes, CD, software self instructional printed material, Radio, television, multimedia training packages, e mail, internet, smart phone, mobile etc.
- *Instructional Strategy:* Teacher educators need to use relevant instructional strategies for distance teacher education such as collaborative approach, personal contact

programme, on line simulation in teaching, workshop, projects, assignment, on line group conferencing, fieldtrips etc.

- *Resources:* Distance teacher education need human and infrastructural resources to achieve the goal of preparation of competent teachers. Adequate supply and sharing of resources such as college building, practising school, laboratory, library, faculties, staffs, computer, internet is necessary in this concern.

- *Time:* As distance mode education is learner centric programme, it is important to assign relevant time period for completion of course.

- *Quality:* Justice Verma report emphasized dilution of quality in distance teacher education, hence it is necessary to maintain minimum standard of education and practice in this field.

Challenges in Distance Teacher Education

The major challenges in distance teacher education include

- Effective planning, administration of pre service and inservice distance teacher education programme

- Use of relevant media, module, technology

- Making teachers literate in technology such as computer, internet.

- Strict supervision during practice teaching

- Emphasis of school based activities including practice teaching.

- Good Cooperation, coordination between all stakeholders

- Teacher evaluation tools and techniques

- Corruption, cheating, Malpractice

- Regular Monitoring and evaluation of programme annually

- Research

Though preparation of competent teachers through distance mode is possible, it requires much well-organized planning, sufficient resources, and proficient faculties and technologically sound media with good instructional and evolutional strategies to make the system effective and qualitative. Such a transparent and goal oriented distance programme definitely would solve the problems related to constructing competent teacher force for the country with excellent standard.

OTHER PROGRAMMES: - A few programmes for in-service education of teachers are suggested below:-

- ☐   Educational tours
- ☐   Radio broadcast
- ☐   Film shows
- ☐   T.V programmes
- ☐   Extension lecture for teachers
- ☐   Exhibitions
- ☐   Exchange of teachers

Distance Education

PROVISION OF IN-SERVICE EDUCATION: - Different institutions are functioning where there is a provision of in-service education of teachers. Some of them are doing commendable work in this field.

STATE INSTITUTE OF EDUCATION (SIE):- In different states, SIE have been set up which cater to the need of in-service education only. They organize seminars, workshops, etc.

STATE INSTITUTE OF SCIENCE: - In some states, they have set up institutes for in-service education of science teachers. They make efforts for developing scientific attitudes among the teachers. Science exhibitions are also conducted there which attract large number of children from the state. Thus it's a great source of inspiration for teachers and their students.

REGIONAL INSTITUTE OF ENGLISH: -

Regional institute of English has been set up in different regions of the country. They have their affiliation with Central Institute of English and Foreign languages; Hyderabad. These institutes impact four month certificate course in teaching English to in-service teachers. The institutes gives scholarship to the trainees and the teachers are paid full salary by the schools were they are employed. These institutes are working for efficiency and improvement of English teachers

CONCLUSION

"Good education requires good teachers" that it becomes essential that the most capable and appropriate be recruited into the teaching profession, provided with high quality pre-service programme of teacher education, and them offered opportunities to upgrade their knowledge and skills over the full length of their career. It is, therefore, essential that there is major reorientation of teacher education to ensure that teachers are furnished with the necessary knowledge and skills to cope with the new demands placed on them. It is strange to note that too often teachers are helpless in front of machines which refuse to work. How undignified it is for the teacher to be thwarted by machines

With the increased capacity of communication technology, language will become a very powerful instrument. The teacher-education programme should be strengthened to develop language competency among our teacher-taught. The modern time demands multi lingual competence including the new computer languages that are bound to emerge with expansion of computer-technology.

Continuing 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.

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UNIT – IV

Teacher Effectiveness and Professional growth.

OBJECTIVES :

- After reading this unit you will able to :

- Define teacher effectiveness

- .State components of teacher effectiveness

- Describe measurement of Teacher effectiveness

- Expaain Cognitive flexibility :and teacher teaching functions,,
- Strategies for analyzing teacher behavior
- Give meaning and purposes of Professional Growth
- Explain strategies of professional growth
- Identify means for Assessing accountability.
- Narrate Research trends in Teachers Education.

INTRODUCTION

The World Declaration on Education for All, states that primary education must be universal to ensure that the basic needs of all children are met. Basic learning needs are defined in terms of the essential learning tools and the basic learning content that people require in order to survive, to live and work with dignity, to improve the quality of their lives, to make informed decisions, and to continue learning. But the quality of education has been suffering. Education for all is all very well, but good quality education for all is another story.

Teachers and the instruction they give their students are only two of a complex set of factors that have an impact on student learning. One of the fundamental truths in education is that the knowledge, skills, aptitudes, attitudes and values with which students leave school or a particular teacher's classroom are influenced to a great extent by the knowledge, skills, aptitudes, attitudes and values that students possessed when they entered the school or classroom. In addition, the knowledge, skills, aptitudes, attitudes and values that students possess when they enter a school or classroom are the result of some intricate and complex combination of their genetic composition and the environment to which they have been exposed in their homes.

In addition to these genetic and environmental factors which are beyond the control of any teacher, teachers are powerless in terms of making learning occur; they cannot simply

open up the tops of their students' heads and pour in the desired learning. The stimulus-response theory has long been dismissed as a viable theory for understanding the link between teaching and learning (that is, teachers teach (stimulus) and students learn (response)).

As Tyler pointed out over half a century ago, learning depends on the activities of the student: Students learn according to what they do, not according to what their teacher does; they either pay attention or they do not; they either construct their knowledge consistently with the teacher's intended construction of knowledge, or they do not. More than a quarter of a century later, Roth Kopf reinforced Tyler's contention by emphasizing the negative case: "The student has complete veto power over the success of instruction". Teachers can neither make students pay attention, nor can they construct meaning for them. So what can teachers do? What exactly is the role of the teacher in student learning?

Teachers must create conditions that reduce the likelihood that students will use their veto power and increase the probability that students will put forth the time and effort needed to learn what their teachers intend them to learn, that is the teacher effectiveness.

CONCEPT OF TEACHER EFFECTIVENESS

Effective teachers are those who achieve the goals which they set for themselves or which they have set for them by others such as ministries of education, legislators and other government officials, school / college administrators. Effective teachers must possess the knowledge and skills needed to attain the goals, and must be able to use that knowledge and those skills appropriately if these goals are to be achieved.

Anderson (1991) stated that "… an effective teacher is one who quite consistently achieves goals which either directly or indirectly focus on the learning of their students".

Dunkin (1997) considered that teacher effectiveness is a matter of the degree to which a teacher achieves the desired effects upon students. He defined teacher competence as the extent to which the teacher possesses the requisite knowledge and skills, and teacher performance as the way a teacher behaves in the process of teaching. The term "teacher effectiveness" is used broadly, to mean the collection of characteristics, competencies, and behaviours of teachers at all educational levels that enable students to reach desired outcomes, which may include the attainment of specific learning objectives as well as broader

goals such as being able to solve problems, think critically, work collaboratively, and become effective citizens.

In Medley's terms, the possession of knowledge and skills falls under the heading of 'teacher competence' and the use of knowledge and skills in the classroom is referred to as 'teacher performance', Teacher competence and teacher performance with the accomplishment of teacher goals, is the 'teacher effectiveness'.

Four major assumptions are implicit in this definition of teacher effectiveness.

The first is that ***"Effective teachers tend to be aware of and actively pursue goals."*** These goals, in turn, guide their planning as well as their behaviours and interactions with students in the classroom. This assumption does not mean that effective teachers are always aware of goals; in fact, awareness is particularly likely to be lacking when goals have been established for teachers by others. Using current educational terminology, these 'goals established by others' are referred to as 'standards' (sometimes 'content standards' or 'curriculum standards'). That is, standards are externally imposed goals that indicate what students should know and be able to do as a result of the instruction that they receive.

The second assumption is that ***"The teaching is an intentional and reasoned act."*** Teaching is intentional because we always teach for some purpose, primarily to facilitate learning. Teaching is reasoned because what teachers teach their students is judged by them to be worthwhile.

The third assumption implicit in this definition of teacher effectiveness is that ***"The vast majority of teachers' goals are, or should be, concerned either directly or indirectly with their students' learning."*** An example of direct teacher concern with learning is a teacher who states that he or she intends to help students develop the ability to differentiate facts from opinions, or reality from fantasy. An example of indirect teacher concern with learning is a teacher who sets out to decrease the level of disruptive behaviour in the classroom because he or she believes that learning cannot occur before the level of disruptive behaviour is reduced. It should be obvious that if teachers' goals are stated in terms of their students' learning, then the "Teacher effectiveness must be defined, and can only be assessed, in terms of behaviours and learning of students, not behaviours of teachers".

A fourth assumption underlying this definition of teacher effectiveness is that ***"No teacher is effective in every aspect of their profession".*** For example a primary school teacher may be highly successful in teaching reading comprehension to his or her students while struggling to teach them the elements of rudimentary problem-solving in mathematics. Likewise a secondary literature teacher may be quite able to teach students an appreciation of poetry, but have some difficulty in teaching them how to interpret the symbolism in a series of novels. Thus, the degree to which a given teacher is effective depends, to a certain extent, on the goals being pursued by that teacher.

Similarly, an elementary school teacher may be very gifted in dealing with less able students, while at the same time feeling quite frustrated with his or her inability to render the work more challenging for the more able students. A secondary mathematics teacher may be particularly adept with students who are well motivated to learn mathematics, but have great difficulty motivating those who question why they have to learn mathematics in the first place. Thus, the degree to which a teacher is effective also depends, to a large extent, on the characteristics of the students being taught by the teacher.

Despite the underlying assumptions, it seems reasonable to assume that those who are referred to as being 'effective teachers' are more often than not effective in achieving specified learning goals. In other words, there is some degree of consistency in these teachers' effectiveness vis-à-vis classroom conditions, time and goals. However, this effectiveness does not stem from rigid adherence to a standard set of behaviours, activities, methods or strategies in all situations. Rather, teachers who are consistently effective are those who are able to adapt their knowledge and skills to the demands inherent in various situations so as to best achieve their goals. Doing whatever is necessary in order to achieve these goals, rather than doing certain things in certain ways or using certain methods or techniques, is a hallmark of an effective teacher.

Finally, we can say that an effective teacher is one who quite consistently achieves goals – be they self-selected or imposed – that are related either directly or indirectly to student learning.

Defining teacher effectiveness is not about creating a simplistic, single view of effective teaching. "It is a dramatic conceptual shift," says ASCD Executive Director Gene Carter, "from focusing exclusively on the teacher to focusing on the act of learning." The National

Comprehensive Center for Teacher Quality (NCCTQ) suggests extending the definition of teacher effectiveness "beyond teachers' contribution to student achievement gains to include how teachers impact classrooms, schools, and their colleagues as well as how they contribute to other important outcomes for students" (Goe, Bell, & Little, 2008).

Attempts to simplify definitions of teacher effectiveness undercut aims to improve professional practice in education. In truth, teacher effectiveness should be measured by considering a range of student and school data. States like Colorado are leading the way in developing comprehensive, growth-model data systems to track teacher effectiveness.

A research synthesis for NCCTQ (Goe, Bell, & Little, 2008) breaks down teacher effectiveness into five points:

- Effective teachers have high expectations for all students and help them learn, as demonstrated on value-added, test-based, or alternative measures.
- Effective teachers contribute to positive academic, attitudinal, and social outcomes for students such as regular attendance, on-time promotion to the next grade and graduation, self-efficacy, and cooperative behavior.
- Effective teachers use diverse resources to plan and structure engaging learning opportunities; monitor student progress formatively, adapting instruction as needed; and evaluate learning using multiple sources of evidence.
- Effective teachers contribute to the development of classrooms and schools that value diversity and civic-mindedness.
- Effective teachers collaborate with other teachers, administrators, parents, and education professionals to ensure students' success, particularly the success of students with special needs and those at high risk of failure.

These teacher factors also align with a vision of whole child education, one in which students are healthy, safe, engaged, supported, and challenged.

Defining teacher effectiveness as the sum of multiple parts means education communities will need to employ multiple measures to evaluate different aspects of teacher effectiveness. Multiple measures yield relatively stable data on teacher performance, and given more data, teachers have more opportunities to make midcourse corrections, according to Kate Walsh (2007) of the National Council on Teacher Quality.

Characteristics of Effective Teacher

According to Harry Wong, there are three main characteristics of an effective teacher:

- Has positive expectations for student success
- Excels at classroom management
- Designs lessons for mastery

Since effective teachers trust that their students are capable of the tasks set before them, positive expectations are the cornerstone of their beliefs. Effective teachers know that students can achieve their goals if given proper, differentiated instruction and guidance.

Effective teachers run their classrooms efficiently. They have set procedures for handling daily tasks that could otherwise become overwhelming and consume instructional time. Effective teachers are able to identify what needs to be done and find ways to consistently achieve order. They understand that the greatest discipline/management problems stem from lack of procedures. If teachers can address potential difficulties ahead of time, these situations can easily be avoided.

Effective teachers also know the content of their subject(s) and what their students need to learn. They use this knowledge to design lessons for mastery. Effective teachers are familiar with national and state standards for the content, and are able to examine data to understand the strengths and weaknesses of their students. Effective teachers teach the student, not the subject.

In his book *Qualities of Effective Teachers,* James Stronge defines five specific, critical areas of teacher effectiveness:

- The teacher as a person
- Classroom management and organization
- Organizing for instruction
- Implementing instruction
- Monitoring student progress and potential

The Teacher as a Person

Effective teachers possess certain personality traits.

- **Caring:** The effective teacher shows deep care and concern for his students. Effective teachers always return to the question, "Is this best for the student?" when making decisions.
- **Listening:** The effective teacher listens to students, parents, administrators, and colleagues when making decisions for instruction.
- **Understanding:** The effective teacher has a deep understanding of the students in her classroom. Decisions are made on a case-by-case basis and are fair because the total student is considered.
- **Knowing Students:** The effective teacher knows his students and their lives. Effective teachers instruct each student as an individual.

Classroom Management and Organization

Organizing a classroom can be a daunting task. Effective teachers approach organization with a distinct plan focusing on increased student performance. Following are some considerations that help when preparing for classroom management and organization.

- **Time Management:** Keep a calendar and a to-do list. Set goals for yourself, prioritize your tasks, and learn shortcuts from veteran teachers. Be prepared for lessons, surprises, and for the needs of your students.
- **Materials:** Organize *everything*. Create files for yourself and use them. Develop a system for collecting and returning student work, for assigning and collecting make-up work, and for keeping the essentials, such as grades, lesson plans, seating charts, emergency plans, and substitute teacher information.
- **Space:** Arrange your room so that you are able to walk next to every student desk. Make decisions regarding the view from the windows, wall decorations, and posted information that will either detract from or enhance student concentration. Remember that the lighting, temperature, and scent of the classroom also affect student learning.

- **Student Behavior:** Things to consider as you set up your expectations for student behavior are: classroom rules, procedures, routines, and creating a work-oriented atmosphere of respect.

Organizing for Instruction

The effective teacher has a plan for instruction. It is important to know the exact requirements for each grade level and subject, so start by examining national, state, and district standards. The next step is to develop a blueprint for delivering the instruction. The goals for each student must be at the heart of the planning process. Everything from the supply list to how you set up your room is dependent upon your instructional goals.

Implementing Instruction

Now that you know what to teach, you face the challenge of figuring out how to teach it! Since not all methods work with all students, it is your job to continually search for the best ways to inspire each of them. This will require you to stay up-to-date in current research and best-practice instruction by reading, attending conferences, participating in workshops, and joining professional organizations. The effective teacher knows how to find effective strategies to ensure that all students are learning.

Monitoring Student Progress and Potential

Effective teachers know how each student in the classroom is doing at all times and how to differentiate instruction to meet the needs of each. These teachers continually push the students to the next level, always keeping them in Vygotsky's "zone of proximal development." Effective teachers are able to manage their classrooms to meet with individual students or small groups of students to ensure maximum learning.

Effective teachers do not just "happen." They are constantly working to improve their practices through continued learning, action research, and listening to the parents, students, and communities they serve.

- See more at: http://www.benchmarkeducation.com/best-practices-library/defining-characteristics-of-effective-teachers.html#sthash.01gEZfep.dpuf

## CHARACTERISTICS ASSOCIATED WITH EFFECTIVE TEACHERS

Teacher characteristics are relatively stable traits that are related to, and influence, the way of teachers practice in their profession. These characteristics are organized into four 'clusters': professionalism, thinking/reasoning, expectations and leadership.

CLUSTER	CHARACTERISTIC	DESCRIPTION
Professionalism	Commitment	Commitment to doing everything possible for each student and enabling all students to be successful
	Confidence	Belief in one's ability to be effective and to take on challenges
	Trustworthiness	Being consistent and fair; keeping one's word
	Respect	Belief that all individuals matter and deserve respect
Thinking/reasoning	Analytical thinking	Ability to think logically, break things down, and recognize cause and effect
	Conceptual thinking	Conceptual thinking Ability to identify patterns and connections, even when a great deal of detail is present
Expectations	Drive for improvement	Relentless energy for setting and meeting challenging targets, for students and the school
	Information seeking	Information seeking Drive to find out more and get to the heart of things; intellectual curiosity
	Initiative	Initiative Drive to act now to anticipate and pre-

		empt events
Leadership	Flexibility	Ability and willingness to adapt to the needs of a situation and change tactics
	Accountability	Accountability Drive and ability to set clear expectations and parameters and hold others accountable for performance
	Passion for learning	Passion for learning Drive and ability to support students in their learning, and to help them become confident and independent learners

CONCEPTUAL MODEL/FRAMEWORK OF TEACHER EFFECTIVENESS

A conceptual framework of teacher effectiveness is a model of reality that includes the key concepts that are used to understand reality and the relationships between and among these concepts.
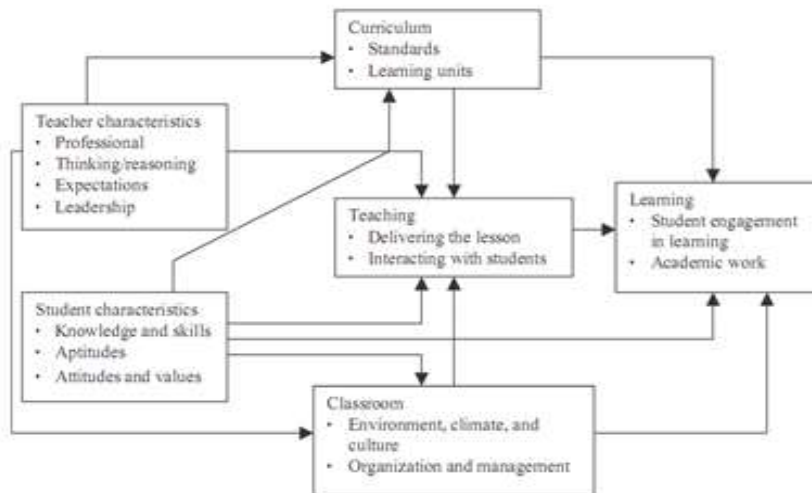
CONCEPTUAL FRAMEWORK FOR UNDERSTANDING AND IMPROVING TEACHER EFFECTIVENESS

The conceptual model contains six concepts. Two of these concepts – teacher characteristics and student characteristics are already discussed but the characteristics of both teachers and students are important to consider in examining and seeking understanding teacher effectiveness.

Three concepts in the middle column of conceptual model are clearly alterable, these concepts are – curriculum, classroom and teaching – can be expected to result in increases or decreases in teacher effectiveness. As a consequence, policies related to these concepts are also quite likely to result in increases or decreases in teacher effectiveness.

The first concept (curriculum) includes the standards that define the intended student learning outcomes – the objectives. The curriculum also includes the learning units that are designed to help students achieve those standards (or objectives). Dividing the curriculum into coherent, meaningful learning units is necessary for many reasons, not least of which is the fact that teachers cannot teach all standards simultaneously. However, there are other advantages of dividing the curriculum into learning units. In designing learning units, planners and/or teachers should focus their attention on four primary questions:

1. What standards/objectives should students achieve in the amount of classroom time allocated to the unit? – The learning question.
2. What instructional strategies and materials should be included in the unit to enable large numbers of students to achieve high levels of learning? – The instruction question.
3. What assessment instruments and/or procedures should be included in the unit so that accurate information is gathered on how well students are learning? – The assessment question.
4. How does one ensure that standards/objectives, instruction and assessment are consistent with one another? – The alignment question.

The concept at the bottom of the second column in conceptual model is the classroom – includes the physical environment, the psychological environment (climate) and the socio-cultural environment (culture), as well as the ways in which both students and learning are organized and managed within these environments. Teachers set the tone for their classrooms, partly by establishing classroom rules and routines and engaging in preventive management behaviours. These rules, routines and behaviours, in turn, influence students' behaviour in the classroom.

The middle concept in the second column of conceptual model (teaching) consists of the ways in which teachers structure and deliver their lessons and the ways in which they interact, verbally and non-verbally, with their students.

The final concept in conceptual model is student learning. In contrast with student achievement, student learning is a process. Achievement indicates what a student has learned (what he/she knows or can do) at a particular point in time. Learning, on the other hand, refers to changes in achievement over time. That is, if a student does not know something at the beginning of a unit, but does know it (and knows it quite well) at the end, he or she has learned. Because learning is a process, it is possible to gather some information about learning while it is occurring.

In conceptual model, the arrows indicate the direction of the expected influences between and among the concepts. Two types of influence are evident: direct and indirect. Arrows connecting adjacent concepts indicate hypothesized direct influences of one concept on another. For example, student learning is believed to be directly influenced by the curriculum, the teaching, the classroom and the students' characteristics. These are the four concepts which have arrows directly linked to student learning. Note that the remaining concept (teacher characteristics) is not believed to influence student learning directly, since there is no arrow linking these two concepts. Rather, teacher characteristics are believed to influence student learning indirectly by virtue of their direct influence on the curriculum, the classroom and the teaching.

DETERMINING TEACHER EFFECTIVENESS

The criteria of teacher effectiveness employed in these investigations were of two sorts, namely efficiency ratings and pupil gains, as measured by tests administered to the pupils before and after instruction. More specifically, the criteria included the following:

1)   In service rating by:
   a)   The superintendent.
   b)   The principal.
   c)   Other supervisory officials.
   d)   Teacher educators.
   e)   Departmental personnel.
   f)   State departmental personnel.

g) Self-rating.

2) Peer rating

3) Pupil gain score

4) Pupil rating

5) Composite of test scores from tests thought to measure teaching effectiveness.

6) Practice teaching grades.

7) Combination or composite of some or all of the above criteria not seem to be complicated, so that my comments are lucid, not too long winded and yet stimulating?

8) With the help of the dimensions of teacher behavior can formulate the aims which I as a teacher wish to attain. Which dimensions seem most important to my work? Which must I renounce first if I do not succeed in realizing a combination of all intended dimensions? What are my own particular problems? In which dimensions should I for preference alter my behavior in order to come closer to my goal?

9) The system of dimensions of teacher behavior is flexible and can be expanded, so it is less likely to become a strait jacket than is perhaps a typology (The fear of many teachers of becoming "authoritarian" and their great efforts to justify the use of "authority", demonstrate clearly the obsessional aspects which these concepts have meanwhile acquired. Every teacher can ask himself: which additional dimensions must I invent in order to be able to scrutinize the goals which I have set for my behavior as a teacher?

HOW TO INCREASE TEACHER EFFECTIVENESS

How to increase teacher effectiveness; that is, how to get teachers to use this knowledge in order to become more effective in their classrooms. There is little, if any, evidence that enticing teachers, for example by giving them more motivating salaries or coercing them by, for example, making them conform to administrative mandates results in any meaningful, long-lasting improvement in their effectiveness, at least in normal circumstances where teachers are actually paid and where they earn a salary that allows them to live. If teachers are to change the way they teach and, perhaps more importantly, the way they think about their teaching, their reluctance to change must be overcome and support must be provided in their attempts to improve.

Overcoming teachers' reluctance to change

Teachers are reluctant to change for a number of reasons, most of which are quite understandable. Three of the primary reasons are:

1. a lack of awareness

2. a lack of knowledge,

3. The belief that the changes will not make any difference to them or their students.

Support for improvement efforts

There is ample evidence that few teachers can engage in serious attempts to improve their teaching without the support of others. Virtually all teachers who attempt to change experience some problems and set-backs early on. Without support, these teachers are likely to give up and return to the status quo. Virtually all meaningful change requires time. If changes are expected in less than the time required, efforts to change are likely to be abandoned and disappointment will reign supreme. If improvement efforts are to be successful, then, administrators, supervisors and fellow teachers need to provide several types of support.

   1. Providing opportunities to benefit from mistakes
   2. Providing opportunities to learn from others
   3. Treating teachers as individuals

SUMMARY

Effective teacher is one who quite consistently achieves goals – be they self-selected or imposed – that are related either directly or indirectly to student learning. Four major assumptions are implicit in this definition of teacher effectiveness – 1-Effective teachers tend to be aware of and actively pursue goals. 2-The teaching is an intentional and reasoned act. 3-The vast majority of teachers' goals are, or should be, concerned either directly or indirectly with their students' learning. And 4-No teacher is effective in every aspect of their profession".

Measurement of Teacher Effectiveness

This section explores those factors that make a teacher effective. Recent research reveals that must variation in overall school effectiveness is due to clas-room level factors rather than school level factors. For these reasons if is important to try to identify what makes an effective teacher

MEANING AND COMPONENTS OF TEACHER EFFECTIVENESS :

Teacher effectiveness is the result of effective teaching

Aspects of effective teaching include :

- Having a positive attitude
- The development of a pleasant social / psychological climate in
- the classroom
- Having high expectations of what pupils can achieve
- Lesson clarity
- Effective time management
- Strong lesson structuring
- The use of
- a variety of teaching methods
- Using and incorporating pupil ideas
- Using appropriate and varied questioning.

However, effective teaching methods are context specific. What is needed for a teacher to be effective can vary depending upon factors such as :

- The type of activity in the lesson
- The subject matter
- The pupil backgrounds (such as age, ability, sex, socio-economic status and ethnicity)
- The pupils' personal characteristics (such as personality, learning style, motivation and self-esteem)
- The culture / organization of the department, school .

From the above discussion we can conclude teacher effectiveness as follows.

Teacher effectiveness is the impact that class-room factors, such as teaching methods, teacher expectations, classroom organizations and use of class-room resources, have on Student's performance.—Teacher effectiveness is the power to realize socially valued objectives agreed for teacher's, especially, but not exclusively, the work concerned with enabling students to learn—Teacher effectiveness is the attribute of a

teacher who has the capability or potential of having a positive impact on student learning, behaviour and attitudes.‖

ENHANCING AND EVALUATING TEACHER EFFECTIVENESS THROUGH PERFORMANCE

- **APPRAISAL FOR TEACHERS AND TEACHER EDUCATORS** :Teachers become public figures when something goes wrong with education systems or when they are needed to implement reforms. They acquire public status also when they negotiate salaries and working conditions or take a stand in relation to some issue. Most of the times, teachers work in their classrooms and schools ignorant of the discussions about their functions and performance. Many policies on teachers are being framed to assess their conceptual knowledge as well as their practicality in producing expected results.Today, a drastic change in education system leads to change in performance of teachers. In present times, teachers build up an invaluable armoury of long-term strategies and quick fixes that every novice would give a right arm for. Present teachers are busier than ever. Thus, the problem before us is to regulate the quality of teaching through setting of standards and at the same time, evaluate teacher's performance. We all are working tooth and nail for setting the standards, but we need less attention towards the appraisal or evaluation of teacher's performance.

  Meaning of Performance Appraisal(P.A):P.A. is personnel evaluation method seeking the measurement of employee work effectiveness using objective criteria. P.A. systems hope to achieve higher productivity outcomes by delineating how employees meet job specifications. A major challenge for performance appraisal systems is to define performance standards while maintaining objectivity.P.A. is one of the important components in the rational and systematic process of human resource management―Appraisal may be defined as a structured formal interaction between a subordinate and supervisor‖ that usually takes the form of a periodic interview.‖ (Annual or Semi Annual)

  Uses :

1)To identify the better performing employees who should get the majority of available merit pay increases, bonuses and promotions.

2)To manage performance.

3)To know how P.A. contributes to performance.

4)To review past behaviour and provide opportunity to reflect on past performance.

From employee view point :

- 1)Tell me what you want me to do?

  2)Tell me how well I have done it?

  3)Help me improve my performance

  4)Reward me for doing well.

  Organizational view point

- :1)To establish and uphold the principles of accountability.

  Meaning of Teacher's Performance Appraisal :

  Teacher's Performance Appraisal or Evaluation means asystematic evaluation of the teacher with respect to his/her performance on job and also,her potent development. Infact, performance appraisal isformal, structured system of measuring, assessing and evaluating a teacher's job, her behaviour and judging how he / she is presently performing the job. It also includes forecasting how he / she can perform the job more effectively in future.

  Criteria for Teacher's Performance Appraisal :

1)The evaluation of teacher should be linked to the mission of the school.

2)The evaluation of teacher should be linked to the standards set up by teacher for

herself.

  3)The evaluation of teacher should be viewed as a continuingprocess. There should be alternative formative techniques used as forms of evaluation and when one gets completed, implement a new one.

  4)The new evaluation system of teacher also emphasizes upon summative evaluation, i.e. judgements of teachers made through collaboration of student soutcomes, opinions of peers,administrators, parents.

- Mission of the School :Mission' is a goal, an aim, a purpose or an objective. Every school has its own mission. Infact, mission depends upon the vision of the school. The effective teacher is expected to shoulder the school in order to accomplish the mission of the school. The teacher can be evaluated through the efforts he / she has made in accomplishing the mission. For exampleThe mission of Seventh Day Adventist Higher Secondary School' in Maninagar atAhmedabad is Committed to mpower each student to achieve all round development through Academic Excellence, Physical Fitness, Mental and Spiritual Health and Social Consciousness.'Hence teacher can be

evaluated not only on the basis of in-class learning experiences that he / she provides, but also on the basis of out-class and off-campus learning experiences. So, her personality should not be like a veneer that can be applied to a person by herself, nor something he / she can turn on and off like an electric current, Rather, her personality needs to have its roots in physical health, emotions, intelligence, knowledge, ideals, spiritualism and sociability. Standards set up :The saying Teachers are born, not made' is wrong. The basic qualities of mind and personality that predispose an individual to success in teaching are influenced greatly by the home and community in which heis reared; also, such qualities can be cultivated. The knowledge of desirable and undesirable qualities help the teacher to set her goals for becoming an effective professional person. The teacher can be evaluated through the standards that he / she has set –up for himself / herself.In order to know what standards a teacher has set up for himself / herself, a form known as Pre teaching Form' can be filled by teachers.Pre-Teaching Form Sample :

1.What are the goals for your subject?

2.What are the goals for particular lessons?

3.What do you want students to learn?

4.How far do such goals accomplish the mission of the school?

5.How far do such goals support district's curriculum and standards set-up by the state?

6.How far do such goals relate to broader curriculum goals?

7.How do you plan teaching work to accomplish those goals?

8.What instructional materials will you use?

9.What teaching-aids will you use?

10.How will you correlate theoretical knowledge to practical aspect of your subject?The responses in Pre Teaching Form' can help to evaluate the teacher's performance in terms of her willingness to do hard efforts, in preparing interesting hand-out materials, preparing learning packages, organizing resource, managing time and making learning process meaningful to students.

Formative Evaluation : Teacher continuously steers the boat of education. He / she constantly strives to help the students to recognize their vital problems, to face their problems with confidence, skill and cretive imagination. He / she guides the students day and night to recognize their desire and also nourish it in order to develop more

adequate understanding.With a view of evaluate teacher's constant efforts, formative evaluation of teachers should be done. Formative evaluation can be done through various techniques by bifurcating teacher's responsibilities into four main domains :

Domain 1 : Planning and Preparation

a)Demonstrate knowledge of content and pedagogy : This refers to what planning has the teacher done to demonstrate her knowledge of a particular subject by interrelating it with teaching skills.

b)Select instructional goals :

- This refers what goals has the teacher set for herself, her subject, her lessons and her students.
- **c)Manage Resources** : This refers to how far has the teacher planned her teaching-learning activities in limited available resources.

d)Design Coherent Instructions :

This refers to what has the teacher planned in coordinating curriculum with extra activities.This domain can be evaluated through –

- Sample Unit Plan made by teacher
- Sample Lesson Plan made by teacher
- Teaching Artifacts planned by teacher

Domain 2 : The Classroom Environment :

a)Create an environment of respect and rapport :

This refers to how far the teacher has been successful in creating environment of respect and rapport. This can be evaluated on the basis of

1Teacher interaction with some students is negative, demeaning, sarcastic or inappropriate.Students exhibit disrespect for teacher.

2Teacher –student interactions are generally appropriate but may reflect occasional inconsistencies, favoritism or disregard for students cultures.Students exhibit only minimal respect for teacher.

3. Teacher student interaction is friendly and demonstrates general warmth, caring and respect Students exhibit respect for teacher.

4. Teacher demonstrates genuine caring and respect for individuality of every student Students make such teachers their role models.

b)Establish a culture for learning :

The culture for learning can be established by

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- Becoming an effective tutor

- Getting pupils to talk to you

- Helping pupils who donot believe in themselves

- Coping with emotional pupils

- Providing personal and pastoral care

- **c)Manage classroom procedures :**

   The teacher can be evaluated on the basis of how far he / she has been successful in managing

- classroom procedures

- Preparing herself well for the lesson

- Preparing children for the lesson

- Providing practical activities

- Keeping children on task

- Involving children

- Displaying work

- Preparing for consolidatory activities like worksheets,

- experiments etc.

- **d)Manage Students Behaviour:**

The teacher can be evaluated on basis of how far he / she could manage student behaviour. This includes :

- Dealing with upset children by being gentle but firm giving

- them, more time and space and becoming their friends.

- Dealing with bad behaviourthrough knowledge of psychology.

- Making Children feel secure and comfortable by being consistent, fair, judicious and not being too rigid.

- Helping children to build self esteem by praising them, managing stressful situations and supporting their proper decisions.

- e)Organize Physical Space :The teacher's evaluation can also be done on the basis of how far he / she has provided satisfactory eating arrangement in available classroom, cares for hygien and sanitation and providing sufficient lighting facilities playground facilities etc.'

This domain can evaluated through –

- Direct observation of teacher in classroom by an expert

- principal or supervisor

- Teacher –student relationship table

- Student surveys

- Samples of student work

- Teaching artifacts

  Domain 3 : The Classroom Instruction

- a)Communicate clearly and accurately : The effective teacher is expected to have good command over the spoken language of school, speak in raised voice, with clarity in speech, proper speech-patterns and neither too fast nor too slow.This is necessary part of classroom instruction. One of the factor to evaluate the teachers performance can be her clear and accurate speech and communication skills.

- b)**Use various techniques** : The effective teacher should make use of various techniques like questioning, discussion, demonstration, etc. to stimulate students and bring variety in teaching.Use of suitable techniques will make the lesson easy and interesting for students. The teachers performance can be evaluated on basis of her selection and implementation ofa particular technique in particular lesson.

  c)**Engage students in learning** : The effective teacher develops broad outlines, formulates objectives to be attained, selects materials and teaching aids suitable to age and level of student, uses appropriate teaching methods, does demonstration, experimentation illustrations, projects, fieldworks to give practical view of the subjects, develops and maintains pupil's interest in learning process, develops suitable study-habits in pupils, develops sense of appreciation for subject among pupils, evaluates pupil's progress using various evaluation techniques.Thus the effective teacher constantly strives to engage students in learning. The teachers performance can be evaluated by assessing how far he / she has been successful in engaging students in learning.

- d)**Provide feedback to students** :The effective teacher needs to be a minute observer and evaluator herself. He / she is expected to do formal and informal observation of her students and give them appropriate feedback and also judge their potentials.This domain can be evaluated through –Direct observation of teacher's class by an expert, supervisor or principalTeaching artefact Samples of students' workAssignment provided by teacher

- **Domain 4 : Professional Responsibilities** :It is sometimes said that degrees do make a teacher, but it is professionalism which develops a teacher. Indeed there is great deal more to being a teacher than just teaching. Every teacher will be faced with an array of additional duties. The effective teacher needs to fulfill these duties also. Hence the teacher can be evaluated on the basis of professional responsibilities.

- a)Competence in the subject : The effective teacher, at whatever level, should be thoroughly competent in the subject he / she teaches. He / she should acquire from advanced study a much wider and deeper knowledge of the subject matter that is directly needed in the class. One cannot teach what one does not know, nor can one teach with enthusiasm unless one know, so much about his field of learning that he is confident and enthusiastic about his specific subject. Facts, ideas and inspiration flow from a mind that is full.The teacher can be evaluated on the basis of her subject competency.

- b)Attending clinics, workshops, seminars, conferences : Such professional gatherings are held on special topic of discussion. The procedures are informal and the groups are small enough that problems of individual teacher can be sorted. The teachers who attend these sessions have greater opportunities to learn, better ways of helping their students.The Teacher can be evaluated on the basis of her visits to such sessions.

- c)Conducting experimentation and research : Teachers may initiate their own experiments, or participate in large projects which aim at discovering new and different techniques for effective teaching.This can also be one of the factors to evaluate teacher's performance.

- d)Keeping Intellectually alert : Teacher should have daily association with magazines and books –professional and recreational, and in addition, should hold discussions with friends and colleagues to enliven his intellectual interest and deepen his thinking.This becomes one of the factors to evaluate teacher'sperformance.

- e)Working with Outside Agencies : Teacher is expected to show professional while working with outside agencies. The teacher should maintain individual student records up to date, keep a case diary of relevant incidents or occurrences, keep accurate notes about any communication carried on with outside agencies and be prepared to express her opinions on the basis of records maintained.The teacher's performance can be evaluated on the basis of what proportion of professionalism does he / she showin relation to working with outside agencies.

- f)Summative Evaluation :One of the evaluation technique to correct ineffective behaviour of the teachers is to do subjective evaluation i.e. evaluation by all live elements surrounding teacher. This evaluation needs to be doe at the end of the semester or academic year. Simple evaluation scale including space for comments on the particular strengths and weaknesses of the teacher can be asked to be rated by :a)Studentsb)Peers or Colleaguesc)Administrators a)Rating by Students :In order to secure objective ratings, a teacher should give her students the opportunity to rate her anonymously and with complete impunity. Any feeling on the part of the student that there may be an attempt to discover hisidentity as a rater will, of course, influence his rating and thus defeat the entire purpose of the procedure. In order to prevent the handwriting from revealing the individual students the comments should be typed. Single, isolated comments may reflecta student's weakness, rather than the teachers; but when the same comment turns up a number of times, it is likely to be a good indication of teacher's behaviour. Many research studies have indicated that student's opinions for their teacher's behaviour in the classroom are competent. Even children in the lower grades seem to know what they are talking about' when they comment on teachers.Again the teacher should have full opportunity to study the comments made for her. Also, it is very important that he / she not be offended by unfavourable ratings and comments or sensitive about learning that her teaching is not totally effective. On the contrary he / she should regard it as an opportunity to improve his / her professional skills.
- b)Rating by Peers :Working in a school or college can be really miserable if the people around you are not supportive and helpful. It is very essential that colleagues around you are helpful and supportive. Infact fellow teachers can better help to evaluate the teacher. But here, the fellow teachers who are raters should keep in mind that they are rating one another for one another's development. Hence, too much friendship or animosity should not become the hurdle. Again, all the peers should avoid to join together to rate one another high. Further, the rating scale should not create conflicts among them.
- c)Rating by administrators : One of the important jobs of the teachers is to comply with the rules made by administrators, try to tackle them by working on his /her own terms and at the same time by not offending them, acting as a bridge between administrators and students and making sure that protocols as defined are respected

cordially. Also, the teacher should exhibit cooperation in his / her behaviour with non teaching personnels and peons. They being the helping hands of the organization, the teacher should not take undue advantage of his / her status. Besides, novel ideas, leadership qualities, punctuality are additional qualities that administrators expect from a teacher.Hence a teacher can also be evaluated through administrators.

Problems of Rating :Teacher's Performance Appraisals are subject to a wide variety of inaccuracies and, biases which can be termed as rating errors occurs in the rater's observation, judgement and can seriously affect assessment results.

The most common occurring rating errors are :

- a)Leniency or severity :Leniency or severity on the part of any rater makes the assessment subjective. Subjective assessment defeats the very purpose of performance appraisal.

- b)Central Tendency : This occurs when teachers are incorrectly rated by the raters near the average or middle of the scale. Here the attitude of the rater is to play safe.

- c)Halo Error :A halo error takes place when one aspect of an individual's performance influences the evaluation of entire performance of the individual. For a teacher, a halo error occurs when a teacher who stays late at school to guide students might be rated high on content and method of teaching. Similarly, an attractive or popular teacher might be given a high overall rating.

- d)Rater Effect :This includes favoritism, stereotyping and hostility. Excessively high or low scores are given only to certain individuals based on rater's attitude towards the ratee, not on actual outcomes

- e)Perceptual Set :This occurs when the rater's assessment is influenced by previously held beliefs. E.g. If the administrator has a belief that teachers hailing from one particular region are intelligent and hardworking his subsequent rating of the teacher hailing from that region tends to be favourably high.f)Performance Attributes Order :Two or more attributes on the rating-scale follow or closely follow each other and both describe or rotate to a similar quality. The rater rates the first dimension accurately and then rates the second dimension similar to the first because of the proximity. If the attributes had been arranged in a significantly different order, the ratings might have been different.g)Spill over Effect :This refers to allowing past performance appraisal ratings to unjustifiably influence current ratings. This may happen in case of ratings done by Administrators or Peers.If the above mentioned

problems are overcomed while rating, summative evaluation can give a clear picture of teacher's present performance and also can judge her potential development.Teacher's Performance Appraisals are never welcomed. They can seem a bit daunting, but if teachers prepare for it. (Traineesof B.Ed. colleges can be for this, too) they aim at improving the performance. Now when affective teaching has become prominent and that the role of individual is undermined, there is necessity of teachers to reach not only intelligently but affectionately and also, learn to work in attribution to system.Hence it is a high time that as performance appraisals are made compulsory in various other professions like Management, Business, Medicine, Pharmacy. It should also be made compulsory in the field of education also.

Evaluation of Teacher Effectiveness

Evaluating teachers can be approached from three different but related angles: measurement of inputs, processes, and outputs. Inputsare what a teacher brings to his or her position, generally measured as teacher background, beliefs, expectations, experience, pedagogical and content knowledge, certification and licensure, and educational attainment. These measures are

sometimes discussed in the literature as "teacher quality"; for instance, the NCLB requirement for highly qualified teachers refers specifically to teacher qualifications and credentials.

Processes, on the other hand, refers to the interaction that occurs in a classroom between teachers and students. It also may include a teacher's professional activities within the larger school and community, but for the purposes of this research synthesis, classroom processes are the focus. Outputs represent the results of classroom processes, such as impact on student achievement, graduation rates, student behavior, engagement, attitudes, and social-emotional well-being. Other outcomes may involve contributions to the school or community in the form of taking on school leadership roles, educating other teachers, or strengthening relationships with parents, but again for the purposes of this research synthesis, student outcomes are the focus. Outputs can be referred to as "teacher effectiveness.

Clarifying the way teacher effectivenessis defined is important for two main reasons. First, what is measured is a reflection of what is valued, and as a corollary, what is measured is valued.

Definitions nominate and shape what needs to be measured. If, for example, policy conversations revolve around scores from standardized tests, the significant outcomes can be narrowed to those that can be measured with standardized test scores. On the other hand, when policy conversations concern the interactions between teachers and students, the focus shifts to classrooms and documenting effective interactions among teachers and their students. In addition, different definitions lead to different policy solutions. When the conversation focuses on teacher quality, the discussion likely turns to improving teachers' scores on measures of knowledge or on signals of that knowledge, such as certification. When classroom processes are discussed, particular practices or approaches to teaching become the focus.

Given this broadened definition of teacher effectiveness, several methods to evaluate teaching and its many dimensions are presented in this section. Research findings on each method are discussed along with associated validity and measurement issues and the considerations to take into account when adopting a method for specific purposes. Two of the most widely used measures of teacher effectiveness—value-added models and classroom observations—are discussed. Then, other methods—principal evaluations, analyses of classroom artifacts, portfolios, self-reports of practice, and student evaluations—are examined.

Definition

Value-added models provide a summary score of the contribution of various factors toward growth in student achievement (Goldhaber & Anthony, 2004). The statistical models are complex, but the underlying assumptions are straightforward: students' prior achievement on standardized tests can be used to predict their achievement in a specific subject the next year. When most students in a particular classroom perform better than predicted on standardized achievement tests, the teacher is credited with being effective, but when most of his or her students perform worse than predicted, the teacher may be deemed less effective. Some models take into account only students' prior achievement scores; others include student characteristics (e.g., gender, race, and socioeconomic background); and still others include information about teachers' experienceValue-added models are relatively new measures of teacher effectiveness, and supporters of their use (e.g., Hershberg et al., 2004; Sanders, 2000) argue that they provide an objective means of determining which teachers are successful at

improving student learning. It is possible for teachers who are evaluated using classroom observations or other teaching measures to receive a high score but still have students with average or below-average achievement growth; however, value-added models directly assess how well teachers promote student achievement as measured by gains on standardized tests. Other researchers argue that these models are not yet fully understood and are theoretically and statistically problematic.

Classroom Observation

Definition

Classroom observations are the most common form of teacher evaluation and vary widely in how they are conducted and what they evaluate. Observations can be created by the district or purchased as a product. They can be conducted by a school administrator or an outside evaluator. They can measure general teaching practices or subject-specific techniques. They can be formally scheduled or unannounced and can occur once or several times per year. The type of observation method adopted, its focus, and its frequency should depend on what the administration would like to learn from the process. When measuring teacher effectiveness through classroom observations, valid and appropriate instruments are crucial. Equally important are well-trained and calibrated observers to utilize those instruments in standard ways so that results will be comparable across classrooms. Observations can provide significant, useful information about a teacher's practice if used thoughtfully, but districts must take great care to administer them in ways that minimize rater bias and other measurement concerns.

Principal Evaluation

Definition

One of the most common forms of teacher evaluation is principal or vice-principal classroom observations (Brandt, Mathers, Oliva, Brown-Sims, & Hess, 2007). Principal evaluation can vary widely by district—from a formal process using validated observation instruments for both formative and summative purposes (Heneman et al., 2006) to an informal, unannounced, or infrequent classroom visit to develop a quick impression of what a teacher is doing in the classroom. Whenever an evaluation involves classroom observation, the concerns raised in the previous subsection apply. In this subsection, principal evaluation is considered a special case of classroom observation, and some of its distinct issues are detailed. Principal evaluations differ from those performed by district

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personnel, researchers, or other outside evaluators who are hired and trained to conduct evaluations. Principals are most knowledgeable about the context of their schools and their student and teacher populations, but they may not be well trained in methods of evaluation. They may employ evaluation techniques that serve multiple purposes: to provide summative scores for accountability purposes, inform decisions about tenure or dismissal, identify teachers in need of remediation, or provide formative feedback to improve teachers' practice. Although these factors can make principals a valuable source of information about their schools and teachers, they also have the potential to introduce bias in either direction to principals' interpretation of teaching behaviors.

Analysis of Classroom Artifacts

Definition

Another method that has been introduced to the area of teacher evaluation is the analysis of classroom artifacts. This method considers lesson plans, teacher assignments, assessments, scoring rubrics, student work, and other artifacts to determine the quality of instruction in a classroom. The idea is that by analyzing classroom artifacts, evaluators can glean a better understanding of how a teacher creates learning opportunities for students on a day-to-day basis. Depending on the goals and priorities of the evaluation, artifacts may be judged on a wide variety of criteria including rigor, authenticity, intellectual demand, alignment to standards, clarity, and comprehensiveness. Although the examination of teacher lesson plans or student work is often included in teacher evaluationprocedures, this subsection specifically addresses structured and validated protocols for analyzing artifacts to evaluate the quality of instruction.

Portfolios

Definition

Portfolios are a collection of materials compiled by teachers to exhibit evidence of their teaching practices, school activities, and student progress. Portfolios are distinct from analyses of instructional artifacts in that materials are collected and created by the teacher for the purpose of evaluation. The portfolio process often requires teachers to reflect on the materials and explain why artifacts were included and how they relate to particular standards. They may contain exemplary work as well as evidence that the teacher is able to reflect on a lesson, identify problems in the lesson, make appropriate modifications, and use that

information to plan future lessons. Examples of portfolio materials include teacher lesson plans, schedules, assignments, assessments, student work samples, videos of classroom instruction and interaction, reflective writings, notes from parents, and special awards or recognitions.

Self-Report of Practice

Definition

Teacher self-report measures ask teachers to report on what they are doing in the classroom and may take the form of surveys, instructional logs, or interviews. Like observations, self-report measures may focus on broad and overarching aspects of teaching that are thought to be important in all contexts, or they may focus on specific subject matter, content areas, grade levels, or techniques. They may consist of straightforward checklists of easily observable behaviors and practices; they may contain rating scales that assess the extent to which certain practices are used or are aligned with certain standards; or they may require teachers to indicate the precise frequency of use of practices or standards. Thus, this class of measures is quite broad in scope, and considerations in choosing or designing a self-report measure will depend largely on its intended purpose and use.

Student Evaluation

Definition

Student evaluations most often come in the form of a questionnaire that asks students to rate teachers on a Likert-type scale (usually a four-point or five-point scale). Students may assess various aspects of teaching, from course content to specific teaching practices and behaviors. Given that students have the most contact with their teachers and are the most direct consumers of teachers' services, it seems that valuable information could be obtained from evaluations of their experience. However, student ratings are rarely taken seriously as part of teacher evaluation systems. Student ratings of teachers are sometimes not considered a valid source of information because students lack knowledge about the full context of teaching, and their ratings may be susceptible to bias. There is concern that students may rate teachers on personality characteristics or how they are graded rather than instructional quality. Students are considered particularly susceptible to rating leniency and "halo" effects. For example, if they rate teacher highly on one trait or aspect of teaching, they might be influenced to rate that teacher highly on other, unrelated items.

Peer Review of Teaching

Peer Review of Teaching (University of Minnesota, Center for Teaching and Learning Services).Guidelines, instruments, and other resources for helping departments establish or improve a peer review process. Includes materials for instructors who are being reviewed or acting as a reviewer and links to other sites with information on peer review of teaching.

Self-Evaluation

Assuming that no one is perfect and therefore everyone has room for improvement, evaluation is the means by which we try to identify which aspects of our teaching are good and which need to be changed. The question then arises as to who should take responsibility for doing this evaluation. My belief is that evaluation is an inherent part of good teaching. Therefore it is the teacher himself or herself who should take primary responsibility for doing the evaluation.

1.Self-monitoring Self-monitoring is what people do semi-automatically and semi-consciously whenever they teach. Most of their mental activity is concerned with making the presentation or leading the discussion. But one portion of their mental attention is concerned with "How is it going?" "Are they with me?" "Am I losing them?" "Are they interested or bored?

2.Audiotape and Videotape RecordingsModern technology has given us relatively inexpensive and easy access to audio and video recordings of what we do as teachers. We can put a small audio recorder on the teachers desk or put a video recorder on the side of the classroom and let it run during a class session. Then later we can listen to or view itInformation from StudentsAs the intended beneficiaries of all teaching, students are in a unique position to help their teachersin the evaluation process. This information can be obtained intwo distinct ways: questionnaires and interviews, each with its own relative values.

a. Questionnaires. The most common method of obtaining student reactions to our teaching is to use a questionnaire. Lots of different questionnaires exist but most in fact ask similar kindsof questions: student characteristics (e.g., major, GPA, reasons for taking the course), the students characterization of the teaching (e.g., clear, organized, interesting), amount learned, overall assessment of the course and/or the teacher (e.g., compared to other courses or other teachers, this one is ...), and sometimes, anticipated grade.

b.Interviews .The other well-established way of finding out about student reactions is to talk to them. Either the teacher(if sufficient trust and rapport exist) or an outside person (if more anonymity and objectivity are desired) can talk with students for 15-30 minutes about the course and the teacher. As an instructional consultant, I have often done this for other teachers, but I have also done it in some of my own courses. I try to get 6-

8 students, preferably a random sample, and visit with them in a focused interview format immediately after class. I have some general topics I want to discuss, such as the quality ofthe learning thus far, reactions to the lectures, labs, tests, and so forth.But within these topics, I will probe for clarification and examples of perceived strength and weakness. I also note when there is divergence of reactions and when most students seem to agree

4.Students' test results. Teachers almost always give students some form of graded exercise, whether it is an in-class test oran out-of-class project. Usually, though, the intent of the test isto assess the quality of student learning. We can also use this sameinformation to assess the quality of our teaching.

5.Outside observerIn addition to the two parties directly involved in a course, the teacher and the students, valuable information can be obtained from the observations of a third party,someone who brings both an outsider's perspective and professional expertise to the task.

Models of Evaluation

Growth Models-measure student achievement growth from one year to the next by tracking the same students. This type of model addresses the question "How much, on average, did students' performance change from one grade to the next?" To permit meaningful interpretation of student growth, the model implicitly assumes the measurement scales across grades are vertically linked (i.e., that student scores on different tests across grades are directly comparable and represent a developmental continuum of knowledge and skill). a Value-Added Models (VAMs)-complex statistical models that attempt to determine how specific teachers and schools affect student achievement growth over time. This model generally uses at least two years of students' test scores and may take into account other student-and school-level variables, such as family background, poverty, and other contextual factors. VAMs address the question, "To What extent can changes in student performance be

attributed to a specific school and/or teacher compared with that of the average school or teacher?"

o Expected Growth-a student's expected/predicted performance on a current year test given his or her previous year's test scoreThis is obtained by regressing the current year test score on the prior year test score. In other words, estimating expected growth addresses the question, ~~compared to students with the same prior test score, is the current year test score higher or lower than would be expected?"

o Residualized Growth-the difference between any student's observed current year test score, and that which would be the expected score given his or her prior year test scores (i.e., expected growth) represents residual. This residual is referred to as lfresidualized growth," which quantifies the extent to which students' performance changes between the prior year and the curent year is higher or lower compared to those with similar performance in prior years.

o Teacher Effect-a teacher's contribution to student performance growth compared with that of the average (or median, or otherwise defined) teacher in the district or the state. In essence, teacher effect is the difference between the observed student achievement growth and the expected student achievement growth (controlling for confounding factors, such as prior student achievement and sometimes student background factors), which are interpreted as representing differences in student achievement growth due to differences in teacher effectiveness. Note that the description of "school effect" "principal effect" is less straightforward because it will depend on decisions about how to aggregate grade-or subject-level estimates based on the specific model employed to determine teacher effects.
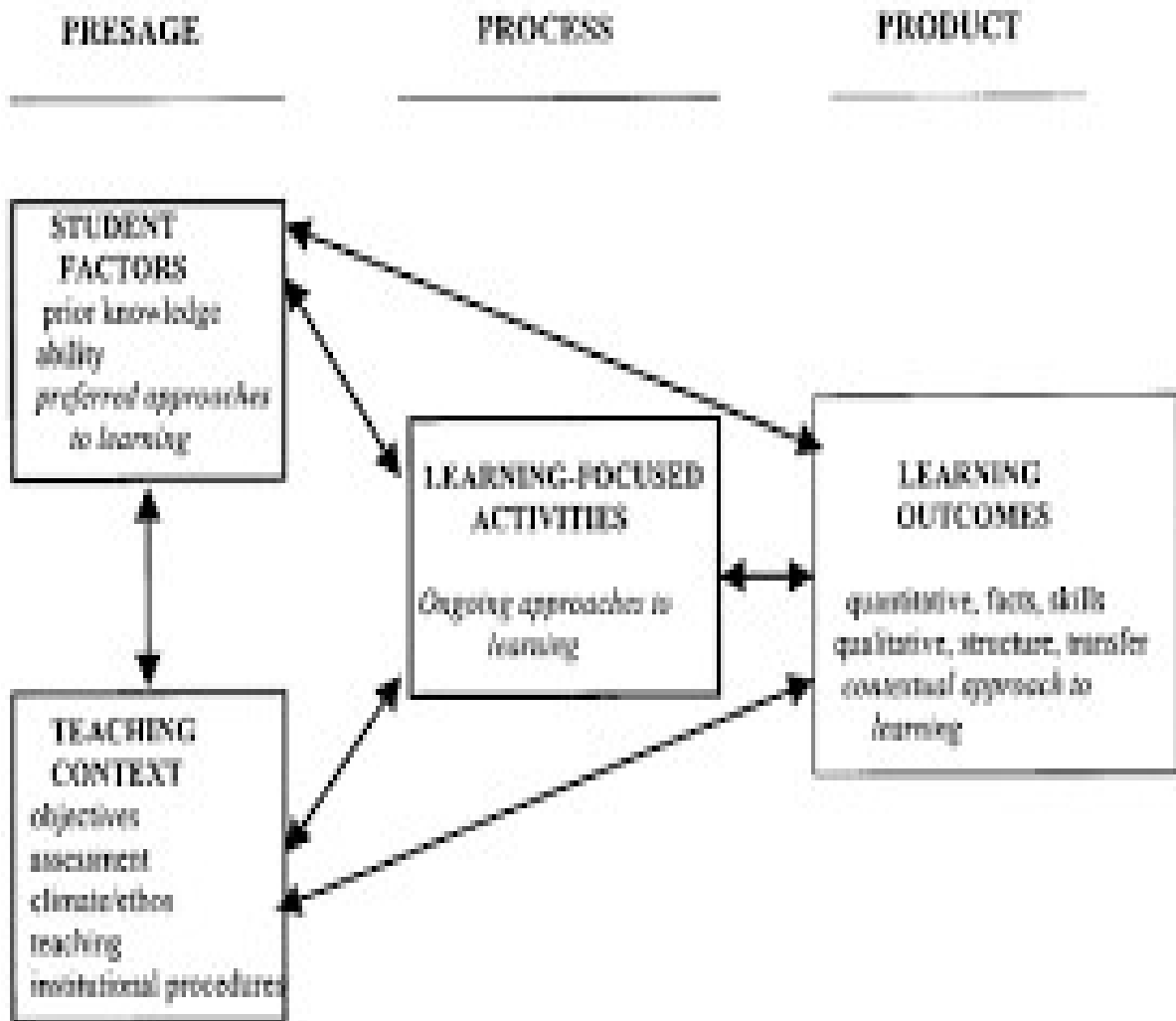
o Value-Added Estimate-to determine the value-added estimate, teacher effects are compared with the counterfactual (sometimes referred to as a "typical" teacher). lfthe teacher effect is higher than the counterfactual, then we may claim the teacher is effective (i.e., positive value-added). Conversely, if the teacher effect is lower than the counterfactual, then we may claim that the teacher is not effective (i.e., negative value-added). The number or rating produced in the comparison is the value-added estimate.

Critera

Product criteria. Product refers to what is learned or outcomes of learning.It is related to how best students achieved.achievement tests and other measures in the field of cognitive, affective psychomotor dimensions are used to measure teacher effecticveness according to

this criterion.Here teachers are judged by their effectiveness in changing student behavior, the judge is employing product criteria. The teacher is judged on the basis of a measurable change In' what is viewed as his product, student behavior. What constitutes

acceptable products, or changes, has never been made altogether clear But it would seem that measures of growth in skills, knowledge of subject matter and attitude which could be logically or empirically attributed to the teacher's influence constitute acceptable data in the product category. (Jenkins and Bausell 1974:572).

Process criteria: Process refers to the performance and behaviour of the teacher, students bvehaviourand the student teacher interactiuon in trhre classroom.Teachers effectiveness based on the nehabvior and activities of teacher and students in classroom.Thus teacher effectiveness according to this criterionis assessed through observationof teacher behaviour and students behaviour.When teacher evaluation is based upon class- .room behavior, either the teacher's behavior, his student's behavior.or the interplay of teacher/student -behavior, the judge is using process criteria. The process behaviors chosen to measure are believed to be worthwhile in their own right and thus are not necessarily related to product criteria. Some variables upon which teachers could be rated are their verbal bahavior, methods, classroom control, and individualization of instruction. (Jenkins and Bausell 1974:572)

PRESAGE   PROCESS   PRODUCT

STUDENT FACTORS
prior knowledge
ability
preferred approaches to learning

LEARNING-FOCUSED ACTIVITIES

Ongoing approaches to learning

LEARNING OUTCOMES

quantitative, facts, skills
qualitative, structure, transfer
conceptual approach to learning

TEACHING CONTEXT
objectives
assessment
climate/ethos
teaching
institutional procedures

Presage criteria. It refers to the academic background and personal characteristics of teachers. Irt includes intellectual abilities oft teachersthe training and education received, personal characteristics.Thus according to this criteria teacher effectiveness is assessed from teachers'college records/markstest scores and training usually made outside the classroom. When teacher evaluation is based upon one's personality or intellectual attributes (industry, adaptability, intelligence, character), his performance in training, his knowledge of achievement (e.g. marks in education courses, success in student teaching, national teacher examination, knowledge of education facts) or his inservice status characteristics (e.g. tenure, years of • experience, or participation in professional organizations), the judge is employing presage criteria. (Jenkins and Bausell 1974:572)

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The criteria or factors significant for teacher effectiveness can be enlisted as follows

Studies on Teacher Effectiveness	Factors examined
Presage – Product Studies	Psychological Characteristics • Personality characteristics • Attitude • Experience • Aptitude/Achievement
Process –Product Model	Teacher Behaviour (a) Quantity of academic activities • Quantity and pacing of instruction: Effective teachers priorities academic instruction and maximise amount of curriculum covered but at the same time move in such step that each new objective is learnt readily and without frustration • Classroom management : Effective teachers organise and manage classroom environment as an effeicient learning environmentand thereby engagement rate are maximised. • Actual teaching process: Students should spend most of their time being taught or supervised by their own teacher talk should be academic rather than managerial or procedural. (b)Quality of Teachers' organised lessons • Giving information:The variable which were examined referred to cognitive level of question, type of question (product vs process question), clarity, length of pause following question. • Providing feedbacks:It referes to the wayteacher monitors student's response and how they react to correct, partially correct and incorrect answer. • Practice and application opportunities. (b) Classroom Climate: Business like and supportive classroom

Beyond classroom behaviour model	**(a) Subject knowledge** **(b) Knowledge of pedagogy** **(c) Teachers beliefst** **(d) Teachers self efficacy**
Overall criteria	• Subject mastery • Preparation and organisation • Presentation style • Classroom management • Motivational strategy • Effective communication • Student teacher interaction • evaluation and feedbacks • Informal academic support • Personal attributes • Overall teaching effectiveness

A. Cognitive flexibility: teaching functions, uses of hardware and software; attitude towards profession, self and others, teaching strategies, teacher-indirectness and classroom performance, Strategies for analyzing teacher behavior- Flauder's interaction Analysis Categories(FIAC), Other evaluative scales of teacher behaviors, Baroda General Teaching Competence Scale(GTC) and Teacher Assessment Batting(TAB)

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Cognitive flexibility

Cognitive flexibility has been described as the mental ability to switch between thinking about two different concepts, and to think about multiple concepts simultaneously.[1] Despite some disagreement in the literature about how to operationally define the term, one commonality is that cognitive flexibility is a component of executive functioning. Regardless of the specificity of the definition, researchers have generally agreed that cognitive flexibility is a component of executive functioning, higher-order cognition involving the ability to control one's thinking.[11] Executive functioning includes other aspects of cognition, including inhibition, memory, emotional stability, planning, and organization. Cognitive flexibility is highly related with a number of these abilities, including inhibition, planning and working memory.[6] Thus, when an individual is better able to suppress aspects of a stimulus to focus on more important aspects (i.e. inhibit color of object to focus on kind of object), they are also more cognitively flexible. In this sense, they are better at planning, organizing, and at employing particular memory strategies.

Researchers have argued that cognitive flexibility is also a component of multiple classification, as originally described by psychologist Jean Piaget. In multiple classification tasks, participants (primarily children, who have already developed or are in the process of developing this skill) must classify objects in several different ways at once - thereby thinking flexibly about them.[12] Similarly, in order to be cognitively flexible they must overcome centration, which is the tendency for young children to solely focus on one aspect of an object or situation.[13] For example, when children are young they may be solely able to focus on one aspect of an object (i.e. color of object), and be unable to focus on both aspects (i.e. both color and kind of object). Thus, research suggests if an individual is centrated in their thinking, then they will be more cognitively inflexible.

Research has suggested that cognitive flexibility is related to other cognitive abilities, such as fluid intelligence, reading fluency, and reading comprehension.[12][14] Fluid intelligence, described as the ability to solve problems in new situations, enables fluid reasoning ability. When one is able to reason fluidly, they are in turn more likely to be cognitively flexible. Furthermore, those who are able to be cognitively flexible have been shown to have the ability to switch between and/or simultaneously think about sounds and meanings, which increases their reading fluency and comprehension. Cognitive flexibility has also been shown to be related to one's ability to cope in particular situations. For example, when individuals

are better able to shift their thinking from situation to situation they will focus less on stressors within these situations.[15]

In general, researchers in the field focus on development of cognitive flexibility between the ages of three and five.[16] However, cognitive flexibility has been shown to be a broad concept that can be studied with all different ages and situations.[3] Thus, with tasks ranging from simple to more complex, research suggests that there is a developmental continuum that spans from infancy to adulthood.

Cognitive flexibility of teachers means it is their ability and a willingness to look at things in a new light, to hold more than one conceptual framework in mind. Cognitive flexibility is the ability to shift thoughts or actions as demanded bu situational context.As teachers plymultiple roles and responsibilities it is necessary for them to have cognitive flexibilities.
Cognitive flexibility is an executive function skill. The term executive function describes a set of cognitive abilities that control and regulate other abilities and behaviors. Executive functions are necessary for goaldirected behavior. They include the ability to initiate and stop actions, to monitor and change behavior as needed, and to plan future behavior when faced with novel tasks and situations. Executive functions allow us to anticipate outcomes
and adapt to changing situations. The ability to form concepts and think abstractly are often considered components of executive function

Cognitive flexibility helps Teachers to

- Interpret information in multiple ways,
- Change approaches,
- Select a new strategy if the first one is not working.

Strategies

- Use perspective-taking to increase reading comprehension.
- Self-monitoring and checking can help students learn self-regulation.
- Students need to know
    - What types of errors to look for,
    - How to check for these errors,

- Exactly how to correct the errors.
- To help learn these skills, executive functioning processes should be taught from pre-K through 3rd grade.
- Example strategies:
  - COPS - check work for Capitalization, Organization, Punctuation, and Sentence structure.
  - SQ3R - Survey, Question, Read, Recite, Review is a strategy for studying from a text book.

- Give teachers/students opportunities to
  - Initiate their own learning,
  - Lead the planning process before starting a task,
  - Engage in a group.

- The teacher should model executive functioning skills as a co-learner alongside the student.

However cognitive flexibility of teachers includes teaching functions, uses of hardware and software; attitude towards profession, self and others, teaching strategies, teacher-indirectness and classroom performance,

- See more at: http://cbirt.org/tbi-education/executive-functions/executive-function-strategies-cognitive-flexibility/#sthash.1eOwXbHu.dpuf

Teaching Functions

The term teaching functions refers to classroom experiences that serve to move students from a lack of mastery to mastery in an academic content area. Descriptions of the most effective teaching functions usually leave little doubt about the specific student learning experi-ences fostered by the teacher's behavior. Doyle (1985) noted that it is the instructional function served (e.g., to increase guided practice), not the teaching behavior, that is most important. Rosenshine and Stevens' (1986) synthesis of the research provides the following summary statement on teaching functions:

In general, researchers have found that when effective teachers teach well-structured subjects, they

1. begin a lesson with a short review of previous, prerequisite learning.

2. begin a lesson with a short statement of goals.

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3. present new material in small steps, with student practice after each step.

4. give clear and detailed instructions and explanations.

5. provide a high level of active practice for all students.

6. ask a large number of questions, check for student understanding, and obtain responses from all students.

7. guide students during initial practice.

8. provide systematic feedback and corrections.

9. provide explicit instruction and practice for seatwork exercises and, where necessary, monitor students during seatwork.

The major components in systematic teaching include teaching in small steps (with student practice after each step), guiding students during initial practice, and providing all students with a high level of successful practice. Of course, all teachers use some of these behaviors some of the time, but the most effective teachers use most of them almost all the time

Good and Grouws (1979) found that when teachers increased their emphasis on the following five teaching functions, their students achieved more than students of teachers who did not

emphasize them.

1. Check the previous day's work and reteach where necessary.

2. Present new content or skills, proceeding rapidly but in small steps, while giving detailed instructions and explanations.

3. Have students practice the material while providing feedback and corrections.

4. Have students do independent practice.

5. Provide weekly and monthly reviews.

The presence of the teaching functions is important, but the timing and amount of time devoted to each function is also significant. For example, guided practice is important, but only if it is conducted at the right time and for long enough to ensure that the student error rate is low before engaging in independent practice. The timing and amount of each activity must be related to its effect on students.

Teaching Function Concept

The majority of teaching functions considered important by researchers have been consolidated into the following five groups: (a) daily reviews and prerequisite checks, (b) presentation of new content, (c) guided student practice, (d) independent student practice, and (e) weekly and monthly reviews

Daily Reviews and Prerequisite Checks.

Typically, the effective teacher will initiate a lesson with a series of related activities that will serve to (a) review the material covered in the previous lesson, (b) check on homework, and (c) check on the prerequisite skills needed for the new content that will be covered in the lesson.

Daily reviews.

One of the most effective ways to initiate a lesson is to review the previous lesson by presenting two or three problems that require a written response by all students. If these problems are on the screen, chalkboard, or worksheet in front of the students when they enter the classroom, and if all the students are actively responding to the problems within the first sixty seconds of the lesson, a number of important things happen, including:

1. A work-oriented tone is established. If a lesson starts with a long, rambling discourse by the teacher and passive participation by students, a very different tone may be set for the lesson.

2. Since the review problems cover material previously taught, the error rate should be low. This means that most students will start the lesson on a successful note. Consistent demonstrations of success are one of the best ways to facilitate the development of appropriate attitudes toward the content and the instruction.

3. Since there are often class management problems associated with transitions between lessons, and since some of these may have to do with factors outside the teacher's classroom, the teacher is in a good position to deal with problems if the majority of students are actively engaged in responding to the review problems at the start of a lesson.

4. Most class management issues are usually associated with a few students who come to class

without any interest in participating. If these students get the message within the first minute of class that they will be expected to participate and that the teacher will take the time to check on them individually, then management problems will be reduced. Homework.

There is lack of consensus in the research literature on the importance of large amounts of homework, but there is some agreement on the importance of the following guidelines:

1. Requiring a session of at least fifteen minutes per night per subject is helpful.

2. The homework should serve to consolidate and review.

3. Students should not be encountering new material or have high error rates in homework assignments.

4. Homework should be checked promptly.

Prerequisite skills.

One of the characteristics of a master teacher is the appropriate treatment of prerequisite skills. The master teacher knows what new material is likely to be difficult for students and which prerequisite skills are important for the successful introduction of new material. Rather than place students in remedial situations, the master teacher will try to prevent errors and misconcepts by making sure that the new material is introduced in small steps and that students demonstrate mas-tery of the critical prerequisite skills before starting the sequence of small steps. Prerequisite skills are typically considered at the start of a course of study and at the begin-ning of each lesson that introduces new content. Most effective teachers use a combination of group and individual instruction. Group instruction can be very effective if the teacher assesses the students at the beginning of the course to determine how the skills they bring to the class will match up with the course curriculum. The appropriate management of prerequisite skills calls for an in-depth understanding of instruction, curriculum, and student learning. Such understanding does not come easily; it is characteristic of an individual who has made a major commitment to the science and art of teaching.

The prerequisites needed to ensure high levels of success in the early stages of acquiring new knowledge include (a) skills mastered to automaticity, (b) problem-solving strategies, and (c) gen-eral principles and concepts

1. Skills mastered to automaticity. One should not be teaching complex algorithmic procedures, such as long division, if students are struggling with the prerequisite facts in subtraction and multiplication. Lessons in reading comprehension will have little value if the needed decod-ing skills have not been mastered.

2. Problem-solving strategies. Even the simplest of work problems requires the mastery of strat-egies to determine what information is provided and what information is needed to solve the problems. Such strategies will be prerequisites for more advanced word problems.

3. General principles and concepts. Commenting on earlier research on the difference between novice and expert problem solving in physics, Doyle (1985, p. 64) stated, "A teacher needs to

describe the connections between lessons, in order to build broad understandings of content and place individual tasks within a wider context of understanding. In addition, a teacher needs to design tasks that require students to integrate information across individual lessons

and class sessions." In the teaching of earth science, the convection cell is a concept that helps explain the movement of air in the atmosphere, the deep ocean currents, and the movement of magma inside the earth. Once taught, the concept of the convection cell will be prerequisite knowledge to help integrate information across several earth science topics. Doyle noted that the better problem solvers possessed "domain-specific knowledge in the subject area" and could interpret problems in terms of the underlying principles and concepts.

Reteaching.

Student errors should be minimal for daily reviews, homework checks, and prerequisite skill checks. All these activities involve previously taught material. If most of the students do not demonstrate mastery, reteaching should be conducted immediately. Certainly one would not want to introduce any new material if less than 80 percent of the class did not demonstrate mastery of important prerequisite skills. It would be far better to spend the rest of the class period teaching the prerequisite skills. Rather than place a large percentage of the class in a remedial situation, it would be better to delay the new material a day so as to help ensure initial success once it is intro-duced. Because remedial instruction is expensive in teacher and student time, and destructive for the attitudes of both students and teacher there is no economy of time or effort in the premature intro-duction of new material.

Presentation of New Content.

Evertson, Emmer, and Brophy (1980), writing in the Journal of Research in Mathematics Education, reported that the most effective teachers spend about 23 minutes per day on the presen-tation of new material through demonstrations, discussions, and lectures. The least effective teachers spend only eleven minutes per day on the same activities.

The following guidelines for presenting new material were prepared by Rosenshine and Stevens (1986, p. 381), based upon their review of the research literature.

Clarity of goals and main points.

• State the goals or objectives of the presentation.

• Focus on one thought (point, direction) at a time.

• Avoid digressions.

• Avoid ambiguous phrases and pronouns.

Step-by-step presentations.

• Present the material in small steps.

• Organize and present the material so that one point is mastered before the next point is given.

• Give explicit, step-by-step directions (when possible).

• Present an outline when the material is complex.

Specific and concrete procedures.

• Model the skill or process (when appropriate).

• Give detailed and redundant explanations for difficult points.

• Provide students with concrete and varied examples.

Checking for students' understanding.

• Be sure that students understand one point before proceeding to the next point.

• Ask the students questions to monitor their comprehension of what has been presented.

• Have students summarize the main points in their own words.

• Reteach the parts of the presentation that the students have difficulty comprehending, either by further teaching explanation or by students tutoring other students.

Guided Student Practice.

Guided student practice serves as a bridge between activities designed to present new material and independent student practice. The guided student practice is integrated into activities designed to present new material. In math instruction, for example, guided practice could involve having the student practice one or several steps in the algorithm used to solve a single calculation or problem. In the more advanced stages of presenting new material, guided practice could involve the presentation of several math problems and the associated feedback procedures.Guided practice and independent practice represent different points on a different contin-uum, so no absolute dividing point can be established to discriminate between the two related activities. Guided practice should be conducted in small steps and should be intensely supervised. It should prevent the development of consistent error patterns and inappropriate practices. This means that guided practice must be designed and implemented so that errors are identified and reteaching conducted immediately.

Hunter (1984), in discussing the importance of guided practice, stressed the need for students to practice their new knowledge or skill under direct teacher supervision. Hunter further noted that "New learning is like wet cement; it is easily damaged. An error at the beginning of learning can be easily 'set' so that it is harder to eradicate than had it been apprehended immediately" The research literature has consistently stressed the importance of appropriate amounts of guided practice for all learners, but nowhere is this guided practice more important than with low achievers. It has been noted that "The important element seems to be the provision of controlled practice with positive teacher feedback" (Voelker Morsink, Chase

Thomas, & Smith-Davis, 1987, p. 292). The fact that certain members of the class will require more guided practice than others suggests that each lesson should contain a certain amount of time in which the higher-achieving students are working on independent practice, while the teacher is working closely with low-achieving students on guided practice.

The effectiveness of guided practice can be evaluated by measures of student success in independent practice. If students are at least 80 percent successful when they begin the subsequent independent practice, then guided practice has been appropriately conducted.

Independent Practice.

In learning a new skill or concept, the students progress through two phases: acquisition and consolidation. Teaching activities designed to support the presentation of new content and guided student practice contribute to the acquisition phase; activities concerned with review and indepen-dent student practice contribute to the consolidation phase.

The transition from guided practice to independent practice should not occur until students are at least 80 percent successful in their guided practice. The independent practice should con-tinue past the point at which the student is 100 percent successful. Independent practice should continue until the use of the skills becomes automatic.

Samuels (1981) identified two levels of independent practice: a unitization level and an auto-maticity level. At the unitization level, the students are integrating their skills with previous knowledge. They make few errors, but learning is not easy; they usually get the right answer with a considerable investment of effort. At the automaticity level, the students are performing the skills successfully, easily, and without having to think through the steps involved in performing

the skill. When the automaticity level has been reached, the skill has been overlearned. Rosen-shine and Stevens (1986) made the following observation with regard to the importance of over-learning:

Overlearning is particularly important for hierarchical materials such as mathematics and elementary reading. Unless there is overlearning to the point of automaticity, it is unlikely that the material will be retained. Furthermore, hierarchical material requires the application of previ-ously learned skills to subsequent new skills. The advantage of automaticity is that students who master the material can then concentrate their attention on learning new skills or applying the skills to new situations. For example, automaticity of decoding skills frees the students' attention for comprehension, just as automaticity of computation frees the students' attention for mathe-matical problem solving

Weekly and Monthly Reviews.

There are two types of reviews: (1) daily reviews and (2) weekly and monthly reviews. As previously discussed, daily reviews facilitate the introduction of new content. The weekly and monthly reviews are designed to ensure that content previously mastered is not forgotten. Good and Grouws (1979) noted that effective teachers were devoting between 15 and 20 percent of instructional time to weekly and monthly reviews.

A weekly comprehensive mastery test can serve the dual purpose of reviewing material and providing a valid measure of student progress for grading purposes. A test that diagnoses how much material a student is retaining is also providing the teacher with feedback on the quality of instruction. If certain skills are consistently giving large numbers of students problems on mas-tery tests of retention, the teacher must reexamine the instructional presentation and student prac-tice activities that were associated with the acquisition and consolidation of the skill

Adjusting Resources.

The point has been made by Rosenshine and Stevens (1986) that all teachers will at some time use all the important teaching function skills. The effective teacher is the individual who uses the skills in the right amount at the right time, in response to student needs.

Individualized instruction is not primarily concerned with the physical individualization of the instructional setting; rather, it stresses the monitoring of students as individuals to ensure that instruction, whether in group or individual settings, is consistent with their needs.

Noli (1980) noted:Student engagement rates are higher when students are involved in more academic interac-tion with the instructor. Engagement rates are higher in a group setting than during indepen-dent seatwork. Engagement rates are higher when students receive more monitoring or help from an instructor .

The teacher has to balance the facility of group settings to ensure high engagement with the facility of individual settings to match instruction to different student needs. The more diverse the entering skills of students, the more difficult the balancing process will be

Safety Nets and Individual Differences.

Individual differences certainly give rise to management problems. There seems to be a widespread misconception that all individual differences come from the individual student. In fact, the breadth of individual differences is a function of both the contributions of the individual and the quality of instruction. An educational system should not be repressing the

unique essence of the individual, nor should it be creating individual differences in achievement by failing to address individual knowledge deficits in a timely manner.

Table 1: Example of a Lesson Schedule

Lesson
Segment
Time
Instructional
Setting
Teaching Function
1 5-10 min. Group
Review and check on prerequisites.
2 20-25 min. Group
Presentation of new content integrated with
guided practice.
3 20-25 min. Individual
Independent practice for average and above
average students. Additional guided practice
for low achievers.

Block (1980) called for more emphasis on a "self-correcting system of schooling." He noted that many existing practices are "error-promoting" and require that Educators must give special attention to a wider range of learner management problems. They must, for example, "individualize" their instruction in the face of unnecessarily wide

ranges of individual differences in students' readiness to learn. This typically entails redoing portions of their predecessors' jobs as well as trying to do their own .

The message is clear. All teachers must make certain they have a systematic set of classroom practices that ensure that errors are detected and reteaching conducted in a timely manner. Such detection and reteaching will

1. Reduce future classroom management problems by reducing unnecessary individual differences;

2. Promote student achievement and more positive student attitudes by providing more consis-tent demonstrations of success;

3. Provide a more effective working environment for colleagues receiving the students.

Daily Safety Nets.

A safety net has two components: error detection and reteaching. A daily safety net can be established by ensuring that every lesson is systematically planned so that errors can be detected and reteaching conducted based on these errors. For example, in the lesson structure shown in Table, there is an opportunity for error detection and reteaching in Segment 1. Even more important will be the error detection and reteaching that occurs in Segments 2 and 3. If more than 20 percent of the class experience difficulty with the introduction of new content, reteaching should be conducted immediately. If only a few students are experiencing problems, the teacher may note the students. During Segment 3, the teacher will be free to provide additional guided practice with these few children, while the others work independently on prepared seatwork activ-ities. With such a safety net, even the students who have major problems will receive reteaching that addresses their needs within the same lesson that the problems were detected.

The maintenance of daily safety nets does not come easily. It requires a mobile, alert teacher, constantly monitoring the high-risk students. Also necessary are well-prepared practice materials that will provide meaningful experiences for the majority while the teacher spends time with stu-dents in difficulty during the last part of each lesson. The quality of the salvage program will be consistent with the physical and cognitive energy expended by the teacher.

Weekly and Monthly Safety Nets.

As noted earlier, the more effective teachers systematically set aside 15 to 20 percent of the allocated time for weekly and monthly reviews. In the study conducted by Good, Grouws, and Ebmeier (1983), one day each week (usually Monday) was set aside for weekly and monthly reviews. For three of these review days each month, the teachers emphasized the content covered in the previous week. On one day each month, the teachers emphasized the content covered dur-ing the previous month. If each of these review days is initiated by a diagnostic test of the content covered during the previous week or month, the test itself will serve as a review, and the teacher will have the information needed to conduct reteaching for the remainder of the lesson. If major problems are encountered, the teacher may continue the reteaching into the next lesson. By keep-ing track of the problems encountered during the weekly reviews, the teacher will be able to develop well-targeted diagnostic tests for the monthly reviews.

Planning for Differences.

Some students require more practice than others (Block, 1980). One strategy for varying the

amount of practice is to prepare three parallel sets of practice examples for each lesson. Although each set of examples is different, each covers the same concepts at the same level of difficulty.

The practice of preparing three parallel sets of examples will accomplish two important objectives. First, it facilitates a successful transition from guided to independent practice. The probability of success in independent practice will increase, because the same problem types will have been encountered and practiced during the preceding guided practice. Second, those stu-dents in need of extra practice will receive it, with examples that emphasize conceptual under-standing rather than rote learning. Repeated practice with the same set of examples would emphasize rote learning.

Expectation of Success.

The research literature has noted that effective instructional programs are characterized by an expectation of success, which can be facilitated if

1. The teacher confidently and briskly presents a carefully validated sequence of instruction.

2. The students experience recurring demonstrations of success, particularly in the initial stages of learning a skill.Effective teachers have been described as "those who almost never use criticism; they have and communicate high expectation; present task-oriented instruction, reinforce on-task behavior, and use high rates of the contingent praise" (Voelker Morsink, Chase Thomas, & Smith-Davis,

1987, p. 291). In essence, the critical attributes of a classroom climate that has an expectation of success include:

1. Proven successful curriculum sequences and teaching methods

2. Consistent success experiences

3. Consistent and timely recognition of student success.

Compromises and Reality.

Brophy (1987) summarized one of the realities of teaching as follows:

The total instructional program will be a compromise constructed in the belief that it will allow the teacher to meet more of the needs of more of the students than any of the feasible alternatives–it will not be an ideal program that continually meets each individual student's needs. The need to accept compromises by trading off classroom management benefits against costs in instructional quality and efficiency increases in relationship to the size and heterogeneity of the class [p. IV-123].

Lightfoot (1983), in her analysis of the characteristics of effective secondary schools, noted

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that a concern for the weakest members of the school community was a characteristic common to the effective schools she observed. It is important that safety nets and similar strategies be inte-grated and accepted instructional components as teachers confront the compromises and realities of teaching. Such demonstrated concern for the weaker members of the school community creates a beneficial affective and academic climate for all

http://iseesam.com/content/teachall/text/effective/research/functions.pdf

Uses of hardware and software

Technology in the classroom has come a long way, not only for the students, but for their teachers, as well. A vast array of products can now be found to aid a teacher in their struggle to keep students interested. Teachers are opting for more control in their classrooms by embracing these new advances and are seeing a difference in their students' ability to retain information, resulting in a higher level of success in the classroom. Teachers will no longer feel as though their classrooms are being controlled by the technologies meant to be helping their students; they, themselves, now have many options to choose from in the fight for their students' attention and success.

Software is a general term used to describe a collection of computer programs, procedures, and documentation that perform some task on a computer system. Practical computer systems divide software systems into three major classes: system software, programming software, and application software, although the distinction is arbitrary and often blurred. Software is an ordered sequence of instructions for changing the state of the computer hardware in a particular sequence. Software is typically programmed with a user-friendly interface that allows humans to interact more more efficiently with a computer system.

Hardware is best described as a device, such as a hard drive, that is physically connected to the computer or something that can be physically touched. A CD-ROM, computer display monitor, printer, and video card are all examples of computer hardware. Without any hardware, a computer would not function, and software would have nothing to run on. Hardware and software interact with one another: software tells hardware which tasks it needs to perform.

There are several differences between computer hardware and software.

	Hardware	Software
Definition	**Hardware** Devices that are required to store and execute (or run) the software.	**Software** Collection of instructions that enables a user to interact with the computer. Software is a program that enables a computer to perform a specific task, as opposed to the physical components of the system (hardware).
Types	Input,storage,processing,control, and output devices.	System software, Programming software, and Application software.
Examples	CD-ROM, monitor, printer, video card, scanners , label makers, routers , and modems.	Quickbooks, Adobe Acrobat, Winoms-Cs, Internet Explorer , Microsoft Word , Microsoft Excel
Function	Hardware serve as the delivery system for software solutions. The hardware of a computer is infrequently changed, in comparison with software and data, which are "soft" in the sense that they are readily created, modified, or erased on the comput	To perform the specific task you need to complete. Software is generally not needed to for the hardware to perform its basic level tasks such as turning on and reponding to input.
Inter dependency	Hardware starts functioning once software is loaded.	To deliver its set of instructions, Software is installed on hardware.
Failure	Hardware failure is random. Hardware does have increasing failure at the last stage.	Software failure is systematic. Software does not have an increasing failure rate.
Durability	Hardware wears out over time.	Software does not wear out over time. However, bugs are discovered in software as time passes.

Nature	Hardware is physical in nature.	Software is logical in nature.

Hardware and Accessories for the classroom teacher Apple laptop computer with built-in camera and wireless connectivity (portability); SuperDrive (CD/DVD playing and recording); digital camera (publishing); thumb drive (quick storage and information transfer); printer (hard copies); projector (presentation).

☐ **Flat Screen monitor** -- it doesn't have to be huge!

☐ Good quality **printer** -- preferably a laser black and color photo. HP is my brand all the way. ☐ **CD/DVD RW drive(s)**

☐ Plenty of **USB ports** -- about 10!!

☐ **Scanner**

☐ **Digital camera** of good quality --

☐ **External storage** -- an external hard drive to back up data (essential with all we are saving digitally these days). That has saved me several times from loosing valuable and irreplaceable stuff.

☐ **Portable storage** -- USB flash drive, 2 GB minimum.

☐ Palm or other **handheld device** to keep schedules, dates, reminders, and store pictures and music. I went the "low end" price route and use a Tungsten Palm from work. I would purchase my own if I didn't have that one.

☐ **Smart board** or **Smart Airliner**, with projection unit for classroom use. In our school, we connect them to our TV system and a VCR and have everything through one computer.

☐ **CPS** (classroom performance system) also for classroom use. If I were in the classroom full time I would use it daily to monitor understanding and progress on goals I was responsible for achieving that day/week. - See more at: http://www.educationworld.com/a_tech/tech/tech239.shtml#sthash.ffezwiDS.dpuf

Hardware

- digital camera with video capabilities
- iPod with a recorder
- lcd projector(s)
- a decent screen to project on

\-   See   more   at:
http://www.educationworld.com/a_tech/tech/tech239.shtml#sthash.ffezwiDS.dpuf

Types software

Courseware

Courseware is a term that combines the words 'course' with 'software'. Its meaning originally was used to describe additional educational material intended as kits for teachers or trainers or as tutorials for students, usually packaged for use with a computer. The term's meaning and usage has expanded and can refer to the entire course and any additional material when used in reference an online or 'computer formatted' classroom. Many companies are using the term to describe the entire "package" consisting of one 'class' or 'course' bundled together with the various lessons, tests, and other material needed. The courseware itself can be in different formats, some are only available online such as html pages, while others can be downloaded in pdf files or other types of document files. Many forms of educational technology are now being blended with the term courseware. Most leading educational companies solicit or include courseware with their training packages.

Classroom aids

See also: Interactive whiteboard

Some educational software is designed for use in school classrooms. Typically such software may be projected onto a large whiteboard at the front of the class and/or run simultaneously on a network of desktop computers in a classroom. This type of software is often called classroom management software. While teachers often choose to use educational software from other categories in their IT suites (e.g. reference works, children's software), a whole category of educational software has grown up specifically intended to assist classroom teaching. Branding has been less strong in this category than in those oriented towards home

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users. Software titles are often very specialized and produced by various manufacturers, including many established educational book publishers.

Assessment software

With the impact of environmental damage and the need for institutions to become "paperless",[3] more educational institutions are seeking alternative ways of assessment and testing, which has always traditionally been known to use up vasts amount of paper. *Assessment software* refers to software with a primary purpose of assessing and testing students in a virtual environment. Assessment software allows students to complete tests and examinations using a computer, usually networked. The software then scores each test transcript and outputs results for each student. Assessment software is available in various delivery methods, the most popular being self-hosted software, online software and hand-held voting systems. Proprietary software and open-source software systems are available. While technically falling into the *Courseware* category (see above), Skill evaluation lab is an example for Computer-based assessment software with PPA-2 (Plan, Prove, Assess) methodology to create and conduct computer based online examination. Moodle is an example of open-source software with an assessment component that is gaining popularity. Other popular international assessment systems include QuestionMark, EvaluNet *XT* and QuestBase.

Reference software
Main article: Reference software

Many publishers of print dictionaries and encyclopedias have been involved in the production of educational reference software since the mid-1990s. They were joined in the reference software market by both startup companies and established software publishers, most notably Microsoft.

The first commercial reference software products were reformulations of existing content into CD-ROM editions, often supplemented with new multimedia content, including compressed video and sound. More recent products made use of internet technologies, to supplement CD-ROM products, then, more recently, to replace them entirely.

Wikipedia and its offspins (such as Wiktionary) marked a new departure in educational reference software. Previously, encyclopedias and dictionaries had compiled their contents on the basis of invited and closed teams of specialists. The Wiki concept has allowed for the development of collaborative reference works through open cooperation incorporating experts and non-experts.

Custom platforms

Some manufacturers regarded normal personal computers as an inappropriate platform for learning software for younger children and produced custom child-friendly pieces of hardware instead. The hardware and software is generally combined into a single product, such as a child laptop-lookalike. The laptop keyboard for younger children follows an alphabetic order and the qwerty order for the older ones. The most well-known example are Leapfrog products. These include imaginatively designed hand-held consoles with a variety of pluggable educational game cartridges and book-like electronic devices into which a variety of electronic books can be loaded. These products are more portable than general laptop computers, but have a much more limited range of purposes, concentrating on literacy.

Corporate training and tertiary education

Earlier educational software for the important corporate and tertiary education markets was designed to run on a single desktop computer (or an equivalent user device). In the years immediately following 2000, planners decided to switch to server-based applications with a high degree of standardization. This means that educational software runs primarily on servers which may be hundreds or thousands of miles from the actual user. The user only receives tiny pieces of a learning module or test, fed over the internet one by one. The server software decides on what learning material to distribute, collects results and displays progress to teaching staff. Another way of expressing this change is to say that educational software morphed into an online educational service. US Governmental endorsements and approval systems ensured the rapid switch to the new way of managing and distributing learning material.

See also:

- SCORM

- Virtual learning environment, LMS (learning management system)
- Web-based training

Specific educational purposes

Educational software for learning Standard Chinese using Pinyin.

There are highly specific niche markets for educational software, including:

- teacher tools and classroom management software

(remote control and monitoring software, filetransfer software, document camera and presenter, free tools,...)

- Driving test software
- Interactive geometry software
- Language learning software
- Mind Mapping Software which provides a focal point for discussion, helps make classes more interactive, and assists students with studying, essays and projects.
- Notetaking (Comparison of notetaking software)
- Software for enabling simulated dissection of human and animal bodies (used in medical and veterinary college courses)[4]
- Spelling tutor software
- Typing tutors
- Medical and healthcare educational software

Some operating systems and mobile phones have videogames to teach users how to use the system. A notable example is Microsoft Solitaire, which was developed to familiarize users with the use of graphical user interfaces, especially the mouse and the drag-and-drop technique.

Operating systems

While mainstream operating systems are designed for general usages, and are more or less customized for education only by the application sets added to them, a variety of software

manufacturers, especially Linux distributions, have sought to provide integrated platforms for specifically education.

Essential or Invaluable Software

Apples pre-installed software package provides the essentials for any classroom teacher (iLife and iWork). Beyond that I would add a grading program and mind mapping software (Inspiration)." - See more at: http://www.educationworld.com/a_tech/tech/tech239.shtml#sthash.ffezwiDS.dpuf

☐ **Office Professional** -- Yes I use Access a lot and I need the full features of other programs. I prefer XP.

☐ **Good photo software** -- Ive been using Microsoft Digital Photo Suite, but I understand theyre no longer making it.

☐ **"Photostory 2** -- comes with service pack 2.

☐ **Inspiration**

☐ **Smart Notebook**

☐ **a United Streaming** subscription -- BIG with educators now. - See more at: http://www.educationworld.com/a_tech/tech/tech239.shtml#sthash.ffezwiDS.dpuf

Software

- **Kidspiration, Inspiration:** We use those all the time. Theyre great brainstorming tools as well as nice ways to organize facts, present knowledge. Theyre very popular with the kids because the applications are so versatile.
- **Kid Pix, Tux Paint:** I love Kid Pix. We create, record voices, make slideshows. Tux Paint is a nice free application that the kids can download at home and it's a change from Kid Pix here at school as it has different features.
- **Open Office or Microsoft Office:** Word for word processing, Excel for spreadsheets, PowerPoint for certificates, slideshows, outlines.We learn formatting, how to get toolbars, how to "dress up" a paper or a presentation.

- **Type to Learn:** For 3rd grade, I teach keyboarding the first three weeks of school, every day for 45 minutes. Then, every week, the kids review for 15 minutes before our regular lesson. By the end of third grade, they are touch-typing with keyboard covers (no peeking!) quite well.

- **Google Earth, along with ePals**, allow our students to experience their world, learn about different cultures, and see for themselves the vast differences and similarities we have with people everywhere.

- **Google Sketchup:** My kids love that free application. It has great tutorials and is easy enough for even young kids to feel successful.

- **Scratch** is popular because it has easy to follow tutorials, is free, and is FUN! Great early programming app.

- **Stationery Studio:** I use it for students to write letters. We sometimes send get-well letters to absent classmates or staff members. It allows the kids to choose which template they want, so it can be customized easily. I also use it to print sheets for students who need to remember how to log on to the computer, as it can be used to practice handwriting and letters.

- **Image Blender** is nice because it allows students to edit and have fun with digital photos. They can put a cool frame around their photos, or curl the edges, or draw on it. It's a great application to resize photos. It also comes with a nice instruction booklet with good ideas to get the kids started.

- See more at: http://www.educationworld.com/a_tech/tech/tech239.shtml#sthash.ffezwiDS.dpuf

Specific Software and Hardware for Teaching

- Macromedia Captivate: It quickly creates interactivesimulation and softwaredemonstration

- Creative zen micro 8 GB: For use in classes, to record lectures, meetings or any other else and then post it for use in website (pod casting)

- Kurzwell 3000 read only:This a programme to convert text material into e text.

- DRAGON naturally speaking preferred:It is a voice recognition software that works in allwindow based application including internet explorer. It allows the users to speak oute mail, word documents and manipulate the computer.

- Inspiration: It is a toolthat the teacher /students utilize to plan, research and complete projects successfully.With integrated diagrammes and outline view sthey can create graphic organizersand expand topics into writings.
- Zoomtext :It is a screen enlarger. It enlarges everything on screen.

Most essential hardware and softwares for Teachers

- **Interactive whiteboard.** These devices use eBeam or SMART Board technology that gives teachers a digital platform to write notes and project them onto a whiteboard for lectures that can be saved and downloaded later for students.
- **Document camera scanner.** Among the most popular is the Elmo series, which integrates with an interactive whiteboard to display scanned media, class notes and presentations.
- **Tablet charging stations.** With more schools buying iPads, Kindles and other tablets for student use, it's important that classrooms be equipped with charging stations that allow several tablets to be plugged in at a time. Cost is $80 and up at electronic stores and online retailers.
- **Attendance tracker.** One of the most versatile programs is PowerSchool, which lets teachers track student attendance, assignments, grades and more. The results can be posted for parents to view at home. Fee-based with free apps for parents and students.

Moderately priced: you might be able to afford these out of your own pocket

- **Digital camera.** A plethora of simple low-priced cameras are available at many retailers. Teachers can use them to quickly capture and digitize written content or create photo projects with students. Cost is $10 and up.
- **Portable flash drive.** These devices are widely available and are great for storing and moving digital data including documents, photos, music, videos and even PowerPoint presentations between devices. Cost is about $8 for smaller-capacity drives (up to 4 gigabytes) and $25 and up for higher-capacity drives (32 GB or more).
- **Universal remote.** These are very handy to control a variety of classroom gadgets including televisions, DVD players, cameras and even some whiteboard projectors. Cost is $15 or less.

Free: These have no fees but will require taking time to learn

- **Video lessons.** This software allows teachers to create lessons on video using interactive whiteboard technology. An example is Edureations, which works with an iPad or the through the company website. Free.

- **Video streaming/Web conferencing.** Among the best streaming content services for classroom use is SchoolTube, which focuses on educational content without commercials. Skype is one of the easiest-to-use Web conference programs and allows multiple users. Free.

- **Private group texting.** A great way to send students, and their parents, reminders about assignments coming due or upcoming tests is to use Remind101. This Web-based program allows registered users to receive texts, but not reply to them. Free, but registration is required.

Technology in the classroom takes many forms from simple to complex. But in the end, it's how teachers use that technology to engage students in the learning process that's most important.

Educational Softwares

- **Math** --Practice programs for basic numeracy and literacy skills, Algebra, geometry and trigonometric software, freeware logic puzzle, software companies that produces educational products.

- **Science** Software for use as a teaching tool on the Internet, science animations to download, interactive multimedia courses.

- **Education Management and Administration** -- Databases and record keeping software, software for gradebooks and scheduling, server-end software with web-based client for administration at the school district level.

- **Special Education** -- Software for adults or children with language, cognitive or developmental disability, autism and other special needs, peech and language therapy software

- **Pre-school software** early-learning software that teaches and entertains, Software for early literacy skills which promotes open-ended activities.

- **Teachers Help** Software for gradebooks, lesson planners, test authoring tools, worksheet and puzzle software.

- **Languages** Foreign language training software.

- **Typing** Touch-typing tutors (shareware, freeware), typing tutor with games, reviews of freeware and shareware touch-typing tutor

Computers for Kids and Teens

- **Computers K-12** Internet research tools, a computer dictionary, tutorials for new users, young adult networks.

- **Computer Games (K-12)** History of video games, review of computer games, list of links for computer games.

- **Graphics** Graphics for web pages including headings, buttons, arrows, and other page

elements, clipart, backgrounds for use as monitor backgrounds.

- **Summer Camps** day camps and sleep over camps for computer programming, computer graphics, video game design.

- **Internet** Guides to get started on the internet,

- **Web Page Design** Provides resources for teen web developers, including tutorials in HTML, JavaScript and C++.

Computers as Tutors

W3 Schools -- At W3Schools you will find all the Web-building tutorials you need, from basic HTML and XHTML to advanced XML, Multimedia and WAP.

MIT's OpenCourseWare -- a free and open educational resource for faculty, students, and self-learners around the world.

Go Math -- Interactive online tutorials -- Algebra, Geometry, SAT Prep.

Math Resources - Tutorials, Formulas, Directories -- Contains a large number of online math tutorials.

Scientific Notation Tutorials -- Learn the basic principles of scientific notation. Convert standard numbers to scientific notation.

Mass Volume, Density Tutorials -- Learn to use a triple-beam-balance and calculate the density of solids and liquids.

Englishpage.com - Free online English lessons & ESL / EFL resources

Human Anatomy Online -- Good content but has a lot of ads.

Online Spanish Teacher--Thanks to this revolutionary advance in education you can now learn Spanish one-to-one from anywhere in the world that has access to a broadband Internet connection.

Spanish Practice-- Practice Spanish Online is an informed, thorough and up-to-date review of the main online Spanish learning resources available.

teaching strategies, teacher-indirectness and classroom performance,

Teachers' Attitude towards profession, self and others

Teaching being a dynamic activity requires a favourable attitude and certain specific competencies from its practitioners. Teachers' proficiency depends on the attitude she possesses for the profession. The positive attitude helps teacher to develop a conductive learner friendly environment in the classroom. This also casts a fruitful effect on learning of the students.The teacher's roles and responsibilities have found extension outside the classroom. The implementation of educational policies, transaction of curricula and spreading awareness are the main areas which keepteacher in the forefront. Changing times have added new dimension to this profession, which requires specified competencies and right attitude. Behaviour, attitude and interest of teacher help in shaping the personality of the student.

What is Attitude?

Attitude is a tendency to react in a particular manner towards the stimuli (Anastasi,1957).It is a dynamic entity which is subject to change. It is a deciding factor of the teacher's performance. Attitude is defined as a state of readiness shaped through the experience and influences the response of individual towards the stimuli. It is precursor of the behaviour and varies from favourable to unfavourable through neutral. Attitude is made up of three components affective, behavioural and cognitive hence acts as a yardstick of the individual behaviour (Feldman, 1985).Factors which bear influence on the attitude of the teacher are the domestic environment, family background, socioeconomic background, beliefs and educational institutes etc.

Teachers' attitude towards Profession

Development of positive attitude towards profession helps in developing creative thinking and motivating eacheras someone who causes learning to take place; someone who imparts knowledge, skills, attitudes and values to a group of learners. A teacher can be viewed as the professionally trained person, who imparts the necessary skills, guide, and facilitate learning hence learning cannot take place without a train professional that is the teacher. Teaching is the profession which comprises activities towards starting, directing, facilitating, and realising the learning process in individuals in line with a certain o

bjective.The person executing these activities is the teacher . The teacher is the indispensable component of the education system. No matter how well educational or instructional objectives are established, no matter how functional the content of the subject is selected and organized, it is impossible to achieve the desired results from education unless they are performed by teachers with those objectives and insights .Professionalisation in any field of human endeavour has a well-defined processesand procedures or requirements such as sound training and of course licensed, before one becomes eligible to practice and professionalism remained a very fundamental to the quality of service offered by the field in its contribution to societal development.The term profession is described as a set of activities which are performed to produce goods or services for the public interest and to earn money in turn, based on some systematic knowledge and skills acquired through some certain training, and whose rules are established by the society . In this sense, when regarded as a social institution and a system, education has some major components including students, teachers, curriculum, administrators, educational experts, educational technology, and both physical and financial sources. Among them the teacher is the most critical component

Furtherexplain that, the profession of teaching is dealt with and defined from different aspects (i.e. teachers' role expectations, where and how they should be trained, qualifications they should have, the characteristics of a good teacher etc.). ttitude towards teaching profession

Attitude plays an important role in determining people reactions to particular situations. Attitude is a predisposition to respond favourably or unfavourably to an object, person, or event .

It is Defined as "a mental and neural state of readiness, organized through experience, exerting a directive or dynamic influence upon the individual's response to all objects and situations with which it is related Other researchers

define attitude as a positive or negative emotional reaction toward a specific situation. Assert that Attitudes are evaluation; positive or negative statement about objects, people or events.

Thus the successful attainment of the teacher training goal of providing season professionals to cater for the manpower need of the education system depends strongly on the students' attitudes towards the profession. It is believed that if students' perception towards the profession is negative, it is likely that, the teacher training goal of providing season professionals will not be realised. Maintained

that, the teacher's attitude is an important variable in classroom application of new ideas and novel approaches to instruction. Therefore attitude is one of the main factors that determine the success of any programme

When weasksomeone about her/his attitude towards something, say her/his job, we are primarily interested in finding out how s/he feels about her/his job and, in particular, whether s/he likes or dislikes her/his job. Attitudes have been defined in a number of ways. The simplest definition is that, it is a feeling for or against something (Remmers, Gage & Rumme l 1960, p. 67). According to Britt (1958, p. 52),it is a mental set of response. Fishbein (1967, p.12) defines it as a mental disposition of the human individual to act for or against a definite object. Allport (1935, p.34) defines it as a mental and neural state of readiness, organised through experience, exerting a directive or dynamic influence upon the individual's response to all objects and situations with which it is related. Thurstone (1946, p. 39) has defined attitude as the degree of positive ornegative affect associated with some psychological object. By a psychological object, he means any symbol, phrase, slogan, person, institution, ideal or idea towards which people can differ with respect to positive or negative affect. A particular job, for example, may be a psychological object.

In the literature of psychology, the terms 'affect' and 'feeling' are used interchangeably. An individual who has associated positive affect or feeling with some psychological object is said to like that object or to have a favourable attitude towards the object. An individual who has associated negative affect with the same psychological object would be said to dislike that object or to have an unfavourable attitude towards the object. The above definitions show that an attitude is a preparation or readiness for response. It is incipient rather than overt and consummatory. It is not behaviour, but the pre-condition of behaviour.

Characteristics of Attitudes

Favourableness

Favourableness is the degree to which a person is for or against a psychological object. This dimension determines the direction of attitude. A person may have positive or negative attitude. S/he may like or dislike an object. S/he may approve or disapprove certain practices. When people say that family planning is a must,it indicates their favourable attitude.

Intensity

Intensity refers to the strength of the feeling. How strongly a person feels about something, reveals the strength of her/ his feeling. For example, Reeta disagrees with co-
education system, while Sita strongly disagrees with it. It can be inferred that Sita's feelings are stronger against co-education system. Moreover, two people may have attitudes of equal intensity, but their direction may differ. Mohan strongly approves reservation policy, while Rohan strongly disapproves it. Intensity is equal but in opposite direction. The more favourable or unfavourable an attitude, the more intense it is. However, people who are neutral in their feelings have the least intense attitudes.

Salience

Salience means how freely or spontaneously an individual expresses his attitude. It is the readiness or promptness with which the individual gives vent to her/his feelings. A person may express her/his attitude freely towards caste system or rising prices, but may not express her/his attitude about sex. Salience is affected by cultural permissiveness.

Attitudes are acquired

Attitudes are not inborn or innate. They are not inherited by the individual but are acquired by her/him during the growth process. At the time of birth, the child does not inherit any preference for food, but as s/he grows s/he develops positive and negative attitudes towards certain types of foods.

Attitudes are more or less permanent

Attitudes, once acquired, become permanent. They are lasting and enduring. They become stable over a period of time. Since they are more or less permanent, an individual's future behaviour can be predicted on the basis of her/his attitudes.

Attitudes involve subject object relationship

Attitudes are not formed in vacuum. They are always formed in relation to some person, object or situation. Attitudes involve affective, cognitive and action componentsAffective refers to feelings, cognitive to knowledge and action to predisposition. A person will have some idea or knowledge about psychological object; will also have feelings towards it and predisposition to act positively or negatively.

Attitudes are inferred

Attitudes of a person cannot be known directly because s/he will not expressthem frankly. Attitudes therefore, can be inferred from individual's actions, behaviour or words. 'Teaching is a profession' is not as important an issue as important is this that 'Teachers are professionals'. Maximum problems related to teaching-learning can be handled safely without giving too much financial inputs, if teachers possess healthy professional attitude. In India, teaching is the third largest workforce; thus a large number of people enter in this profession. Lack of professional attitude among this group has made it difficult to ensure uniform standards. The increasing demand for professional service with quality has put the onus on the teaching profession to be responsible and more accountable to the needs and conditions of service. Due tolack of professional attitude among teachers, continuous and adequate efforts are not made to recognise the best ideas in time, practice and role in action for self renewal and sustenance.Teachers have to carefully understand the new prominent characteristics of professional modern age viz. scientific temper, objectivity, achievement motivation, merit excellence and faith in change. The teacher who will have a healthy professional attitude will not act in a manner that will bring bad name to herself/hims

elf or her/his profession. S/he is proud of the fact that s/he belongs to this profession. S/he will always conduct herself/himself in a dignified manner. The professionals will not wait for or allow regulation of their professional work by others. They will regulate their conduct themselves. Remuneration is not considered as important as to overshadow the sense of satisfaction which a good professional gets when s/he has done the work as it ought to have been done.

Merriam-Webster's defines professionalism as a "set of

attitudes and behaviors believed to be appropriate to a particular

occupation"(6). A recent white paper on professionalismdefined it as "the active demonstration of the traits of a professional"Structural attributesof professions and professionals include:

• specialized body of knowledge and skills

• unique socialization of student members

• licensure/certification

• professional associations

• governance by peers

• social prestige

• vital service to society

• code of ethics

• autonomy

• equivalence of members, and

• special relationship with clients.Attitudinal attributes of professionals were described as:

• use of the professional organization as a major reference,*i.e.*, using professional colleagues as the major source ofprofessional ideas and judgments in practice

• belief in service to the public, *i.e.*, one's professional practice is indispensable to society and benefits the public

• belief in self-regulation, *i.e.*, one's peers are the best qualified to judge one's work

• sense of calling to the field, *i.e.*, dedication to the profession regardless of extrinsic rewards

• autonomy, *i.e.*, one can make professional decisions without external pressures from clients, non-professionals, andemployers.

As stated in several of the definitions above, professionalismis comprised of attitudes and behaviors. Attitudes are often described and measured because of their relationship to behaviors. Psychological literature of the 1970's purported a "theoryof reasoned action" which, in simplified terms, states that one'sbeliefs shape one's attitudes which in turn can predict one'sbehavior toward which the belief and attitude are directed(21).Fishbein defined beliefs as "hypotheses concerning the nature ofan object or class," attitudes as "learned predispositions torespond to an object or class of objects," and behaviors as"actions in response to an object or class of objects"(22). Tocontrast these definitions to those from a non-psychologicalreference, a belief is defined as "a state of mind or habit inwhich trust or confidence is placed in some person or thing,"an attitude is defined as "a mental position, feeling or emotionwith regard to a fact or state," and behavior is defined as "themanner of

conducting oneself" (6).To extrapolate these definitions to those of professionalattitudes and behaviors, a professional attitude could bedefined as a predisposition, feeling, emotion, or thought thatupholds the ideals of a profession and serves as the basis forprofessional behavior. Professional behavior can also bedescribed as "behavioral professionalism" — behaving in amanner to achieve optimal outcomes in professional tasks andinteractions(23). Specific attributes of behavioral professionalismhave been described and will be discussed furtherbelow(24). These definitions of professional attitudes andbehaviors can serve as the basis for helping us to determine thecomponents of these concepts.

These are some of the dimensions which reflect professional attitude in teaching.

Attitude	Behavior
Accountability	Takes responsibility for actions
Caring	Volunteering Acts of service
Desire for self-improvement	Continued learning ,Self-instruction
Diversity characteristics	Fair treatment of all people regardless of demographic
Honesty	Behaviors that demonstrate honesty and trustworthiness
Open-minded	Increased receptiveness to new ideas
Respect	Dresses appropriately ,Punctual ,Maintains confidentiality
Responsibility to learn	Comes to class prepared Actively participates in class activities, such as engages in discussion
Team player	Engages in constructive peer assessment , Accepts and appliesconstructive critique

Values new experiences   Desire to seek out and take on new challenges

aSubmitted by participants in the 2000 AACP Teachers' Seminar on Developing ProfessionalAttitudes and Behaviors Some of the best attitude for teaching profession are:altruism - putting patients' best interests first

•accountability - to patients, to society, and to their profes-sion •excellence - exceeding expectations and commitment to lifelong learning

•duty - commitment to service in the community and pro-fessional organizations

•honor and integrity - adhering to personal and profession-al codes, being fair, truthful, straightforward, and meeting commitments

•respect for others - all patients and their families, all col-leagues and other health professionals

Teacher'd attitude towards self and Others

A positive attitude causes a chain reaction of positive thoughts, events and outcomes. It is a catalyst and it sparks extraordinary results. Teachers attitude must be positive towards self. It may include following component

- Identifying self and purpose of life
- Accepting self (both strength and weakness)
- Active reflection on own activities
- Engagement in Creative vision
- Introspection for self
- Understand the value in your own actions
- . Create opportunities for self
- Feeling inner peace and happiness

- See more at: http://www.teachersatrisk.com/2008/08/06/a-positive-attittude-is-key-to-maintaining-a-positive-classroom-climate/#sthash.SH3ksvRL.dpuf

- **Attitude towards Students:**

First Attitude: Demonstrating Caring and Kindness
This attitude is regarding the personality of the teachers. Effective teachers willingly share emotions and feelings (i.e., enthusiasm, affection, patience, sadness, disapproval) as well as a sincere interest and care about their students. Communication is also valued in classrooms and feelings are openly expressed by both the children and teachers.

Second Attitude: Sharing Responsibility
This attitude focuses on the ability of the teacher to establish a shared environment. An effective teacher must not be overly possessive or need complete control of the children and environment. It is important to allow students both responsibility and freedom within the classroom community. Both the teachers and students need to contribute to the learning environment for a relationship of closeness and acceptance to develop.

Third Attitude: Sensitively Accepting Diversity
This attitude deals with empathy and the importance of understanding your students.

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Sensitivity, acceptance, and encouragement are critical when approaching the issues associated with the diversity of the children. Effective teachers understood their students without analyzing or judging. They have the ability to make each child feel special by verbally sharing individual compliments in front of the class.

Fourth Attitude: Fostering Individualized Instruction
This attitude discusses the ability to provide meaningful learning opportunities for all students. Teachers who use intimidation in front of the class cause a reluctance to volunteer. I strongly feel effective teachers believe every child can and will learn. They do not point out weakness; instead they stress individual strengths and talents. I credit some of my teachers for encouraging positive self-confidence and self- esteem in me.

Fifth Attitude: Encouraging Creativity
This attitude stresses the importance of stimulating the students' creativity. Effective teachers are open to students' ways of being imaginative and also utilize many approaches to learning. Students appreciate and are personally motivated when teachers design lessons that consider their interests, skills, and needs.

Attitude of Teacher for others (collegues, principal, parents, staffs)

•Willing to be a role model for other teachers
•Exhibits strong commitment to the teaching profession
•Believes mentoring improves instructional practice
•Willing to advocate on behalf of colleagues
•Willing to receive training to improve mentoring skills
•Demonstrates a commitment to lifelong learning
•Is reflective and able to learn from mistakes
•Is eager to share information and ideas with colleagues
•Is resilient, flexible, persistent, and open-minded
•Exhibits good humor and resourcefulness
•Enjoys new challenges and solving problems

While there is no quick answer to maintaining a positive attitude, we can certainly integrate the following action-plan to bolster our own approach to our teaching agenda.

* Develop a pro-active response by embracing the notion of change.

It is human nature to be skeptical (even cynical) about anything requiring a shift in habits. Avoid the pattern of instant reaction (often negative) by substituting a perspective of pro-action. Ask yourself, "What benefits can we garner by embracing the suggested changes." The exercise of re-focusing your mind on the positive possibilities will avoid the defensive reaction associated with any kind of change.

* Avoid conversations/environments dwelling on the problems and shortcomings of the school environment.

This is not to suggest we ignore some of the unpleasantries of the profession, however we can sidestep the conversations where the focal point is a negative commentary. Become solution-oriented rather than problem-oriented. Use problems as an opportunity to generate a creative solution. Choose to affiliate with the colleagues who are excited and passionate about their life's mission.

* Acknowledge those who are contributing in a positive, productive fashion.

It is easy to become consumed with identifying what is wrong; if we do not balance this practice by equally addressing what is right, our entire day can be spent surrounded by wrong. Unfortunately, we often let one or two personal rejections override a host of several positive experiences. Maintain a healthy perspective by balancing the value of a positive occurrences in relation to a less-than-positive experiences. Many students, fellow teachers, parents, etc., are eager to express their enthusiasm and gratitude; be willing to graciously accept their gift-of-thanks and savor the moment; put these appreciative folks at the center of your mental spotlight

The key to developing a positive teacher attitude is not an easy task, for it requires a high level of personal discipline. It is far easier to simply point the finger-of-blame and conclude nothing can be done. However, such logic will be an idle servant for the teacher who truly cares for the welfare of his/her students.

Finally it can be said that *It changes how you interact with people, and that in itself is huge. If people perceive you as a negative person, they tend to get tired of dealing with you after awhile. But if you're a positive person, you come off in a more positive light, and you're a joy to talk to and work with and be with."*

He also gives these suggestions for changing the way you think and I thought about how teachers could change the way they think in order to be happier and not get burned out. Too many times I have seen new teachers give up because of negative thinking. Here are Leo's suggestions with my spin on each suggestion.

1. *"Squash negative thoughts."* Too many times I have heard teachers say on Sunday night that they hate the thought of Monday arriving or groan when Monday arrived. I have always tried to see Mondays as looking forward to seeing my students and hear how their weekend went. I also tried to see the new week as a way to make a fresh start and be a better teacher this week then I was last week by learning from my mistakes or trying new techniques.

2. *"Mantras."* My husband is my true hero in all of this. For the past 30 years, he would wake up and say "I feel great! It is so great to be alive!" You would never know that he was not feeling well or grumpy. He felt that by saying that, he even felt better and it changed the way he saw the day. As a teacher, as soon as I arrived in my classroom, I would say, "I'm so glad to be here and I'm going to make a difference today!"

3. *"See the good in any situation."* Remember that old saying, "when you are given lemons, make lemonade?" Try to find something good when things get rough in your classroom. If there is a student who misbehaves, think of it as an opportunity to try a new behavior modification technique or think of a way to redirect the behavior.

4. *"Enjoy small pleasures."* Look for the little things that give you pleasure. I remember noticing that a student who normally doesn't do well on work, was trying harder today. Or maybe I had a few moments of free time and needed to just sit down and relax without feeling guilty about it.

5. *"See the good in yourself."* Sometimes I would think I was not a good enough teacher or not effective. That was the time I tried to focus on what I was good at doing and how it

affected my students. This helped me see my weaknesses in a better light so they were manageable instead of overwhelming.

6. **"See the good in others."** I heard or read somewhere that there was something good about every person. We all know that there is that one student that you just can't stand to teach. I would try to find something I liked about that student and when I did that, it changed the way I interacted with that student. I'm not saying we had a mutual like for each other, but we were able to get along better so that I could be effective in teaching this student.

7. ***"Positive imaging."*** I hate to be observed and evaluated! I don't care how much experience or how good I was, I just felt scared to death. One way I got through this was to picture a positive image of myself teaching. I would be teaching with confidence, and know my material. When I would hold that image in my mind, it made it much easier when I was observed and evaluated.

8. ***"Anticipate fun."*** Have fun teaching! If you enjoy your job, you will do much better. I loved teaching and all the unexpected things that will happen comes with it. Every day was different and was never boring. If I was having fun, I know the students were usually enjoying the lesson too. I tried to teach as if I was the student so if I was bored with the lesson, so were the students. I also tried to tell the students at the beginning, "This is going to be a fun lesson today!" That usually put them in a receptive frame of mind and the lesson went well.

I feel that having a positive attitude was important as a role model for students. Sometimes they are surrounded with people who do not have this kind of attitude so showing and teaching this can really make a difference in a student's life. With a positive attitude, success is sure to happen!

Teaching Strategies

There are a variety of teaching strategies that instructors can use to improve student learning. The links below will show you some ways to make your classes more engaging.

- **Active Learning** - Active Learning is anything that students do in a classroom other than merely passively listening to an instructor's lecture. Research shows that active

learning improves students' understanding and retention of information and can be very effective in developing higher order cognitive skills such as problem solving and critical thinking.

- **Clicker Use in Class** - Clickers enable instructors to rapidly collect and summarize student responses to multiple-choice questions they ask of students in class.

- **Collaborative/Cooperative Learning** - Cooperative and collaborative learning are instructional approaches in which students work together in small groups to accomplish a common learning goal.They need to be carefully planned and executed, but they don't require permanently formed groups.

- **Critical Thinking** - Critical thinking is a collection of mental activities that include the ability to intuit, clarify, reflect, connect, infer, and judge. It brings these activities together and enables the student to question what knowledge exists.

- **Discussion Strategies** - Engaging students in discussion deepens their learning and motivation by propelling them to develop their own views and hear their own voices. A good environment for interaction is the first step in encouraging students to talk.

- **Experiential Learning** - Experiential learning is an approach to education that focuses on "learning by doing," on the participant's subjective experience. The role of the educator is to design "direct experiences" that include preparatory and reflective exercises.

- **Games/Experiments/Simulations** - Games, experiments and simulations can be rich learning environments for students. Students today have grown up playing games and using interactive tools such as the Internet, phones, and other appliances. Games and simulations enable students to solve real-world problems in a safe environment and enjoy themselves while doing so.

- **Humor in the Classroom** - Using humor in the classroom can enhance student learning by improving understanding and retention.

- **Inquiry-Guided Learning** - With the inquiry method of instruction, students arrive at an understanding of concepts by themselves and the responsibility for learning rests with them. This method encourages students to build research skills that can be used throughout their educational experiences.

- **Interdisciplinary Teaching** - Interdisciplinary teaching involves combining two different topics into one class. Instructors who participate in interdisciplinary

teaching find that students approach the material differently, while faculty members also have a better appreciation of their own discipline content.

- **Learner-Centered Teaching** - Learner-Centered teaching means the student is at the center of learning. The student assumes the responsibility for learning while the instructor is responsible for facilitating the learning. Thus, the power in the classroom shifts to the student.

- **Learning Communities** - Communities bring people together for shared learning, discovery, and the generation of knowledge. Within a learning community, all participants take responsibility for achieving the learning goals. Most important, learning communities are the *process* by which individuals come together to achieve learning goals.

- **Lecture Strategies** - Lectures are the way most instructors today learned in classes. However, with today's students, lecturing does not hold their attention for very long, even though they are a means of conveying information to students.

- **Mobile Learning** - Mobile Learning is any type of learning that happens when the learner is not at a fixed location.

- **Online/Hybrid Courses** - Online and hybrid courses require careful planning and organization. However, once the course is implemented, there are important considerations that are different from traditional courses. Communication with students becomes extremely important.

- **Problem-Based Learning** - Problem-based Learning (PBL) is an instructional method that challenges students to "learn to learn," working in groups to seek solutions to real world problems. The process replicates the commonly used systemic approach to resolving problems or meeting challenges that are encountered in life, and will help prefer students for their careers.

- **Service Learning** - Service learning is a type of teaching that combines academic content with civic responsibility in some community project. The learning is structured and supervised and enables the student to reflect on what has taken place.

- **Social Networking Tools** - Social networking tools enable faculty to engage students in new and different means of communication.

- **Teaching Diverse Students** - Instructors today encounter a diverse population in their courses and many times need assistance in knowing how to deal with them.

- **Teaching with Cases** - Case studies present students with real-life problems and enable them to apply what they have learned in the classroom to real life situations. Cases also encourage students to develop logical problem solving skills and, if used in teams, group interaction skills. Students define problems, analyze possible alternative actions and provide solutions with a rationale for their choices.

- **Team-Based Learning** - Team-based learning (TBL) is a fairly new approach to teaching in which students rely on each other for their own learning and are held accountable for coming to class prepared. Research has found that students are more responsible and more engaged when team-based learning is implemented. The major difference in TBL and normal group activities is that the groups are permanent and most of the class time is devoted to the group meeting.

- **Team Teaching** - At its best, team teaching allows students and faculty to benefit from the healthy exchange of ideas in a setting defined by mutual respect and a shared interest in a topic. In most cases both faculty members are present during each class and can provide different styles of interaction as well as different viewpoints.

- **Writing Assignments** - Writing assignments for class can provide an opportunity for them to apply critical thinking skills as well as help them to learn course content.

- Some of the more prominent strategies are outlined below. For more information about the use of these and other pedagogical approaches, contact the Program in Support of Teaching and Learning.

- **Lecture.** For many years, the lecture method was the most widely used instructional strategy in college classrooms. Nearly 80% of all U.S. college classrooms in the late 1970s reported using some form of the lecture method to teach students (Cashin, 1990). Although the usefulness of other teaching strategies is being widely examined today, the lecture still remains an important way to communicate information.

- Used in conjunction with active learning teaching strategies, the traditional lecture can be an effective way to achieve instructional goals. The advantages of the lecture approach are that it provides a way to communicate a large amount of information to many listeners, maximizes instructor control and is non-threatening to students. The disadvantages are that lecturing minimizes feedback from students, assumes an unrealistic level of student understanding and comprehension, and often disengages students from the learning process causing information to be quickly forgotten.

- The following recommendations can help make the lecture approach more effective (Cashin, 1990):
- 1. Fit the lecture to the audience
- 2. Focus your topic - remember you cannot cover everything in one lecture
- 3. Prepare an outline that includes 5-9 major points you want to cover in one lecture
- 4. Organize your points for clarity
- 5. Select appropriate examples or illustrations
- 6. Present more than one side of an issue and be sensitive to other perspectives
- 7. Repeat points when necessary
- 8. Be aware of your audience - notice their feedback
- 9. Be enthusiastic - you don't have to be an entertainer but you should be excited by your topic.
  (from Cashin, 1990, pp. 60-61)
- **Case Method.** Providing an opportunity for students to apply what they learn in the classroom to real-life experiences has proven to be an effective way of both disseminating and integrating knowledge. The case method is an instructional strategy that engages students in active discussion about issues and problems inherent in practical application. It can highlight fundamental dilemmas or critical issues and provide a format for role playing ambiguous or controversial scenarios.
- Course content cases can come from a variety of sources. Many faculty have transformed current events or problems reported through print or broadcast media into critical learning experiences that illuminate the complexity of finding solutions to critical social problems. The case study approach works well in cooperative learning or role playing environments to stimulate critical thinking and awareness of multiple perspectives.
- **Discussion.** There are a variety of ways to stimulate discussion. For example, some faculty begin a lesson with a whole group discussion to refresh students' memories about the assigned reading(s). Other faculty find it helpful to have students list critical points or emerging issues, or generate a set of questions stemming from the assigned reading(s). These strategies can also be used to help focus large and small group discussions.
- Obviously, a successful class discussion involves planning on the part of the instructor and preparation on the part of the students. Instructors should communicate

this commitment to the students on the first day of class by clearly articulating course expectations. Just as the instructor carefully plans the learning experience, the students must comprehend the assigned reading and show up for class on time, ready to learn.

- **Active Learning.** Meyers and Jones (1993) define active learning as learning environments that allow "students to talk and listen, read, write, and reflect as they approach course content through problem-solving exercises, informal small groups, simulations, case studies, role playing, and other activities -- all of which require students to apply what they are learning" (p. xi). Many studies show that learning is enhanced when students become actively involved in the learning process. Instructional strategies that engage students in the learning process stimulate critical thinking and a greater awareness of other perspectives. Although there are times when lecturing is the most appropriate method for disseminating information, current thinking in college teaching and learning suggests that the use of a variety of instructional strategies can positively enhance student learning. Obviously, teaching strategies should be carefully matched to the teaching objectives of a particular lesson. For more information about teaching strategies, see the list of college teaching references in Appendix N.

- Assessing or grading students' contributions in active learning environments is somewhat problematic. It is extremely important that the course syllabus explicitly outlines the evaluation criteria for each assignment whether individual or group. Students need and want to know what is expected of them. For more information about grading, see the Evaluating Student Work section contained in this Guide.

- **Cooperative Learning.** Cooperative Learning is a systematic pedagogical strategy that encourages small groups of students to work together for the achievement of a common goal. The term 'Collaborative Learning' is often used as a synonym for cooperative learning when, in fact, it is a separate strategy that encompasses a broader range of group interactions such as developing learning communities, stimulating student/faculty discussions, and encouraging electronic exchanges (Bruffee, 1993). Both approaches stress the importance of faculty and student involvement in the learning process.

- When integrating cooperative or collaborative learning strategies into a course, careful planning and preparation are essential. Understanding how to form groups,

ensure positive interdependence, maintain individual accountability, resolve group conflict, develop appropriate assignments and grading criteria, and manage active learning environments are critical to the achievement of a successful cooperative learning experience. Before you begin, you may want to consult several helpful resources which are contained in Appendix N. In addition, the Program in Support of Teaching and Learning can provide faculty with supplementary information and helpful techniques for using cooperative learning or collaborative learning in college classrooms.

- **Integrating Technology.** Today, educators realize that computer literacy is an important part of a student's education. Integrating technology into a course curriculum when appropriate is proving to be valuable for enhancing and extending the learning experience for faculty and students. Many faculty have found electronic mail to be a useful way to promote student/student or faculty/student communication between class meetings. Others use listserves or on-line notes to extend topic discussions and explore critical issues with students and colleagues, or discipline-specific software to increase student understanding of difficult concepts.

- Currently, our students come to us with varying degrees of computer literacy. Faculty who use technology regularly often find it necessary to provide some basic skill level instruction during the first week of class. In the future, we expect that need to decline. For help in integrating technology into a course curriculum contact the Program in Support of Teaching and Learning or the Instructional Development Office (IDO) at 703-993-3141. In addition, watch for information throughout the year about workshops and faculty conversations on the integration of technology, teaching and learning.

- **Distance Learning.** Distance learning is not a new concept. We have all experienced learning outside of a structured classroom setting through television, correspondence courses, etc. Distance learning or distance education as a teaching pedagogy, however, is an important topic of discussion on college campuses today. Distance learning is defined as 'any form of teaching and learning in which the teacher and learner are not in the same place at the same time' (Gilbert, 1995).

- Obviously, information technology has broadened our concept of the learning environment. It has made it possible for learning experiences to be extended beyond the confines of the traditional classroom. Distance learning technologies take many

forms such as computer simulations, interactive collaboration/discussion, and the creation of virtual learning environments connecting regions or nations. Components of distance learning such as email, listserves, and interactive software have also been useful additions to the educational setting.

Teacher-indirectness and classroom performance:

In contrast to the direct instruction strategy, indirect instruction is mainly student-centered, although the two strategies can complement each other.

Indirect instruction seeks a high level of student involvement in observing, investigating, drawing inferences from data, or forming hypotheses. It takes advantage of students' interest and curiosity, often encouraging them to generate alternatives or solve problems.

In indirect instruction, the role of the teacher shifts from lecturer/director to that of facilitator, supporter, and resource person. The teacher arranges the learning environment, provides opportunity for student involvement, and, when appropriate, provides feedback to students while they conduct the inquiry.

Indirect instruction is used to teach constructed knowledge (concepts and functional relationships). It is an approach to teaching and learning in which the learning process is inquiry, the result is discovery, and the learning context is a problem. When learners are presented content, materials, objects, and events and asked to go beyond the information given to make conclusions and generations or to find a pattern of relationships, indirect instruction is being used. Indirect means that the learner acquires a behavior indirectly by transforming stimulus material into a response or behavior that differs from both the stimulus used to present the learning and any previous response given by the student. Because the learner can add to the instruction and rearrange it to be more meaningful, their responses can take many different forms. In contrast to direct instruction outcomes, there is rarely a single, "correct" answer when the indirect instruction model is used. Instead, the learner is guided to an answer that goes beyond the raw material, information, or problem which was presented in class.

Indirect instruction is inefficient for teaching many facts and standard procedures because the desired response is almost identical to the learning stimulus. For example, procedures for

solving partial differential equations are most efficiently taught by giving students the rules and practice applying them. The necessary knowledge acquisition and application are best taught with a direction instruction strategy because the stimulus material -- written rules and examples - already contain the correct answers in desired form. The purpose is to apply the rules, not to discover them or to invent new ones.

However, not all learning is limited to the lower levels of behavioral complexity. Real-world activities often involve analysis, synthesis, and decision-making. This complicates instruction because these behaviors are not learned in the same way as behaviors at lower levels of complexity. The teaching of higher-level behaviors requires a different set of instructional strategies.

Some examples of concepts and functional relationships which are best taught through indirect instruction strategies may clarify the nature of these outcomes. Examples of topics that require complex behavior to master include:

- Concept of a quadratic equation.
- Understanding of the law of conservation of energy.
- Demonstration of a designed experiment.
- Understanding of a cross-functional approach.
- Assessment of risk inherent in a development program.

Learning these topics requires not just the learning of facts and standard procedures, but much more: processes, meanings, and understandings. If students are taught just the facts and procedures about quadratic equations -- "Here is the definition... "; "Here are the rules for solving them... "; or "Follow this sequence of steps..." -- they may never learn the concept features that identify and characterize quadratic equations of different forms, or how to use these equations in a novel situation. To master the concept of a quadratic equation, students must learn to add to, rearrange, and elaborate upon the material they are presented in class. Ms requires the use of more-complex mental processes including generalization and discrimination. Generalization helps learners respond in a similar manner to stimuli that differ, thereby increasing the range of instances to which particular concepts and functional relationships apply. Discrimination selectively restricts this range by eliminating things that appear to match the students concept but differ from in some critical way. Generaliza-tion and discrimination help learners classify apparently different things and events into the same

category, based on critical attributes. Critical attributes act as magnets, drawing together all instances of the same type without requiring the learner to memorize (or even see) all possible instances.

The indirect instruction model uses instructional strategies that encourage the mental processes required to form concepts and to combine concepts into larger patterns and abstractions. Indirect instruction functions in the following way:

1. Provides a means of organizing content in advance. Provides advance organizers and conceptual frameworks, which serve as "pegs" on which to hang key points that guide and channel thinking to the most productive areas. Allows for concept expansion to higher levels of abstraction

2. Provides conceptual movement using inductive and deductive methods. Focuses generalization to higher levels of abstraction by inductive methods (selected events used to establish concepts or patterns) and by deductive methods (principles or generalizations applied to specific instances)

3. Uses examples and non-examples to define critical attributes and promote accurate generalizations, to gradually expand the set of examples to reflect the real world, to broaden concept and functional relationship understand-ing with noncritical attributes.

4. Uses questions to guide the search and discovery process. Questions are used to raise contradictions, probe for in-depth responses, extend the discussion, and pass responsibility for learning to the individual student.

5. Encourages students to use examples and references from their own experience, to seek clarification, and to draw parallels and associations that aid understanding and retention. Relates ideas to past learning and to students own sphere of interests, concerns, and problems.

6. Allows students to evaluate the appropriateness of their own responses and then provides guidance as necessary. Provides cues, questions, or hints as needed to call attention to inappropriate responses.

7. Uses discussion to encourage critical thinking and help students to examine alternatives, judge solutions, make predictions, and discover generalizations. Class discussions help to orient students, provide new content, review and summarize

important points, alter the flow of information, and combine areas to promote the most productive discussion.

8. The direct model is best suited to teaching facts and standard procedures, and provides six teaching approaches for doing so: daily review and checking, presenting and structuring new content, guided student practice, feedback and corrections, independent practice, and regular reviews.

9. Indirect instruction is best suited for teaching concepts and functional relationships. The model provides seven teaching approaches for doing so: advance organizations of content, inductive and deductive thinking, use of examples and nonexamles, use of questions to guide search and discovery, use of student ideas, student self-evaluation, and group discussion. Not only is content taught and learned, thinking skills are developed and practiced also.

10. These two main instructional models, coupled with a variety of instructional strategies and techniques, can be mixed in many combinations to match particular objectives and student needs. Teachers should employ the direct and indirect teaching models to create lessons which best fit the content to be taught and their instructional objectives.

n contrast to the direct instruction strategy, **indirect instruction** is mainly student-centered. It seeks a high level of student involvement in observing, investigating, drawing inferences from data, or forming hypotheses. It takes advantage of students' natural curiosity, often encouraging them to generate alternatives or solve problems while they construct new knowledge. **Indirect instruction** is an approach to teaching and learning in which (1) the process is inquiry, (2) the content involves concepts and functional relationships, (3) the context is a problem, and (4) the result is a discovery (The Companion Website for Effective Teaching Methods: Research-Based Practice, Sixth Edition).

http://www.ece.uc.edu/~pffp/fft_Indirect.html

Teachers indirectness affect the classroom performance as follows:

- Teacher indirectness affects the pupil talk
- Teacher indirectness raise the amount of pupil initiate

- Teacher indirectness enhance cognitive level of classroom discourse.
- It causes students' learning
- It creates positive pupil attitude for learning
- It is associated with greater achievement motivation of students
- It enhances students 'creativity in classroom.
- It lowers pupils' anxiety.
- It helps to achieve instructional and learning goals and objectives.

Strategies for analyzing teacher behavior- Flauder's interaction Analysis Categories(FIAC),

Ned. A. Flanders defines, "Teaching as an interactive process. Interaction means participation of teacher and students in the process of teaching. In this process, teacher influences the students; students also interact with the teacher. Interaction takes place among the students themselves also. It means, in the process of teaching, every body interacts with every other person involved in the process. Flander's system of interaction is known as the most popular technique used for the analysis of the teacher behavior and interaction going on in the classroom at a particular teaching-learning situation. It tries to categorize all the sets of possible behaviors while interacting with his students in ten categories divided into three major sections, namely: (i) teacher talk, (ii) student talk, (iii) silence or confusion. The application and utilization of Flander's interaction analysis mainly involves three major steps: (i) observation and recording of the classroom events, (ii) construction of the interaction matrix, and (iii) interpretation of the interaction matrix

Teacher influences students through lecture, ask questions, criticizing, giving directions etc.

- Student"s reacted to the teacher"s lecture and questions, they give responses.
- It is interaction between teachers and students.

What is Interaction Analysis?

- Interaction analysis is a process of encoding and decoding a pattern of interaction between the communicator and the receiver.
- Encoding helps in recording the events in a meaningful way and decoding is used to arrange the data in a useful way and then analyzing the behaviours and interactions in the classroom interaction.
- There are four important techniques to observe the interaction systematically. These are:

1. Flander‟s Interaction Analysis Categories System (FIACS)

2. Reciprocal Category System (RCS)

3. Equivalent Talk Categories (ETC)

4. Verbal Interaction Category System (VICS)

Flanders Interaction Analysis Technique is most suitable and widely used technique in the field of research all over the world.

Characteristics of Interaction Analysis

1. The classroom verbal interaction can be made more effective.

2. The teacher can increase student participation in his teaching.

3. The direct behaviour of teacher may be shifted to indirect behaviour, which is more suitable in democratic way of life.

4. The tape recorder and videotape can be used for recording the classroom events. The trainee can encode and decode his own behaviour.

5. This technique can also be combined with other feedback device such as microteaching and simulated teaching.

Flander's Interaction Analysis Category System (FIACS)

- Ned. A. Flanders developed a system of interaction analysis to study what is happening in a classroom when a teacher teaches. It is known as Flanders Interaction Analysis Categories System (FIACS).

- Flanders and others developed this system at the University of Minnesota, U.S.A. between 1955 and 1960.

- Flanders classified total verbal behaviour into 10 categories. Verbal behaviour comprises teacher talk, student talk and silence or confusion.

- The ten categories are mentioned as under:

1. Teacher Talk – 7 categories

2. Pupil Talk – 2 categories

3. Silence or Confusion- 1 category

Thus, the first seven categories include teacher talk. Next two categories include pupil talk. The last tenth category includes the small spans of silence or pause or confusion.

The first 7 categories or teacher talk has been bifurcated into a) indirect talk, b) direct talk.

A) Indirect Talk

In this method of analysis, the first four categories represent the teacher"s indirect influence.

Meaning of Various Categories
1. Teacher Talk (7 Categories)

Category 1: Accepts Feelings
- In this category, teacher accepts the feelings of the pupils.
- He feels himself that the pupils should not be punished for exhibiting his feelings.
- Feelings may be positive or negative.

Category 2: Praise or Encouragement
- Teacher praises or encourages student action or behaviour.
- When a student gives answer to the question asked by the teacher, the teacher gives positive reinforcement by saying words like „good", „very good", „better", „correct", „excellent", „carry on", etc.
- **Category 3: Accepts or Uses ideas of Pupils**
- It is just like 1st category. But in this category, the pupils ideas are accepted only and not his feelings.
- If a pupil passes on some suggestions, then the teacher may repeat in nutshell in his own style or words.
- The teacher can say, „I understand what you mean" etc. Or the teacher clarifies, builds or develops ideas or suggestions given by a student.

Category 4: Asking Questions
- Asking question about content or procedures, based on the teacher ideas and expecting an answer from the pupil.
- Sometimes, teacher asks the question but he carries on his lecture without receiving any answer. Such questions are not included in this category.

B) Direct Talk
- Next 5th to 7th categories represent the teacher"s direct influence.
- **Category 5: Lecturing /Lecture**

- Giving facts or opinions about content or procedure expression of his own ideas, giving his own explanation or citing an authority other than a pupil.

Category 6: Giving Directions

- The teacher gives directions, commands or orders or initiation with which a pupil/student is expected to comply with,
- - Open your books.
- - Stand up on the benches.
- - Solve 4th sum of exercise 5.3.

Category 7: Criticizing or Justifying Authority

- When the teacher asks the pupils not to interrupt with foolish questions, then this behaviour is included in this category.

1. Teacher's „what" and „why" also come under this category.

2. Pupil Talk (2 Categories)

Category 8: Pupil Talk Response

- It includes the pupils talk in response to teacher's talk
- Teacher asks question, student gives answer to the question.

Category 9: Pupil Talk Initiation

- Talk by pupils that they initiate.
- Expressing own ideas; initiating a new topic; freedom to develop opinions and a line of thought like asking thoughtful questions; going beyond the existing structure.

3. Silence or Pause or Confusion (1 category)

Category 10: Silence or Pause or Confusion

- Pauses, short periods of silence and period of confusion in which communication cannot be understood by the observer.

Procedure of Observation / Encoding Procedure

- The observer sits in the classroom in the best position to hear and see the participants.
- At the end of every three seconds he decides which category best represents the communication events just completed. Thus the time involves in coding one tally for

every 3 seconds, is 20 tallies in one minute, 100 tallies in 5 minutes and 1200 tallies in one hour.

- In this process only the serial numbers of the categories are recorded.
- The serial number of that category is recorded on the data sheet by the observer.
- When the observation is over, the observer shifts to some other room and prepares the details on the basis of those serial numbers of the categories.
- In this observation process, the writing of serial numbers of the categories is known as Encoding.
- Writing details of behaviour on the basis of these categories is known as Decoding.
- The observers should remember the serial numbers of these categories.

Rules for Observation / Rules for Recording or Decoding

Flanders category method has many rules for observation without following which the observation is not possible. The observer must remember these rules. These rules help in maintaining consistency and making observations uniform. These rules are as follows:

Rule 1: If more than one type of category occurs during a 3 second period, the observer should choose the category that is numerically farther from category 5 (but not category 10). Suppose the observer is in doubt whether the category is 2 or 3; he should write 2 categories.

Rule 2: The observer should not involve his personal viewpoint.

Rule 3: If more than one category is active in a span of 3 seconds, and then all the categories should be recorded. If after 3 seconds, no category changes, then the same serial number should be repeated in the next 3 seconds.

Rule 4: If the time period of silence exceeds 3 seconds, it should be recorded under the category No.10

Rule 5: When teacher calls a child by name, the observer is supposed to record a 4th category.

Rule 6: When the teacher repeats the student''s answer and the answer is a correct, that is recorded as a category No. 2. This tells the student that he has the right answer and therefore functions as praise or encouragement.

Rule 7: When a teacher listens to a pupil and accepts his ideas for a discussion, then this behaviour belongs to category No. 3.

Rule 8: The words „All is ok", „yes", „yah", „hum", „alright" etc belong to the category No. 2. (Encouragement)

Rule 9: If a teacher jokes without aiming at any pupil, this behaviour belongs to the category No. 2. But if he makes any joke aiming at some particular pupil, then it belongs to the category No. 7

Rule 10: When all the pupils respond to a very small question collectively, then the serial number of category-8 is recorded.

Other evaluative scales of teacher behaviors, Baroda General Teaching Competence Scale(GTC)

.K. Passi's General Teaching Competence Scale The General Teaching Competence Scale is generally used by measuring teaching competency of a teacher individually by a reliable observer or a group of reliable observers making direct observations of his classroom behaviour for the entire teaching period. As the teacher teaches, the observer sits at the back for observation. At the end of the teaching period, she gives her ratings on the General TeachingCompetence Scale against all the items. To facilitate this process she may either mark frequencies or write verbal descriptions against each item which would help her in giving rating more objectively

. Not at all 1 2 3 4 5 6 7 Very much

•Planning (Pre-instructional). Objectives of the lesson were appropriate: clearly stated relevant to the content, adequate and attainable.

•Content selected was appropriate: relevant and adequate with respect to the objectives of the lesson, and accurate.

•Content selected was properly organized: Logical continuity and psychological organization.

•Audio-visual material chosen were appropriate: suited to the pupils and content, adequate and necessary for attaining the objectives.

•Presentation (Instructional) Lesson was introduced effectively and pupils were made ready emotionally and from knowledge point of viewto receive the new lesson: continuity in statements or questions, relevance, use of previous knowledge and use of appropriate device/technique

•Questions were appropriate: well structured, properly put, adequate in number and made pupils participate.

•Critical awareness was brought about in pupils with the help of probing questions: prompting, seeking further information, refocusing, redirection and increasing critical awareness.

•Concepts and principles were explained (understanding brought about) with the help of clean, interrelated and meaningful statements: statements to create set, to conclude, statements which had relevancy, continuity appropriate vocabulary explaining links, fluency and had no vague words and phrases.

•The concepts and principles were illustrated with the help of appropriate examples though appropriate media (verbal and non verbal): simple, relevant to content and interest level of pupils.

•Pupils' attention was secured and maintained by varying stimuli like movements, gestures, changing speech pattern, focusing, changing interaction styles, pausing, and oral-visual switching: Pupils' postures, and listening, observing and responding behaviour of pupils.

•Deliberate silence and nonverbal cues were used to increase pupil participation.

•Pupils' participation (responding and initiating) was encouraged using verbal and nonverbal reinforces.

•Speed of presentation of ideas was appropriate: matched with the rate of pupils' understanding and there was proper budgeting of time.

•Pupils' participated in the classroom and responded to the teacher and initiated by giving their own idea and reacting to others' ideas.

•The blackboard work was good: legible, neat, appropriateness of the content written and adequate.

•Closing. The closure was achieved appropriately: main points of the lesson wereconsolidated, present knowledge was linked with the past knowledge, opportunities were provided for applying present knowledge, and present knowledge was linked with future learning (assignment).

•The assignment given to the pupils was appropriate: suited to individual differences, relevant to the content taught, and adequate.

•Evaluation. Pupils' progress towards the objectives of the lesson was checked and the procedures of evaluation were appropriate: relevant to the objectives, valid, reliable and objective.

•Pupils' difficulties inunderstanding a concept or principle were diagnosed by step-by-step questioning and suitable remedial measures were undertaken.

•Managerial. Both attending and non attending behaviours of the pupils were recognized: attending behaviour was rewarded, directions were given to eliminate non-attending behaviours, questions were asked to check pupils' attending behaviour, pupils' feelings and ideas were accepted, and nonverbal cues were used to recognize pupils' attending and non-attending behaviours.

•Classroom discipline was maintained in the class: pupils' followed teacher's instructions that were not related to the content. Comments (if any): 3.2.2.1 Scoring Procedure.The sum of the ratings against at the 21 items constitutes the score onGeneral Teaching Competency (GTC Scale) of the teacher being observed. The maximum score possible is 147 and the minimum is 21.

•Reliability of the Scale.The inter-observer reliability coefficients range from 0.85 to 0.91.

•Validity of the Scale.The scale has factorial validity. Scott's coefficient of inter-observer ranging from 0.78 to 0.82.

B. Professional Growth: Meaning and purposes

"'Profession' describes at once a knowing and a doing; it describes a practice rather than a technical application." (Beyer, Feinberg, Pagano, and Whitson, 1989, p.14)

Educators must understand the concepts in processing professional development and what it means to education. The National Staff Development Council (2007) created a set of nine standards that all professional development should follow. They include content knowledge and quality teaching, research-basis, collaboration, diverse learning needs, student learning environments, family involvement, evaluation, data-driven design, and teacher learning.

However, it does not determine whether accountable measures are being gathered to determine if this information has benefited the education system as a whole.

Professional development refers to the development of a person in his or her professional role. According to Glattenhorn (1987), by gaining increased experience in one's teaching role they systematically gain increased experience in their professional growth through examination of their teaching ability. Professional workshops and other formally related meetings are a part of the professional development experience (Ganzer, 2000). Much broader in scope than career development, professional development is defined as a growth

that occurs through the professional cycle of a teacher (Glattenhorn, 1987). Moreover, professional development and other organized in-service programs are deigned to foster the growth of teachers that can be used for their further development (Crowther et al, 2000). One must examine the content of those experiences through which the process will occur and how it will take place (Ganzer, 2000; Guskey, 2000).

This perspective, in a way, is new to teaching in that professional development and in-service training simply consisted of workshops or short term courses that offered teachers new information on specific aspects of their work (Brookfield, 2005). Champion (2003) posited that regular opportunities and experiences for professional development over the past few years had yielded systematic growth and development in the teaching profession.

Many have referred to this dramatic shift as a new image or a new module of teacher education for professional development (Cochran-Smith & Lytle, 2001: Walling & Lewis, 2000). In the past 15 years there have been standards-based movements for reform (Consortium for Policy Research in Education, 1993; Hord, 2004; Kedzior & Fifield, 2004: Sparks, 2002). The key component of this reform effort has been that effective professional development has created a knowledge base that has helped to transform and restructure quality schools (Guskey, 1995; Willis, 2000).

Much of the available research on professional development involves its relationship to student achievement. Researchers differ on the degree of this relationship. Variables are the school, teacher, student level related to the level of learning within the classroom, parent and community involvement, instructional strategies, classroom management, curriculum design, student background knowledge, and student motivation (Marzano, 2003). Based upon a review of several studies, Marzano (2003) concluded that the professional development activities experienced by teachers have a similar impact on student achievement to those of the aforementioned variables.

Opportunities for active learning, content knowledge, and the overall coherence of staff development are the top three characteristics of professional development. Opportunities for active learning and content specific strategies for staff development refer to a focus on teacher application of learned material. Overall coherence refers to the staff development program perceived as an integrated whole and development activities building upon each other in a consecutive fashion. Marzano (2003) warned, however, that standardized staff

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development activities which do not allow for effective application would be ineffective in changing teacher behavior.

Richardson, (2003) published a list of characteristics associated with effective professional development, stating that such programs would optimally be:

"statewide, long term with follow-up; encourage collegiality; foster agreement among participants on goals and visions; have a supportive administration; have access to adequate funds for materials, outside speakers, substitute teachers, and so on; encourage and develop agreement among participants; acknowledge participants existing beliefs and practices; and make use of outside facilitator/staff developers." (p. 402)

Kedzior and Fifield (2004) described effective professional development as a prolonged facet of classroom instruction that is integrated, logical and on-going and incorporates experiences that are consistent with teachers' goals; aligned with standards, assessments, other reform initiatives, and beset by the best research evidence. Elmore (2002) described professional development as sustained focus over time that is consistent with best practice.

Professional development encompasses all types of facilitated learning opportunities including credentials such as academic degrees to formal coursework, conferences and informal learning opportunities situated in practice. It has been described as intensive and collaborative, ideally incorporating an evaluative stage.[1] There are a variety of approaches to professional development, including consultation, coaching, communities of practice, lesson study, mentoring, reflective supervision and technical assistance

☐ Professional Development Refers to the development of a person in his or her professional role. According to Glattenhorn (1987), by gaining increased experience in one's teaching role they systematically gain increased experience in their professional growth through examination of their teaching ability.

☐ 4. Professional Development means practices and activities teachers do individually or collectively to enrich themselves professionally. These activities provide opportunities for growth in knowledge, skills and attributes leading to improved practice.

Purpose of Professional Growth

Good teachers form the foundation of good schools, and improving teachers' skills and knowledge is one of the most important investments of time and money that local, state, and national leaders make in education. Yet with the wide variety of professional development options available, which methods have the most impact on student learning?

Research on professional development is scattered throughout subject areas, with its focus ranging from classroom processes and structures to teachers' personal traits. We have limited our review to learning opportunities for teachers that are explicitly aimed at increasing student achievement.

Strategies for Professional Growth

☐ 5. How to Set Professional Development Goals Find a description of your current job and list the skills critical to that position. Isolate areas where improvement is needed. Take your rankings and list the skills where you need the most improvement. List any subskills or parts of the areas that might need extra improvement. Create a skill mastery plan. List the ways in which to improve or the skills that you need the most work on. Determine appropriate milestones and completion dates. Break your mastery plan down into reasonably acheivable milestones.

☐ 6. How to Set Professional Development Goals 1. Find a description of your current job and list the skills critical to that position. These skills might include knowledge of certain computer software, certain classes or certifications or specific skills associated with a professional position. Review the skills necessary for your position and rank your own skills on a 1 to 5 scale.

☐ 7. How to Set Professional Development Goals 2. Isolate areas where improvement is needed. Take your rankings and list the skills where you need the most improvement. List any subskills or parts of the areas that might need extra improvement.

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☐ 8. How to Set Professional Development Goals 3. Create a skill mastery plan. List the ways in which to improve or the skills that you need the most work on. Also list the ways to obtain skills that you lack. Research classes or training needed to gain these skills. If these skills can be taught by someone in your organization, put that into your plan, as well. Type these goals and print them for your records.

☐ 9. How to Set Professional Development Goals 4. Determine appropriate milestones and completion dates. Break your mastery plan down into reasonably acheivable milestones. It's best to use a year long plan. Work on your most needed skills first and set a date by which you want to be at the minimum, competent at the skill. Create dates for completion for the other skills, as well.

☐ 10. Methods of Professional Growth for Teachers 1. Books on the Teaching Profession 2. Professional Development Courses 3. Additional College Courses 4. Reading Well Established Websites and Journals 5. Visiting Other Classrooms and Schools 6. Joining Professional Organizations 7. Attending Teaching Conferences

☐ 11. Methods of Professional Growth for Teachers 1. Books on the Teaching Profession An easy way to learn new methods for lesson preparation, organization, and creating effective classroom systems can be found in books You can also read books that provide inspirational and moving stories to help motivate you as you teach.

☐ 12. Methods of Professional Growth for Teachers 2. Professional Development Courses Professional development courses are a great way to find out the latest research in education. Courses on topics like research and assessment creation can be very enlightening. You should approach your department head and administration if you hear of a course that would be great to bring to your school district. Alternatively, online professional development courses are on the rise and provide your more flexibility in terms of when you actually do the work.

☐ 13. Methods of Professional Growth for Teachers 3. Additional College Courses College courses provide teachers with more in depth information on the topic chosen. Many educational institutions provide teachers with incentives for completing additional college courses.

☐ 14. Methods of Professional Growth for Teachers 4. Reading Well Established Websites and Journals Established websites like About.com's Education sites and others provide

wonderful ideas and inspiration to teachers. Further, professional journals can help enhance lessons throughout the curriculum.

☐ 15. Methods of Professional Growth for Teachers 5. Visiting Other Classrooms and Schools If you know of a great teacher at your school, arrange to spend a little time observing them. They don't even have to teach in your subject area. You can pick up different ways to deal with situations and to help with basic housekeeping tasks. Additionally, visiting other schools and seeing how other teachers present their lessons and deal with students can be very enlightening. Sometimes we get in a rut thinking that the way that we are teaching is the only way to do it. However, seeing how other professionals handle the material can be a real eye opener.

☐ 16. Methods of Professional Growth for Teachers 6. Joining Professional Organizations Professional organizations for teachers provide resources to help you in and out of the classroom. Further, many teachers find associations specific to their subject matter give them a wealth of material to help build and enhance lessons.

☐ 17. Methods of Professional Growth for Teachers 7. Attending Teaching Conferences Local and national teaching conferences occur throughout the year. See if one is going to be near you and try and attend. Most schools will give you the time off to attend if you promise to present the information. Some might even pay for your attendance depending on the budgetary situation. Check with your administration. The individual sessions and keynote speakers can be truly inspirational.

☐ 18. As a teacher, what is your Professional Growth Plan? Determine your goals and plans

☐ 19. Professional Growth Plans means the career-long learning process whereby a teacher annually develops and implements a plan to achieve professional learning objectives or goals that are consistent with the Vision and Mission of the University.

☐ 20. Professional Growth Plans Teachers have a professional responsibility to keep abreast of new developments in education and to continue to develop their professional practice. Every teacher employed by a school system must develop and implement an annual plan for professional growth that outlines the professional development activities the teacher intends to undertake in that year.

☐ 21. Sample Professional Growth Plan Target Area Objectives Strategies Expected Outcomes Teaching Strategies use/utilize various teaching strategies -Attend seminar on teaching strategies -Enroll post graduate studies - Use collaborative teaching -Confidence in teaching and systematized teaching process -Increased student participation in the learning process

☐ 22. Teachers start strong and continue to grow professionally throughout their careers

http://www.tolerance.org/article/teaching-teachers-professional-development-improve-student-a

, strategies of professional growth, self study, acquisition of higher learning, conducting research and publications, Teachers Accountability- Meaning, teacher,s role in school, community and the nation, parent Teacher Association, Assessing accountability.

Self Study

he study of something by oneself, as through books, records, etc., without direct supervision or attendance in a class:

Self studying, which involves studying without direct supervision or attendance in a classroom, is a valuable way to learn, and is quickly growing in popularity among parents and students. By complementing formal education with home study, students can see a drastic improvement to grades, material understanding, and confidence.

Many students study at home to supplement their class-based learning. However, self study can also be used to master a new skill or learn an entirely new concept – like a language or an instrument. The benefits you can gain from self study are endless and are completely determined by yours and your child's goals.

There are various self studying methods you can implement at home (whether they're self study tips to complete solo or with you) that can bring about many educational benefits both in and out of school.

Important insights into varying aspects of teacher education emerge when attention is focused on the work of teacher educators. Teacher educators' observations, explorations and inquiries

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are important as they offer access to the intricacies of teaching and learning about teaching so important in shaping the nature of teacher education itself. For (at least) this reason, research of the kind found in self-study of teacher education practices (S-STEP) is increasingly pursued and valued by teacher educators. In so doing, self-study also encourages others to look more closely into their own practices.

For many, self-study has become an empowering way of examining and learning about practice while simultaneously developing opportunities for exploring scholarship in, and through, teaching. Self-Study allows educators to maintain a focus on their teaching and on their students' learning; both high priorities that constantly interact with one another. This interplay between practice and scholarship can then be quite appealing to educators as their work becomes more holistic as opposed to being sectioned off into separate and distinct compartments (e.g., teaching, research, program evaluation, development, etc.). However, just because self-study may be appealing, it is not to suggest that the nature of self-study work should simply be accepted without question and critique. There is a constant need to examine what is being done, how and why, in order to further our

understanding of the field and to foster development in critical and useful ways so that the learning through self-study might be informative and accessible to others.

This series has been organized in order so that the insights from self-study research and practice might offer a more comprehensive articulation of the distinguishing aspects of such work to the education community at large and builds on the International Handbook of Self Study in Teaching and Teacher Education (Loughran, Hamilton, LaBoskey & Russell, 2004).

Self-study may be viewed as a natural consequence of the re-emergence of reflection and reflective practice that gripped the education community in the last two decades of the 20th century (see for example Calderhead & Gates, 1993; Clift et al., 1990; Grimmett & Erickson, 1988; LaBoskey, 1994; Schön, 1983, 1987). However, self-study aims to, and must, go further than reflection alone. Self-study generates questions about the very nature of teaching about teaching in teacher education (Korthagen & Kessels, 1999) and is important in conceptualizing scholarship in teaching as it generates and makes public the knowledge of teaching and learning about teaching so that it might be informative to the education community in general.

This series offers a range of committed teacher educators who, through their books, offer a diverse range of approaches to, and outcomes from, self-study of teacher teacher ed

ucation practices.

Methods/Techniques of Self Study
☐ Reflective TeachingLearning Strategies

 Self-analysis • Keep a record of own success or failure in employing a strategy, problems and issues confronted, and significance of learning events

Writing Journals • Includes: a) a description of the teaching/learning event, b) outcomes of the event, c) value or worthiness of the outcomes and d) causes of success

Keeping a Portfolio • Includes a student's first-hand observations and personal knowledge that will be needed on analyzing changes in values being developed. helps students to understand the meaning and effect of their contributions. The experiential learning process of reflection • one borne out of experiences that have been deeply thought of, analyzed and evaluated. Learning that results from reflective teaching Take Note:

☐ 8. (M) Metacognitive Approach ("meta" means beyond) an approach that goes beyond cognition. It is an approach that makes students think about thinking. Making the teachers conscious of their thought processes while they are thinking; allowing them to think aloud. "students learn more effectively when they are aware on their learning of how they learn and know how to monitor and reflect" (Linda Darling-Hammond and colleagues, 2008) "effective problem solvers subvocalize, that is they talk to themselves frequently" (Orlich, 1994) Students describe what is going on in their mind; Students identify what is known in a situation or problem
Ways

For those who are conditioned to think that learning only happens in a classroom, the world of self-learning can be a little daunting. How do we best take advantage these new opportunities.

1. Get interested

Make no mistake. Your interest in the subject is the essential driver of success. You can't learn what you do not want to learn. Emotion is an important part of the learning process. If you are even moderately interested in a subject, give yourself a chance. The key is to get started. If you can create some pleasurable routines, you may find that the subject grows on you. "L'appetit vient en mangeant" (the appetite comes with eating) as they say in French.

2. Expect problems and you won't be disappointed.

Don't expect to understand things, much less remember them, the first time you study them. Trust that things will get clearer as your brain comes to grips with new information. It is like a jig-saw puzzle or a cross-word puzzle. As you start to put the pieces together, or string the words together, the full picture becomes clearer. The brain learns all the time, but on its own schedule. Learning does not take place according to a schedule laid down by a curriculum or teacher. Some things are easier to learn than others. Some things just take longer to click in. Keep at it, and you will gradually find that things that seem difficult at first, will become second nature with time.

3. Cover the same ground from different angles.

Your brain is struggling to form patterns to cope with new input from your learning activities. Sometimes, no matter how long you focus on one subject, your brain is not going to pick it up. If you are stuck, move on. Then cover the same general information from a different source, a different book, or a podcast, or an online lecture or a video. Try to become a grazing learner, roaming the countryside, rather than a feedlot learner, just standing there in one spot, munching on the same bale of hay. The broader your base, the easier it is to learn. Just as the "rich get richer", the more you know, the more you can learn.

4. Anytime is learning time.

Take full advantage of the Internet, iTunes, and various mobile devices, not to mention good old-fashioned books and magazines. Learn during "dead time". Listen in your car, on the train, or while jogging. Have your learning with you while waiting in the doctor's office, or listen while checking out at the supermarket. Anytime is learning time. Remember, you are learning through exposure, not by nailing things down. It is more like moisture accumulation in a cloud, rather than building a brick wall.

5. Be a multimedia learner.

The more varied your learning content, and the more varied the ways in which you learn, the clearer the puzzle will become. Different learning activities suit different people, at different times of the day. Vary your activities in order to keep your interest level up. Even if listening and reading work best for you, treat yourself to the odd video lecture, or get-together with other learners. This will renew your batteries.

6. Join learning communities.

The "loneliness of the distance learner" is a thing of the past. Join a learning community on the web, where members share their knowledge and experience. Search for the communities that suit your interests and learning style. You will find encouragement, advice and stimulus from fellow learners, as well as from tutors, teachers and coaches. In these communities, you can measure your progress against your own goals, or compare your experience with that of other learners. You can even teach and help others, which is a great way to learn.

Read more at http://www.pickthebrain.com/blog/6-steps-to-effective-self-learning/#RUts3TsJ6ebImSgE.99

acquisition of higher learning

What	**Are**	**Teachers**	**Learning?**
FOCUS	ON	TEACHING	SKILLS

Research on the links between teacher learning and student achievement is divided into two waves. The first wave, beginning in the 1960s, focused primarily on "generic" teaching skills, such as allocating class time, providing clear classroom demonstrations, assessing student comprehension during lectures, maintaining attention, and grouping students.

These studies showed small to moderate positive effects on students' basic skills, such as phonetic decoding and arithmetic operations; in a few cases, reasoning skills also improved. For example, in an experimental study of fourth-grade mathematics in urban schools serving primarily low-income families, student achievement was greater when teachers emphasized active whole-class instruction — giving information, questioning students, and providing

feedback — and more frequent reviews, among other measures. Student achievement also was enhanced when teachers learned to follow the presentation of new material with "guided practice" — asking questions and supervising exercises.

FOCUS ON SUBJECT MATTER AND STUDENT LEARNING
In the 1990s, a second wave of research delved deeper into student learning, focusing on students' reasoning and problemsolving potentials rather than only on basic skills. It suggested that professional development can influence teachers' classroom practices significantly and lead to improved student achievement when it focuses on (1) how students learn particular subject matter; (2) instructional practices that are specifically related to the subject matter and how students understand it; and (3) strengthening teachers' knowledge of specific subject-matter content. Close alignment of professional development with actual classroom conditions also is key.

In one study, Thomas Carpenter and colleagues randomly placed first-grade teachers either in a monthlong workshop that familiarized them with research on how students understand addition and subtraction word problems or in professional development that focused on mathematical problem-solving strategies but not on how students learn. Teachers who participated in the student learning workshop more often posed complex problems to students, listened to the processes students used to solve those problems, and encouraged them to seek different methods of finding answers. By contrast, teachers who were not in the workshop emphasized basic fact recall, getting answers quickly, and working alone rather than in groups.

Student achievement was consistently higher and growth in students' basic and advanced reasoning and problem-solving skills was greatest when their teachers' professional development focused on how students learn and how to gauge that learning effectively. This suggests that professional development that is rooted in subject matter and focused on student learning can have a significant impact on student achievement.

In another study, Paul Cobb and colleagues provided opportunities for teachers to examine new curriculum materials, solve mathematics problems that they would teach to students, and then study student learning. At the end of the school year, these teachers' students did better on conceptual understanding and maintained their basic (computational) skills.

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Although research in teacher professional development is dominated by mathematics studies, good examples of such research also exist in other subjects including science, literacy, and basic reading skills.

In reading, Deborah McCutchen and colleagues studied two groups of kindergarten and first-grade teachers. One group received professional development that improved their knowledge of word sounds and structure, whereas the other group had no additional training. Students' reading performance then was tracked over the course of a year. Teachers who got the extra training spent more time explicitly teaching the building blocks of words and language, and their students did better on tests of word reading, spelling, and in first grade, comprehension.

LINKING PROFESSIONAL LEARNING TO TEACHERS' REAL WORK
To be effective, professional development must provide teachers with a way to directly apply what they learn to their teaching. Research shows that professional development leads to better instruction and improved student learning when it connects to the curriculum materials that teachers use, the district and state academic standards that guide their work, and the assessment and accountability measures that evaluate their success.

Two recent studies that support focusing professional development on curriculum have implications for states striving to connect education policy to instruction. David Cohen and Heather Hill found that teachers whose learning focused directly on the curriculum they would be teaching were the ones who adopted the practices taught in their professional development. These teachers embraced new curriculum materials when they were supported by training and, in some cases, workshops about the new state-required student assessment. The study also showed that students of teachers who participated in this kind of curriculum-focused professional development did well on assessments. Unfortunately, most teachers received less effective forms of training.

In another study, Michael Garet and colleagues surveyed a nationally representative sample of teachers who, in the late 1990s, participated in the Eisenhower Professional Development Program, which emphasized mathematics and science. The study found that teachers were more likely to change their instructional practices and gain greater subject knowledge and improved teaching skills when their professional development linked directly to their daily experiences and aligned with standards and assessments.

How Much Professional Development Is Enough, and How Well Is It Working?

Studies suggest that the more time teachers spend on professional development, the more significantly they change their practices and that participating in professional learning communities optimizes the time spent on professional development. Therefore, it is striking that one national survey found that in nine of 10 content areas, most teachers said that they spent one day or less on professional development during the previous year.

While adequate time for professional development is essential, studies also show that by itself, more time does not guarantee success. If the sessions do not focus on the subject-matter content that research has shown to be effective, then the duration will do little to change teachers' practices and improve student learning.

Most states and school districts do not know how much money they are spending on professional development for teachers or what benefit they are actually getting from their outlays because they do not systematically evaluate how well the additional training works. An effective evaluation includes an examination of actual classroom practices, the training's impact on teacher behavior, and its effect on student learning. Evaluation should be an ongoing process that starts in the earliest stages of program planning and continues beyond the end of the program.

Conclusion

Our changing goals for learning, coupled with shifts in curriculum emphasis and a deeper understanding of teacher learning and student thinking, have led to new findings about the impact of teacher professional development and how best to sharpen teachers' skills and knowledge.

What matters most is what teachers learn. Professional development should improve teachers' knowledge of the subject matter that they are teaching, and it should enhance their understanding of student thinking in that subject matter. Aligning substantive training with the curriculum and teach ers' actual work experiences also is vital.

The time teachers spend in professional development makes a difference as well, but only when the activities focus on high-quality subject-matter content. Extended opportunities to better understand student learning, curriculum materials and instruction, and subject-matter content can boost the performance of both teachers and students.
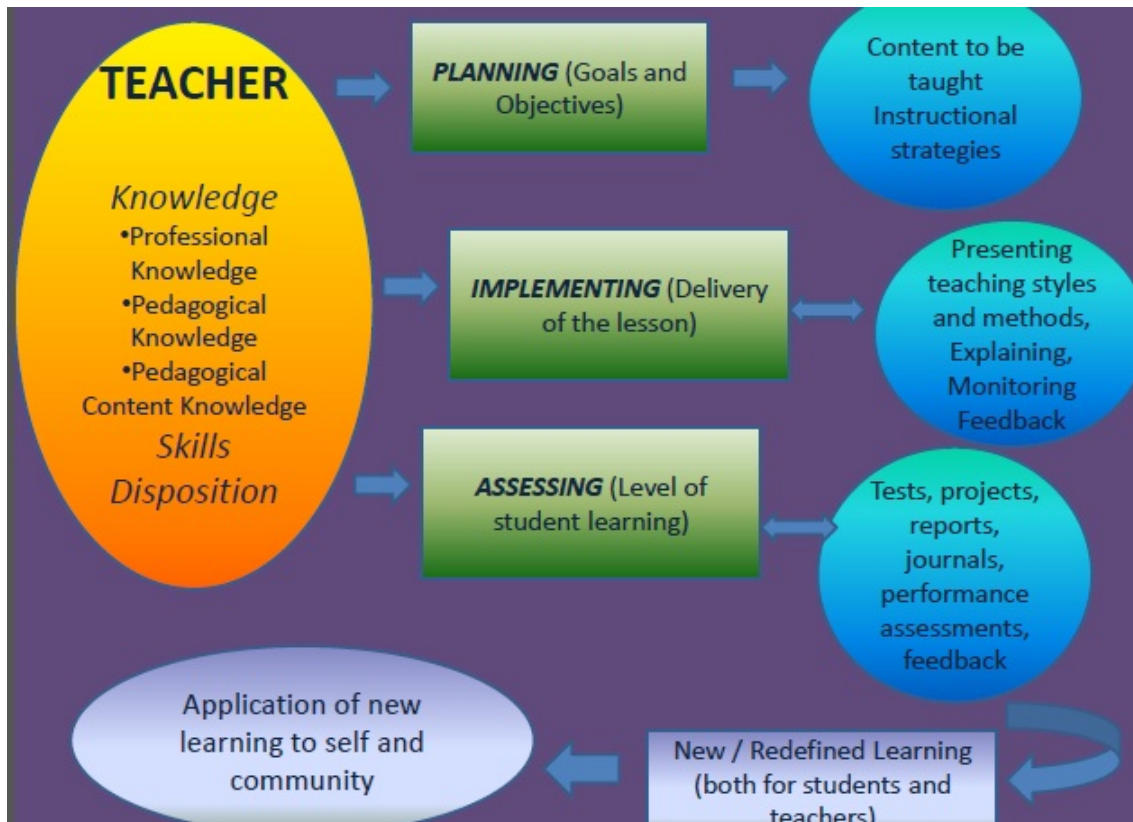
Conducting research and publications

What is action research?
One problem with action research is that the term means different things when used by different authors. For example, Hopkins (1985) treats action research and classroom research by teachers as synonymous; Wallace (1991) argues that the main criterion for action research is practicality; Brown (1994) and Robinson (1991) suggest that any action undertaken by teachers to collect data and evaluate their own teaching can be termed action research; and Somekh (1993) highlights the participatory insider nature of action research.

Despite the differences between these interpretations of action research, there does appear to be a common core which distinguishes action research from research in general. Action research occurs within a specific classroom situation, is usually conducted by the teacher as classroom participant, and aims to develop the situation and the teacher-researcher rather than generate additions to the pool of human knowledge.

Since action research does not aim to increase knowledge, issues of research reliability and validity can generally be downplayed in action research while practicality and immediate usefulness become more important. For this reason, action research often seems an attractive option for teachers new to research. It looks easy - action researchers do not have to worry about creating valid research designs, about statistics, or about concepts like triangulation and replicability. While these points are to some extent true, conducting useful action research still requires serious devotion of time and effort, and a lot of thoughtful consideration. However, while not easy, action research should still be an attractive option for classroom teachers, albeit for different reasons.

Why should teachers conduct research? To improve and develop teaching, research into classrooms is needed. As teachers, we need to know what is actually happening in our classrooms, what learners are thinking, why learners are reacting in the ways they do, what aspects of the classroom we should focus on to develop our teaching most effectively, how we should change in these aspects, and what the effects of such a change are. It is important to note that more than half of the items in this list concern describing and understanding the existing classroom situation rather than evaluating the implementation of a new approach. If we do not truly understand our classroom situations first, our choices of new approaches to implement are likely to be based on personal fancy and whimsy rather than on what is most likely to have beneficial effects in the situation.

Given this need for teachers to understand their own classroom situations, it comes as something of a surprise to realise that most research into classrooms is still conducted by researchers from outside the classroom situation. A quick trawl through a few recent journals shows that university researchers are the authors of nearly all of the articles, including those that investigate school classrooms. (I should be a little careful here as I work at a university but am advocating action research at all educational levels). The problem with classroom research being conducted by outside researchers is that classrooms are very complicated specific contexts replete with their own routines and expectations which are very difficult for outside observers to understand. Classroom research into surface behaviours, such as the number of questions a teacher asks in a lesson, can be effectively conducted by outside researchers, but getting a real understanding of the underlying meaning s and purposes of these behaviours can only be done by insiders. Since most learners are not in a position to be

able to conduct research, this means that the teacher is the person who should be doing most research into classrooms.

The problems with conducting research

Teachers wishing to conduct research into their own classrooms, however, are faced with a host of problems. Not least among these are lack of time, lack of expertise or skills in research, lack of support especially from within their own institution, and threats to their self-image as a teacher (Allwright, 1993; Burton and Mickan, 1993; Nunan, 1993).

The problem of lack of research expertise or skills has a knock-on effect causing further problems. Research designed and conducted by teachers new to research is likely to have low reliability (e.g. the findings are not likely to be generalisable) and low validity (e.g. the research may bot actually produce findings which address the targetted research topic). Because of these problems, the research is also likely to have low publishability - which may obstruct achievement of the teacher's real reason for conducting research, namely, to get published given the heavy stress placed on publishing research by the Ministry of Education and universities at present.

Action research as a solution to the problems

All of these problems may make teachers think twice before getting involved in research. However, these problems apply to research in general rather than action research. In focusing on action research, we need to shift our perceptions of the nature and purposes of research, and this shift in our perceptions reduces the importance that can be given to the problems discussed above.

Action research, as we have seen, aims to develop the teaching situation and the teacher-researcher rather than generate new knowledge. As such, reliability and generalisability are not really issues in action research. Action research aims to generate findings that are useful within a specific context rather than findings applicable across many different situations. Similarly, the basis for judging validity in action research is different from that used in research in general. In general research, validity is measured by the extent to which the research actually investigates what it is supposed to investigate, and because of this, research design and data analysis procedures are crucial. In action research, on the other hand, validity can be measured by the extent to which the research produces findings which are useful in developing the classroom situation. This shift in perceptions concerning the nature and

purposes of research means that action research, which may not be publishable when judged by the criteria of research in general, is publishable as action research (see Edge, 2001; Sitler and Tezel, 1999; Watson Todd, 1999 for recent examples of published action research). However, the number of publications focusing on action research is limited meaning that publishability is actually still low.

Publishing an article, however, should not be a teacher's top priority when deciding to conduct action research. More important is the likely effect that conducting the action research will have on the classroom situation and the teacher-researcher.

Action   research   for   development

In conducting action research, teachers can become emancipated (Gore and Zeichner, 1995), in that they become in control of the whole process of research and investigation of their own teaching, rather than being the tool of an outside researcher. Teachers, then, can become more autonomous, responsible and answerable through action research (Day, 1987), and so decisions concerning change can be taken by teachers themselves. One outcome of this is that action research is likely to be relevant and immediately useful in understanding and developing the specific classroom context in which it was conducted, and so of benefit to learners. Another outcome is that the research becomes both an input into and a stimulus for teacher reflection (indeed, teacher reflection is one of the key tools in conducting action research), and reflection is a necessary component of personal and professional development. Conducting action research, then, is one key way for us to develop ourselves as teachers.

As teachers, it is our duty to develop both our teaching and ourselves. Action research can help us to fulfil these responsibilities. Because of this, conducting action research should not be seen as something extra that keen teachers can do which goes beyond their usual teaching responsibilities. Instead, conducting action research should be seen as an integral part of our responsibilities as professionals dedicated to developing our teaching and ourselves.

http://philseflsupport.com/why_ar.htm

Teachers Accountability- Meaning,
teacher,s role in school, community and the nation,

ox 1 **Twelve qualities of a good teacher or mentor**

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1. *Committed to the work*
   - Focuses on educational needs of the students
   - Works with passion
   - Keen to uphold the university's values
   - Enthusiastic about work and about teaching

2. *Encourages and appreciates diversity*
   - Does not stereotype or speak negatively of others
   - Nurtures and encourages diversity
   - Seeks and encourages understanding of, and respect for, people of diverse backgrounds

3. *Interacts and communicates respect*
   - Communicates effectively with others
   - Encourages input from others, listening deeply and giving credit for their contributions
   - Acts with integrity
   - Provides a model of high ethical standards
   - Shows a caring attitude

4. *Motivates students and co-workers*
   - Encourages students to achieve their goals
   - Provides constructive feedback
   - Monitors progress of students and fosters their success

5. *Brings a wide range of skills and talents to teaching*
   - Teaching is clearly presented and stimulates high-order thinking skills
   - Presents difficult concepts comprehensibly
   - Brings appropriate evidence to the critique
   - Teaches memorably

6. *Demonstrates leadership in teaching*
   - Contributes to course design and structure
   - Contributes to publications on education
   - Evidence of self-development in an educational context
   - Demonstrates creativity in teaching strategies
   - Committed to professional development in education

7. *Encourages an open and trusting learning environment*

- Creates a climate of trust

- Encourages students to learn from mistakes

- Helps students redefine failure as a learning experience

- Encourages student questions and engagement in the learning process

- Encourages student growth with appropriate behaviour-based feedback

8. *Fosters critical thinking*

   - Teaches students how to think, not what to think

   - Encourages students to organize, analyse and evaluate

   - Explores with probing questions

   - Discusses ideas in an organized way

   - Helps students to focus on key issues

   - Trains students in strategic thinking

9. *Encourages creative work*

   - Motivates students to create new ideas

   - Fosters innovation and new approaches

10. *Emphasizes teamwork*

    - Builds links at national and international levels in education

    - Encourages students to work in teams

    - Encourages collaborative learning

11. *Seeks continually to improve teaching skills*

    - Seeks to learn and incorporate new skills, and information teaching

    - Seeks feedback and criticism

    - Keeps up to date in specialty

12. *Provides positive feedback*

    - Listens to students and discovers their educational needs

    - Values students, never belittles

    - Provides constructive feedback

    - Helps and supports people to grow

    - Teaches students how to monitor their own progress.

parent Teacher Association,

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What is the Parent Teacher Association?/

The purpose of the PTA is to provide a structure through which the parents/guardians of children attending Dublin 7 Educate Together National School can work together for the best possible education and welfare of their children.

The objectives of the Parent Teacher Association will be as follows:

- o To represent the views of parents
- o To promote a positive view of parents through liaison with the Parent Representatives on the Board of Management
- o To develop partnership between the school bodies
- o To inform parents of current changes in the education system, if need be
- o To network with other Parent Associations through involvement with National Parents Council
- o To work as a team and to have a yearly plan
- o To establish a forum through which parents can communicate their opinions and concerns regarding the school, to identify issues and possibly work towards a solution
- o To establish a forum through which parents and teachers can exchange information and research in relation to education/welfare of children.
- o The Parent Association can play their role by:
  - o Finding out what information parents would like or need
  - o Contributing to the school newsletter
  - o Helping the teachers to set up an information meeting for parents of a particular class
  - o Bringing Department of Education and Science and National Parents Council circulars or any relevant information to the attention of parents
- o To support parents, teachers and students to ensure that all children are treated in accordance with the ethos of the school.
- o To support teachers, and to work with them in delivering the curriculum
- o To elect a Committee and Sub-committees, e.g. Fundraising Committee, Ethics Committee.
- o To ensure equal participation by all parents
- o To access any training available for parents and staff of the school from other sources

- To help plan and carry-out programme of activities for the year, in consultation with the Principal and Board of Management and to run activities that involve parents and children
- To help raise funds for the school and the Parents Association, in consultation with the Principal and Board of Management
- To keep parents informed about activities planned for the school
- To influence policy development at school level
- To influence policy development at national level once affiliated to the National Parents Council.

What is NOT the role of the Parents Association?

- To get involved in individual complaints
- Day to day running of the school
- Curriculum
- Appointment of teachers
- Carrying out activities without consultation with Principal and/or Board of Management
- Portraying the school, its staff, the Board of Management and pupils in a negative manner

The parents/teacher association is a body comprising of parents and teachers of an institution of learning who meet annually to discuss matters on the educational, moral and spiritual well-being of the students or pupils of a particular learning institution, either at the elementary or secondary school level.

This body is basically made up of two arms; the Executive and the General Assembly. The general assembly meets once a year, while the executive meets as often as the need arises.

Every child begins life within a particular family. The child is raised and taught some fundamental principles in life, such as what is right and what is wrong, the kind of behaviour that society approves of and those which society regards as anti social. Thus children begin life in a home environment learning and being exposed to life principles. Gradually, as the

child grows older it becomes an imperative for the child to meet persons in a different environment where formal education takes place.

This new environment is the school. At the beginning children have difficulties coping and accepting this "strange" place but they gradually begin to become accustomed to it. What is very important to note here is that discipline and learning which was initially and exclusively the responsibility of the parents, must now be shared between parents and teachers. The child begins to learn a lot of things and very new things, new ways of doing things and so forth.

Besides the teachers who have become a new phenomenon in the child's life, other pupils or students play a role in the life of the child because of constant interaction and communication. This phenomenon sometimes brings confusing in the mind of the child. It is however a very important process because it is the only means by which a child can acquire formal education and training and gain financial independence in future. Teachers become the watch dogs and the regulators of the new way of life, helping the child to adapt to everything seemingly new for the child.

But because the parents still play an important role in the life of the child, it becomes necessary and important to group the two main actors at this stage of the child's life to work together in raising a complete human person. The idea of a PARENTS/TEACHERS ASSOCIATION came to be borne out of the necessity to avoid conflicting methods and approaches in raising the child. Suffice it to note that this is a purely ENGLISH SPEAKING TRADITION, in all institutions of learning be it private or public, you will not find one single school in the NW nor SW Regions of Cameroon without a body or association named a PARENTS/TEACHER ASSOCIATION. They have contributed immensely in the educational, material and moral well-being of the children.

SHARING IN UPBRINGING:

From the very moment that a child begins school, his or her life is no more influenced by the home environment, but also by the new environment which is the school. Parents are the primary actors in the life of the child and the teachers are secondary actors. Both are participating in the upbringing of the child in different ways and as a result it becomes very

important to establish a common forum for both parents and teachers to come together to discuss issues pertaining to the welfare of the children.

While the children are in school the teachers are acting in loco parentis, especially in the area of discipline, and therefore the necessity for both parties to meet annually to exchange notes and form a common ground of action in the best interest of their children.

ACADEMIC WORK AND PERFORMANCE:

Teachers are more involved in the academic work of the children and must see to their academic growth, strength and soundness. Parents are more or less active in this area. It becomes imperative therefore for parents and teacher to meet and discuss the academic development and performance of the children so as to enable the parents to participate by allowing them through discussions to appreciate the standard of learning imparted to the children, be able to understand the difficulties which some children face. Parents are able to the see the importance of following up their children at home because they know the particular difficulties which their children are encountering at school.

Thus in a forum of this nature there is bound to be an entente between the parents and the teachers which go a long way to help the children and take away unnecessary blames and accusation which sometimes, bring gross misunderstanding between parents and teachers with regrettable consequences. Meetings like this have the advantage of a very frank and open discussion which leads to resolutions being taken in the interest of all concerned and as a result avoid unpleasant situations.

STANDARDS AND VALUES:

Every educational institution has its own set of values by which the standards of that institution are assessed. It is not sufficient for the school to send to parents, a list of school rules to which the children are to be subjected. It is most important for parents to understand the essence of those rules and regulations. Such understanding can only be derived in a forum of the Parents/teachers meeting. Parents need to understand the rules and regulation so as to

encourage their kids to abide by them and as such learn their support to the institution to keep the standards and values in the interest of the kids. Where this is not possible, parents become disgruntled and critical of a system which is rather beneficial to their kids. (e g owning mobile phones or other electronic gadgets in school, assorted clothes in school, extra food in school etc).

For the standards and values to be maintained parents must contribute their own measure through understanding and participating in maintain those standards.

MORAL ATTITUDE AND BEHAVIOUR:

The school environment is far different from the home. It is place where we see a conglomeration of all types of attitudes and behaviour. There is no gainsaying that parents have different approaches in raising and disciplining their kids. Here we dare say that there are two types of parents the "no nonsense" parents and the seemingly "I don't care parents." Before coming to an institution like Holy Cross, most children have spent at least the first eleven years of their lives with their parents and under their discipline. Mindful of the fact that, parents have different approaches in the disciplining of their kids, teachers are faced with children of varying types of behaviour, albeit positive and negative.

It is incumbent on the teachers to help children whose behaviour and attitude leaves much to be desired. At this stage of their growth kids suffer from peer influence and will readily copy what their friends do without giving a thought to the correctness of what they are copying.

Such problems are well addressed in PTA meetings so as to keep the parents aware and so enable them to be vigilant with their kids while they are on holidays. Some kids exhibit tendencies which their parents are not aware of and these are brought to the notices of the parents when parents and teachers meet under the umbrella of a PTA meeting. The fact of having parents assemble as we are doing today is very important because parents also have the opportunity to discuss first hand with teachers on individual and private basis. Parents become aware of certain negative attitudes of their kids known only by the teachers, and this helps the parents to work in correcting such attitudes while the kids are on holidays.

SHARING OF IDEAS:

From the above expose, we realize that the PTA meeting is very important as a forum for sharing ideas all geared towards helping our children develop both academic and moral strength and integrity. As parents we want the best for our kids and we want to know and understand the environment in which they learn, the comfort of the environment the facilities made available to achieve a holistic education.

It is a well known and established fact that school environment and regulations have been improved and made more conducive for learning over the years through a great deal of participation and contribution of ideas from parents.

Parents and teachers have worked together to improve on the living standards of the children, by providing structural facilities, such as good water supply, sports facilities, medical facilities, etc, which have contributed a great deal in enhancing the living standards of the children, as well as their condition of health, etc.

CONCLUSION:

The more comfortable our children are in schools, the less worrisome we shall be as parents and as the old saying goes more heads are better than one, a PTA is very essential to cater for the needs of our kids to help them perform excellently both academically, morally and spiritually. The PTA is therefore essential to achieve these goals.

Assessing accountability.

Meaning

Accountability of teacher is very significant aspect in teacher education. It is very essential for quality assurance in education. The concept is more relevant in profession like teaching to ensure teachers responsibilities. This is necessary if educational accountability is to be successfully implemented.

Good Biddle and Murphy define accountability as follows:

1. Making them responsible for people is accountability.

It is not unilateral concept. In the educational system the principal,   teachers and non-teaching staff and the community is accountable for the products of education

According to Webster's Encyclopedia Dictionary, accountability means one's subjection to having to report, explain or justify and he is responsible and answerable to somebody else.LeonLessinger(1971) stated that "accountability is the product of a process." Accountability means that apublic or private agency entering into a contractual agreement to perform a service will be heldanswerable for performing according to agreedupon terms, with an established time period, and witha stipulated use of resources and performance standards. (Taylor 1992).In layman's language accountability means an accounting of one's performance with respect tothe responsibility given to an individual. The account of his or her performance is taken by an. authority or by the society in general. Accountability is thus-measurement of the assignedresponsibility actually performed by a person or a group. The term 'accountability' is concerned withthe total outcome of the task given. Every employee is directly accountable to his superiors andorganization and finally to the public or the society at large. Accountability may be regarded as anacid test for measuring efficiency and proficiency of the employees at their respective placements. Ittouches upon the sincerity of purpose, commitment and devotion to duty and profession. (Mohanty,2000)Teaching is a profession like any other profession but the roles and responsibilities of a teacher are more significant than in many other professions as he is regarded as an important source or generator and transmitter of knowledge, a creator of values and a self-sacrificing nation builder. That is why the teacher is apt to be more accountable than any other public servant.Accountability has two aspects- moral and legal (Wagner, 1989). Moral accountability is basedon upon a sense of responsibility, a feeling that one is responsible to one's clients (students andparents)to colleagues and to oneself. Legal accountability is being responsible to one's employeronly in terms of fulfillment of terms of employment. Formaintenance of quality it is necessary todevise an accountability evaluation system which shifts the emphasis from legal accountability tomoral accountability to generate a feeling of responsibility rather than the feeling of failure.(Powar,2002)

Criterion for Accountability

According to Gnanam (1995) the following criteria (having moral and legal basis) may be considered to ensure teacher accountability to their students, their parents, their community and their

profession:

1. Regularity and punctuality of the teachers in performing their jobs.

2. Innovative methods of teaching evolved and or adopted for effective teaching, leading to generating interest and motivation and independent thinking on the part of students.

3. The number of level of courses taught and developed, number and quality of research papers published, research projects undertaken and Ph.D.'s guided.

4. Co-ordination and co-operation extended to colleagues and authorities.

5. Contribution to the construction of curriculum, design of evaluation methods, preparation of learning/reading materials and role played in student counseling and remedial teaching.

6. Seminars conferences and symposia organized at university level, and international level. Fellowship, awards and recognition received.

7. Higher positions secured outside the institution.

8. Office held in national or regional or international organization.

9. Contribution in resolving the social issues, international issues and issues related to national concern and priorities.

10. Contribution to environment preservation, co-curricular activities and extension services.

11. Implementation of comprehensive objective evaluation system in overall evaluation process of the institution.

13. Role played in enrichment of campus life, student welfare and ensuring quality education

Dimension

➢ STUDENTS
➢ Love and affection for children.
➢ Tolerance towards their mistakes, mischief coupled with their pedagogically correct interpretation.
➢ Towards this progress and development.
➢ Towards their human empowerment.

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Core for the development of quality of life among the children

PARENTS

- Children of the poor and deprived section need extraordinary care and love
- Encouragement to make them educated
- Encouraging Adult to joint adult education and non-formal education
- Enrolment of children into formal school
- Develop sense of equity for the children of the poor and illiterate parents.
- Community mobilization for development of school.
- Willingness to participate in enrollment drives.
- Develop a sense of belongingness with the community
- SCHOOLS AUTHORITIES

School Manegement

- Account to the management, action acts, programmes.
- Develop mutual trust and respect.

Education Department

- Follow rules and regulations with meticulous care.
- Obedience and strict observance of education acts, programmes and policies.
- Participation in department programmers' whole heartedly.

- GOVERNMENT SUPERVISION

Teaching is a highly regulated profession. As well, teachers continually enhance their practice by:

- assessing their own learning needs and developing annual professional growth plans;
- participating in professional development activities at the school, school board, and provincial level;
- addressing critical issues, sharing ideas and working on grade activities in divisional meetings;
- attending curriculum meetings;
- presenting workshops;
- taking courses to enhance their learning;
- mentoring peers;
- writing curriculum; and
- serving on in-school, board and provincial committees.

strategies for Nurturing teacher accountabilty.

1. Allocation for construction of school building should be increased in the central and state budget, and community resources mobilized on the basis of equalization. Loans and grants in aid should be given on a liberal basis to provide schools for the constructed of building.

2. The norms and guidance available as a result of the work of a number of committees appointed by the central and state governments and on behalf of Ministry of Education, the Ministry of works and the planning commission, U.G.C. and the central building Research Institute of Roorke and the Indian standard institute, for spacing and planning of school buildings should be put into practice.

3. In view of the shortage of traditional building material and the cost involved, well – designed and constructed Kacha structures should be accepted as a part of the school system.

4. In rural areas, efforts should be made to encourage local initiative and contribution in putting up school buildings. The "nuclear" approach suggested by the Ministry of Education is recommended for general adoption.

RECOMMENDATION OF VARIOUS COMMISSIONS

The recommendation of various commissions is as follows:

Kothari Commission made important recommendations regarding salaries of teachers their status

- ➤ Intensive and continuous efforts are necessary to raise the economic, social and professional status of teachers and to attract talented young persons into the programmes.

- ➤ The most urgent to upgrade the remuneration of teachers substantially particularly at the school stage.

- ➤ The system of retirement benefits to the teachers should also of uniformity and purity.

The recommendation of Indian Education Commission 1964-66

- • In view of the present unsatisfactory position regarding school building it is necessary to take steps to clear the backlog of unobstructed school.

- • In 1982 the hunter commission came into existence. The commission suggested that the government should conduct examinations for the teacher's trainees both in principles of teaching and practice teaching Jobs were given to the successful candidates. At the same time the Indian Education Commission (1882) also made the training of teachers a condition nor for initial employment is any school but for permanent employment. At the end of the 19th Century there only 'six training college' in India for secondary school teachers. There were name none Bombay.

- •   1900-1950 was the crucial period in the "Teacher Education". The government of India's resolution on education policy,1904,emphasized that the time has came to extend the system to all provinces where it does not exist and supply trained teachers which shall be adequate to the needs of the secondary schools throughout the country. The resolution also laid down the following norms for establishment of training institutions.

NPE (1986) calls upon teachers to be accountable to the students, parents, community and theirown teaching profession. It enunciated that a system of teacher evaluation –open, participative anddata based would be created. It also stated that norms of accountability would be laid down withincentives for good performance and disincentives for non-performance.

According to the Annual Status of Education Report (ASER-2010), the student learning levels in India is abysmal- 46% of 5thgrades cannot read basic text in their local language; and 64% cannot do basic mathematicalfunctions. The drop-out rates are very high(more than 50% drop out by 8th grade) and only 12.4%actually graduate from college. This all can be explained only by one factor-Accountability. Almost65% of the teaching resources are wasted in India as a result of teacher absence and inactivity inschool classrooms. Teacher absenteeism is chronic in India and only half the teachers who areactually present in the classroom are actively teaching. The lack of teacher responsibility in Indiastems from poor monitoring, high level of corruption, influence and power of teacher unions,inability to hire/fire teachers, seniority-based salary structure and extreme centralized nature of theeducational system.

According to IIM Calcutta Report on Education (2010) - 'teacher's accountability is a concern'.It points out 'managing committees do not spend time on academic matters. The committees spendmost of the time on matters concerning physical infrastructure.'It is essential to ensure that a teacherregularly spends 5 hours in the school every working day. A teacher should also take classes as perschedule.The report recommends innovative means of learning and incentives. An incentives scheme(in the lines of PratibhaParvin Madhya Pradesh) may be launched for the teachers in primary andupper primary schools (Indian Express, 4th July 2010).

Research trends in Teachers Education.

Educational research is that which develops new knowledge, which is then applied to the improvement of educational practice. Same is true for Teacher Education. The contributions of research to educational knowledge are easy to demonstrate through reviews of related literature. However, it is difficult to determine whether the accumulation of research findings has made an impact on thepractice of education. Even when research knowledge attracts

The attention of policy makers in education, they generally consider itjust one source of information to use it in shaping a particular policy, or use it to justify a unpopular decision, or

cut funds, or may dismiss the research findings which are contradictory to their beliefs.In spite of this research in education in general and teacher education in particular continues to grow and make its contributions to the body of knowledge.

NATURE &PURPOSE OF RESEARCH INTEACHER EDUCATION:

Essentially thereare two broad purposes of research inTeacher Education.

(1)To understand the educational phenomenon and (2) To transform it

TRENDS IN RESEARCH IN TEACHEREDUCATION:

Quantitative Leap:

The first study reported in Teacher Education was by Banerjiin 1956. After the first study was reported the First Survey reported45 studies on Teacher Education upto 1973. The Second Surveyduring the next five years i.e. up to 1978 reported 65 studies. During the period 1978 to 1983, 116 studies were reported. The growth of researches in Teacher Education indicates that the researchers were getting attracted towards this area. Some of t

he reasons cited for this attraction were easy accessibility of sample for the studies, availability of ready-made tools and expertise.

Systematization of Instruction:

Instruction dominated by lecture' method, which is usually aone way interaction and often unstructured was called the traditionalmethod. Research on instruction show a shift of emphasis fromlecture methodto structured methods such as programmed learning,

instructional model-based teaching or structured lectures. The purpose of research was to make instruction at Teacher Education level a systematic activity. The main intention was to makeinstruction reproducible. Further, the purpose was to develop instructional strategies for Teacher Education.Larger Coverage of Objectives:

Attempts to cover a larger number of objectives was seen.These included classroom interaction analysis for objectiveevaluation of lessons to achieve the objective of understanding dynamics of classroom teaching. Micro-teaching studies aimed at

developing skills of teaching. Programmed learning for imparting theoretical knowledge. Discussion as an alternative method for developing social interaction skills and higher order cognitive skills, and simulation for development of application and decision making skills and abilities were also areas of research. The trend which emerges indicates that objectives of teacher education were researched.

Alternative Model: Earlier researches on the Harbartian model as a method of teaching, Flanders interaction model, micro-teaching were seen as the behaviouristic models. However,

recent researches indicated a different trend wherein other behaviouristic models such as Concept Attainment, Inquiry Training, Advanced Organizer Models. This was indeed a welcome change. During the current period researches on the context, presage, process and product variables highlighting the importance of areas of teaching and learning styles of teachers and students, cognitive styles, student and teacher characteristics, management of educationand technology of education and technology in education are gainingimportance and attention of researchers.

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UNIT – V

Improvement of quality of Teacher Education

After studing this unit you will be able to

- Identify different organizations for quality improvement in teacher education
- Explain Role of the following organizations in quality improvement in teachereducation- Indian Association of pre-school Education(I.A.P.E), Indian Association of Teacher Education(I.A.T.E), Primary and secondary Teachers Organizations, National Council for Teachers Education(N.C.T.E), National Assessment and Accreditation Council(NAAC).

Role of Different Organizations for Improvement in quality of Teacher Education

Indian Association for Preschool Education (IAPE)

A national level voluntary organization established in 1964 with the intention of bringing together the professionals in the field of early childhood education in the interest of young child.

Philosophy

IAPE is a committed organization working towards quality in early childhood education. Through our programs it empowers concerned adults towards creating a joyful childhood for each child. We bring together professional experts and make available their experi ences to others. We promote a comprehensive approach towards a child's development. We strongly believe that any early childhood programme must promote allround, total, integrated and balanced development of the child in a harmonious environment through developmentally appropriate learning experiences

Programmes:

- Workshops on varied topics for enhancing teaching skills and knowledge throughout the year at regular intervals.
- Refresher courses are held annually to generate an awareness of innovative ideas and methods in teaching learning process.

- Conferences: specific themes chosen for conferences held in different parts of the country to bring together researchers, experts and practitioners.

- Seminars: seminars on relevant trends and issues in the field of ECE development aiming to increase awareness are conducted.

- Parent interaction programme: internal and open forum for discussing issues with expert panelists for various disciplines.

- Need based parents programme to enable them towards more effective parenting is undertaken in schools.

- Consultancy: need based consultancy services provided by professional experts for individual setups such as space, organizing, curriculum planning, in-service training, sustained monitoring and evaluation of the programme.

- Publications: a Journal "Balak" is published for members.

- Advocacy and networking: Advocacy on issues affecting children and networking with other likeminded organizations for further cause of young children.

Indian Association of Teacher Education(I.A.T.E)

Indian Association of Teacher Educators (IATE) the oldest and leading professional body of teacher educators of India was established on 25th Nov, 1950 at MS University of Baroda due to initiatives of eminent educationists like late Prof. T. K. N. Menon, Late Prof. Hansa Ben Mehta and Late Prof. S.N. Mukerjee. It was registered under Societies Registration Act in 1966. IATE has been playing significant role in providing a platform to teacher educators of India and neighboring countries for meaningful deliberations on various issues related to education system in general and teacher education in specific. It has made ventures in influencing policy decisions in shaping teacher education programme in the country. Organization of annual conferences, national and international seminars and workshops as well as publication of its journal are some of the regular features of IATE. Currently it has life membership of more than 2,000 covering different regions of the country. **Objectives of the Association are:**

- To develop and promote teacher education
- To provide a forum for discussion and deliberations on issues and problems related to education in general and teacher education in particular

- To conduct workshops, seminars, conferences etc. on teacher education and related areas
- To publish journals, monographs and other literatures on teacher education
- To co-operate with organizations working in the area of teacher education

Resolution of General Body of IATE

This resolution was adopted by the General body of IATE on 23 December in the conference Hall of the Dept. of Education& Allied Sciences, M.J.P. Rohilkhand University during 44th IATE Annual Conference, Bareilly (22-24 December, 2010)

- National Curriculum Framework for Teacher Education 2009 prepared by the NCTE should be modified and National Consultation / debate must be organized by NCTE for removing anomalies. The IATE shall send its observations to NCTE.
- Superannuation age of NCTE Chairperson & Vice-Chairperson should be similar to that of the Vice-Chancellors of Central Universities.
- Like other professional courses the interns of teacher education course should be given suitable stipend from NCTE/UGC.
- A National Teacher Education University should be established. The existing status of NCERT should be maintained.
- Commercialization of Teacher Education must be stopped forthwith to avoid exploitation of teacher educators and students by the private managements.
- B.Ed. should remain essential qualification for admission to M.Ed. courses. The admission criteria suggested by NCTE be modified immediately.
- UGC Qualification should be endorsed by the NCTE for appointment of faculty for B.Ed. / M.Ed. courses.
- Individual Life membership of IATE should be enhanced to Rs. 1000/- and institutional life membership to Rs 5,000/- from January 2011 and corpus fund from this may be created so that routine expenditure be made from the interest earning from that.
- The state Govt. / Universities should ensure the fair deal for teachers in private teacher education institutions.

Primary and secondary Teachers Organizations

Professional organizations and teacher association can play leading role in quality enrichment among proimary and secondar school teachers.These organization or association hold their meetings and discuss on various issues in education and related subjects, encourage experimentation, research and innovation, thus cater the general and specific need of professional growth of members as well as other teachers.These organization also publish journals, bulletin, on line resources helpful for professional enlightment

AIPTF

All India Primary Teachers Federation

India, New Delhi, India

The idea and the efforts for uniting teachers to effectively represent their grievances and just demands to their authorities were seriously initiated during the struggle for independence by the teachers leaders of that time . Soon after the independence the unity among teachers was seen through the formation of teachers organizations in various states of India. After the independence of India there was no significant improvement in the status and the conditions of primary teachers . So the idea of setting up of an organization of primary teachers at the national level came to the minds of leaders . A national level body called All India Primary Teachers Federation came into the existence into the year 1954 . Pandit Jawahar Lal Nehru, the then Prime Minister of India inagurated its first conference at Nagpur on 7th January 1954. It is the apex organization of Primary teachers in the country. More than 2.5 million teachers are its members. Almost all the state primary teachers associations are affiliated to it. The AIPTF is affiliated to Education International (EI). AIPTF is working for the betterment and upliftment of education since its inception to improve the quality of education and status of teachers. It has restricted its activities as a trade union to safeguard socio economic interests, salary , service conditions and the general welfare of primary teachers in India.

Aims and Objectives :

- To make every effort to build the nation by actively encouraging participation in economic ,social, educational, political , mental and moral development of teachers .
- To work for the development of primary teachers in India.

- To work for the improvement of the educational system on the basis of spirit of cooperation leading to self sufficiency.
- To foster the spirit of brotherhood and cooperation among all members of the profession.
- To improve the working and living conditions of the teachers .
- To promote the standard of education and reestablish it in the society .
- To make aware the teachers in the concerns of their professional and organizational responsibilities and rights.
- To safeguard and promote the rights and privileges of primary teachers on matters relating to employment service conditions and create consciousness about duties and responsibilities.

Structure Of AIPTF :

The organization is a homogenous corporate of the following :

- The affiliated State Organizations
- The General Council ,representing the affiliates
- The Working Committee ,representing the General Council

The Working Committee meets at least thrice in a year and the General Council at least twice a year to elect its office bearers .

Activities at the National Level:

AIPTF organizes the following activities to realize its aims and objectives and to achieve its goals.

- Seminars and workshops on Educational issues affecting Primary Education .
- Eradication of Child Labour
- Elimination of Violence Against Women .
- Women Empowerment
- Girls Education
- HIV/AIDS Education
- Value Education
- Developing professional competency among primary teachers.

- Agitations , Dharnas on issues related to Education and teachers problems .
- Against Para Teachers Recruitment and getting them trained and bringing them into mainstream
- Global Action Week.

Policies :

AIPTF has developed policies to achieve its goal. The emphasis is to empower its affiliates and its leadership through various strengthening measures such as seminar, workshops, roundtables . It has also initiated advocacy campaigns, industrial actions from .grass root level to national level , research on educational policies , its implementation and evaluation to lobby for acceptance of its demands in the large interest of the teaching community .
AIPTF has further resolved that it will impart education and awareness on HIV/AIDS and promote health education in schools .

Relationship of AIPTF with National and International Bodies:

AIPTF has established linkages with international, national, regional and local organizations and facilitates periodic meetings, conferences, training courses etc. AIPTF is member in many high level committees of Government of India ,Department of Education ,Ministry of Human ResourceDevelopment , Women and Child Development , National Council for Education, Research and Training(NCERT),National AIDS Control Organisation (NACO) Ministry of Labour , National Council for Teacher Education (NCTE), National Commission for Protection of Child Rights (NCPCR),National Committee on Sarva Shiksha Abhiyan headed by the Prime Minister of India and to name a few .

International Linkages :

AIPTF also enjoys the patronage by many international organizations like Education International (EI), UNESCO,UNICEF ,ILO ,World Bank ,Global Campaign for Education (GCE) ,Global Union Federation(GUF) SAARC Teachers Federation (STF), etc.

Achievements of AIPTF :

- The continuous efforts and agitations by AIPTF and its affiliates has successfully led to the passing of Right to Education Bill by the Government of India in 2009 .
- Regularizing and mainstreaming the Para teachers in many states for Quality Education .
- Pressurizing the states Government to implement the recommendations of VI Pay Commission set up by the Government of India .

AIFTO

All India Federation of Teachers' Organizations, Ahmedabad, India

Background:

AIFTO was established on 23 January,1976 with following objectives:

(a) To use resources to teach, to do research work and to serve the society and the world,

(b) To serve the public good and to be the stewards of knowledge and to use it for building a peaceful and just world.

(c) To seek excellence at every level in teaching and learning process.

(d) Building national atmosphere for the profession with regards to professional ethics and equitable salaries and curriculum improvement.

AIFTO's Vision

AIFTO desires to visualise totally literate India. Every child to be in school and not at work place The child getting quality education from qualified teachers. Teachers professional dignity is not compromised under any pretext. A teacher to become a friend, philosopher guide and leader of the community around.

AIFTO's Mission

Mobilising teaching community to struggle for the professional excellence and dignity. The teaching community to integrate its interests in the well-being of students in the class and the society. The teacher to champion the new ideas to take care of the new challenges of the century before the society. The teacher should become the rallying point to spearhead the fight against the out-dated ideas of gender inequalities, discrimination based on cast, creed and gender and should strife for a strong integrated peaceful and just world.

AIFTO's Major Goals

- Organising education workers.
- Building professional excellence.
- Better service conditions.
- Research and training.
- To work for professional excellence

Activities **:** *At present AIFTO is working on three issues :*

- Quality Education for All,
- Women Empowerment
- Professionalism in teachers

Publications

AIFTO News (Monthly),The Swayam Siddha (Women Quarterly),

Quality Education in India Trends and Strategies Quality Teachers Required for Quality Education

HIV/AIDS Poses Threats to India HIV/AIDS and STDs,

Profile of Para-teachers in India ILO Workplace Policy Code of Professional Ethics for Teachers

The Right to Children to Free and Compulsory Education

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Survey Reports

All India Schools Science Teachers Association (A.I.S.S.T.A)

Eminent Educationist from different parts of India associated and formed an Educational theatre to provide techniques in **Science** for development of mental skill to the youngsters. Since then the aim of forming this Association is well achieved. The year **1990** was the establishment year when a group of eminent Educationists from different parts of the country assembled and formed an Association with the name of **All India Schools Science Teachers Association (A.I.S.S.T.A)** to serve the noble cause of education with an aim to provide the latest techniques in **Science** subject to the youngsters and to feed them to improve their knowledge so as to find a place for them in the competitive world.

Since then, the Association has come a long way in achieving its aim to motivate the students to sharpen their skills and talent mentally. They are also gaining tremendous knowledge to partake in future competitions. Moreover it is a self practice event before their final examination. The **AISSTA** is moving ahead with distinctive vision and philosophy. It is emerging as a conglomerate of institutions and comprising real knowledge developing body of modern generation.

  Every year numerous numbers of schools are adding up to the member's list of **AISSTA**. This support makes us work more efficiently towards our goal of making examination innovatively more competitive and challenging.

The **National Science Olympiad contest** is an event that brings together schools from not only **India** but also from **Japan, Kingdom of Bahrain, Thailand, Saud i Arabia, Doha-Qatar, Dubai, Kuwait, Sultanate of Oman, Republic of Yemen, Tanzania, Moscow and Indonesia**. This event is truly a Global event and it is possible only with the help of Principals & Organizing Staff involvement that an event of this magnitude can be organized smoothly.

The Association feels proud that most of the parents are taking keen interest to awakening their wards to participate in the contest and the Association is more excited to see that our aim and object of getting most meaningful education to a different level is achieved.

All India Schools Mathematics Teachers Association (A.I.S.M.T.A)

The year **1990** was the establishment year when a group of eminent Educationists from different parts of the country assembled and formed an Association with the name of **All India Schools Mathematics Teachers Association (A.I.S.M.T.A)** to serve the noble cause of education with an aim to provide the latest techniques in **Mathematics** subject to the youngsters and to feed them to improve their knowledge so as to find a place for them in the competitive world.

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The **National Mathematics Olympiad contest** is an event that brings together schools from not only **India** but also from **Japan, Kingdom of Bahrain, Thailand, Saudi Arabia, Doha-Qatar, Dubai, Kuwait, Sultanate of Oman, Republic of Yemen, Tanzania, Moscow and Indonesia**. This event is truly a Global event and it is possible only with the help of Principals & Organizing Staff involvement that an event of this magnitude can be organized smoothly.

Indian Association of Physics Teachers

IAPT was established in the year **1984** by the great visionary late **Dr. D.P. Khandelwal** with active support from some physics teachers with the aim of upgrading the quality of physics teaching and physics teachers through a mass movement of dedicated teachers.

Since then it has grown into a major organization with **more than 11000 member**s of which 7000 are Life-members, 65 are institutional membersd and about 100 of them from abroad. The members include research workers, science administrators, science savvy enthusiasts, university, college and school teachers.

The Association of Chemistry Teachers (ACT)
The Association of Chemistry Teachers was launched in 2000 to serve as an apex national
body of chemistry educators to promote excellence in chemistry education. The Association brings together on a common platform higher secondary school teachers, college and university lecturers, professors, scientists and researchers from industry for organizing subject related activities. Since its inception, ACT has worked tirelessly to strengthen chemistry education in India and to motivate students to pursue chemistry as a career.
Objectives
1.To advance Chemistry education by means of curriculum development and innovation in teaching and evaluation methodologies.

2. To organize workshops and conferences including an Annual National Convention of Chemistry Teachers (NCCT) in different cities and regions.

3. To forge a synergistic relationship between academia, industry and research centres for mutual benefit.

4. To explore and nurture talent in Chemistry with special reference to the Indian National and International Chemistry Olympiads.

5. To collaborate with International Science Teachers' organizations for exchange of ideas and organization of joint programmes.

Activities:

ELTAI

The largest Network of Teachers of English in India (An Associate of IATEFL, UK)The English Language Teachers' Association of India (ELTAI) was founded on August 7,1974 by the late Padmashri S. Natarajan, a noted Educationist.

It brings out "The Journal of English Language Teaching", a bi-monthly, and it is given free to all the members of the Association. Our consultancy services offer Teacher training packages and organize bi-monthly meetings on current ELT themes relevant to the Indian context.

It hosts annual conferences and regional conferences on specific areas relevant to the ELT scenario today. Delegates from all over the country as well as the world outside participate in them, present papers and conduct workshops.

MISSION

It provides a forum for teachers of English to meet periodically and discuss problems relating to the teaching of English in India.

help teachers interact with educational administrators on matters relating to the teaching of English.

disseminates information in the ELT field among teachers of English.

undertake innovative projects aimed at the improvement of learners' proficiency in English.

promote professional solidarity among teachers of English at primary, secondary and university levels and

strive promote professional excellence among its members in all possible ways.

VISION

ELTAI envisions to make India a hub of ELT related activities and to conceptualize the experiences of English language teaching-learning and symbiotically share them with others.

ELTAI shall develop into a movement spreading across the length and breadth of the country empowering teachers to make every learner of English globally competitive. ELTAI shall aim at becoming a recognized leader, a catalyst. A facilitator and trendsetter in spreading English literacy.

NSTA

The National Science Teachers Association (NSTA), founded in 1944 and headquartered in Arlington, Virginia, is the largest organization in the world committed to promoting excellence and innovation in science teaching and learning for all. NSTA's current membership of 55,000 includes science teachers, science supervisors, administrators, scientists, business and industry representatives, and others involved in and committed to science education.

NSTA's Guiding Principles

- Model excellence;
- Champion science literacy;
- Value scientific excellence;
- Embrace diversity, equity, and respect;
- Enhance teaching and learning through research;
- Collaborate with partners; and
- Exemplify a dynamic professional organization.

NSTA's Strategic Plan

In the fall of 2014, NSTA unveiled its new strategic plan, *NSTA Strategic Goals 2015*. The plan identifies six overarching goals that will provide a road map to guide and prioritize the work of the association over the next five years. Goals include:

1. **Advocacy** – Raise the status of science education and science teaching as a profession by advocating for high-quality science education within national, state, and local contexts.

2. **Professional Learning** – Enhance the professional learning of science educators by providing a suite of tools, resources, and opportunities that support long-term growth within a collaborative learning environment.

3. **Next Generation Science Standards and STEM** – Revitalize science education to boost student achievement and science literacy, and bolster U.S. economic standing.

4. **Elementary Education** – Nurture scientific curiosity among children in the earliest grades.

5. **Membership** – Enrich the NSTA membership experience through enhanced peer-to-peer engagement and differentiated benefits.

6. **Internal Organizational Goals** – Fulfilling the goals and objectives outlined in this plan requires updates in infrastructure, as well as certain tactical staff supports.

Governance

The NSTA Board of Directors consists of elected officers and directors representing the ten divisions within the organization. The Divisions are:

- Preschool and Elementary Division
- Middle Level Division
- High School Division
- College Division
- Informal Science Division
- Division of Research in Science Education
- Division of Coordination and Supervision
- Division of Preservice Teacher Preparation
- Division of Multicultural/Equity in Science Education
- Division of Professional Learning

The Executive Director is a nonvoting, ex-officio secretary and there is a nonvoting ex-officio treasurer. There are three elected members in the presidential chain: the president-elect, the president and the retiring president. Each of their terms is one year.

The NSTA Council is composed of one director elected from each of NSTA 18 districts. The NSTA Council serves as the advisory body to the Board of Directors. The Council makes recommendations for consideration by the Board of Directors and attends all meetings of the Congress as non-voting members. All members of the Council have the responsibility for promoting NSTA programs.

The Alliance of Affiliates consists of one voting delegate from the NSTA affiliate organizations. NSTA Affiliate organizations include:

- Association for Science Teacher Preparation
- Association for Multicultural Science Education
- Council for Elementary Science International
- Council of State Science Supervisors
- National Association for Research in Science Teaching
- National Middle level Science Teachers Association
- National Science Education Leadership Association
- Society for College Science Teachers

The Congress comprises one voting delegate from each Chapter and Associated Group. The NSTA Congress meets each summer for the purpose of identifying and examining issues from the local perspective.

The Center for Science Education Campaign

The Center for Science Education Campaign—led by Honorary Chair Senator John Glenn—is a $43 million national effort to make excellence in science teaching and learning a reality for all U.S. students. This effort—one of the most significant ever undertaken by NSTA—will fund a body of forward-thinking programs and initiatives that promote leadership, learning, and advocacy in science education. An extraordinary state-of-the art facility will house these programs and serve as a national home base for all teachers of science. Learn more.

Journals and Publications

To address subjects of critical interest to science educators, the Association publishes a professional journal for each level of science teaching; a 52-page newspaper, *NSTA Reports*;

and many other educational books and professional publications. Publications, books, posters, and other educational tools are available through the NSTA Recommends catalog and online.

Professional Learning

NSTA offers a wide range of professional learning opportunities for science educators at all levels, including the NSTA Learning Center, NSTA Conferences on Science Education, Research Dissemination Conferences, NSTA New Science Teacher Academy, and much more.

Conferences

To enhance professional learning and provide networking forums for science educators, each year NSTA conducts a national conference and a series of area conferences. These events attract over 30,000 attendees annually. At the conferences, teachers may choose from hundreds of workshops, demonstrations, and presentations covering every discipline, grade level, and teaching focus. They hear nationally renowned speakers address the hottest topics in science education and learn about the latest breakthroughs from experts in the field.

Science Matters

NSTA's Science Matters initiative is a major public awareness and engagement campaign designed to rekindle a national sense of urgency and action among schools and families about the importance of science education and science literacy. Science Matters builds on the success of the Building a Presence for Science program, first launched in 1997 as an e-networking initiative to assist teachers of science with professional learning opportunities. The Building a Presence for Science network—now the Science Matters network—reaches readers in 34 states and the District of Columbia.

Awards and Recognition Programs

Each year the Association and its sponsors reward and recognize teachers and students with cash awards, school supplies and materials, trips to our national convention, U.S. savings bonds, and more. NSTA administers a robust Awards Program and several exciting competitions to recognize the professional efforts of teachers and the innovative talents of their students.

Advocating for Science and Science Teachers

The Association serves as an advocate for science educators by keeping its members and the general public informed about national issues and trends in science education. NSTA disseminates results from nationwide surveys and reports and offers testimony to Congress on science education-related legislation and other issues. The Association develops position statements on issues such as teacher preparation, laboratory science, use of animals in the classroom, laboratory safety, and elementary and middle level science.

The Association of Mathematics Teachers of India (AMTI)

The Association of Mathematics Teachers of India is a registered body founded on 27th June 1965 and registered as SI43/1965 under the Societies Registration Act XXI of 1860 on 29 October 1965. It is an academically oriented premier organization of professionals and students interested in the field of mathematics and mathematics education.

Objectives

- To assist practising teachers of mathematics at all levels in improving their expertise and professional skills making mathematics interesting and enjoyable.
- To spot out and foster mathematical talent in the young.
- To disseminate new trends in Mathematics Education.
- To offer consultancy services to schools.

Periodicals

- The official Journal of the Association "The Mathematics Teacher (India)" is published quarterly in English and is sent to members free. (Quarterly issued twice a year combining two at a time).
- The Journal for students - JUNIOR MATHEMATICIAN - is published tri-annually in English before the commencement of vacation(s) and is supplied only to the subscribers through the respective schools, wherever possible. (Issued thrice a year - September, December and March).

Activities

- Conducting National Mathematics Talent Contests. (NMTC)

- Conducting Grand Achievement Test. (GAT)
- Arranging Exposure Programmes for talented students.
- Organising Orientation Courses, Seminars and Workshops for teachers including suggestions to equip the mathematics section of their libraries and laboratories.
- Organizing National Conferences in different parts of the country to meet and deliberate on important issues of Mathematics Education.
- Giving Distinguished Mathematics Teacher Award to enterprising and pioneering teachers of Mathematics.

Odisha Secondary School Teachers' Association (OSSTA)

Odisha Secondary School Teachers' Association popularly known as OSSTA has been working in the state with Head Quarter at Nayasarak, Cuttack to bring about a new change and add something conducive for the growth of Education in the state to improve the academic activities and uplift the social and financial status of the inmates of the association.

Vision and Mission

1. To improve the Present system of education by all its legitimate means.
2. To have effective voice in shaping of the Secondary Education in ODISHA.
3. To improve the professional ability and social status of its members.
4. To foster spirit of brotherhood among all teachers and employees of all grades and classes .
5. To promote the status of the secondary Teachers and employees of the state.
6. To secure adequate representation of secondary School Teachers in the Board of Secondary Education and other controlling bodies.
7. To promote teachers and students welfare activities.
8. To create social awareness in connection with educational development in the state.
9. To develop and foster sense of morality and social commitment among the members.
10. To keep co-ordination with other Teachers Organisation at Block / District / State level.
11. To affiliate OSSTA with the Federal Teachers organizations of All India level, State level and abroad.
12. To promote the qualitative aspect of secondary education avoiding disparity.
13. To organize odia medium schools in the area outside the state.

14. To up hold the social Commitment of Teachers by organizing socio-economic and environmental seminars / discussions / Programmes.

15. To develop values / obligation within teachers / employees towards professional ethics.

Higher Secondary School Teachers Association (HSSTA)

The Departmental Higher Secondary School Teachers Association is the vanguard of the Government Higher Secondary School Teachers movement in Kerala. Having the distinction of being the only recognized organization of the Government Higher Secondary School Teachers of Kerala; it is steadfastly committed to its objectives of taking up the cause of the fraternity of teachers of Higher Secondary sector. HSSTA is unflinching in its efforts to make quality education accessible to all especially the marginalized sections of our society. Reinvigorated with the induction of most of the new generation teachers in the field, the Association is poised to advance its position on the bandwagon of change: educational, cultural, social and political.

KHSTU - (Kerala Higher Secondary Teachers Union)

Kerala Higher Secondary Teachers Union (KHSTU) is a govt recognized teacher organization which represents the higher secondary teaching community of Kerala. This organization has a pivotal role in streamlining the higher secondary system and in tackling the academic and service matters with clinical precision.

National Council for Teachers Education(N.C.T.E)

Introduction

The National Council for Teacher Education, in its previous status since 1973, was an advisory body for the Central and State Governments on all matters pertaining to teacher education, with its Secretariat in the Department of Teacher Education of the National

Council of Educational Research and Training (NCERT). Despite its commendable work in the academic fields, it could not perform essential regulatory functions, to ensure maintenance of standards in teacher education and preventing proliferation of substandard teacher education institutions. The National Policy on Education (NPE), 1986 and the Programme of Action thereunder, envisaged a National Council for Teacher Education with statutory status and necessary resources as a first step for overhauling the system of teacher education. The National Council for Teacher Education as a statutory body came into existence in pursuance of the National Council for Teacher Education Act, 1993 (No. 73 of 1993) on the 17th August,1995.

Objective

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. 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.

Functions of Council

It shall be the duty of the Council to take all such steps as it may think fit for ensuring planned and co-ordinated development of teacher education and for the determination and maintenance of standards for teacher education and for the purposes of performing its functions under this Act, the Council may:

a. undertake surveys and studies relating to various aspects of teacher education and publish the result thereof;
b. make recommendations to the Central and State Government, Universities, University Grants Commission and recognised institutions in the matter of preparation of suitable plans and programmes in the field of teacher education;
c. co-ordinate and monitor teacher education and its development in the country;

d. lay down guidelines in respect of minimum qualifications for a person to be employed as a teacher in schools or in recognised institutions;

e. lay down norms for any specified category of courses or trainings in teacher education, including the minimum eligibility criteria for admission thereof, and the method of selection of candidates, duration of the course, course contents and mode of curriculum;

f. lay down guidelines for compliance by recognised institutions, for starting new courses or training, and for providing physical and instructional facilities, staffing pattern and staff qualification;

g. lay down standards in respect of examinations leading to teacher education qualifications, criteria for admission to such examinations and schemes of courses or training;

h. lay down guidelines regarding tuition fees and other fees chargeable by recognised institutions;

i. promote and conduct innovation and research in various areas of teacher education and disseminate the results thereof;

j. examine and review periodically the implementation of the norms, guidelines and standards laid down by the Council, and to suitably advise the recognised institution;

k. evolve suitable performance appraisal system, norms and mechanism for enforcing accountability on recognised institutions;

l. formulate schemes for various levels of teacher education and identify recognised institutions and set up new institutions for teacher development programmes;

m. take all necessary steps to prevent commercialisation of teacher education; and

n. perform such other functions as may be entrusted to it by the Central Government.

Programmes Recognised by NCTE

NCTE notified revised Regulations and Norms and Standards on November 28, 2014 for the following Teacher Education Programmes:

a. Diploma in early childhood education programme leading to Diploma in Preschool Education (DPSE).

b. Elementary teacher education programme leading to Diploma in Elementary Education (D.El.Ed.).

c. Bachelor of elementary teacher education programme leading to Bachelor of Elementary Education (B.El.Ed.) degree.

d. Bachelor of education programme leading to Bachelor of Education (B.Ed.) degree.

e. Master of education programme leading to Master of Education (M.Ed.) degree.

f. Diploma in physical education programme leading to Diploma in Physical Education (D.P.Ed.).

g. Bachelor of physical education programme leading to Bachelor of Physical Education (B.P.Ed.) degree.

h. Master of physical education programme leading to Master of Physical Education (M.P.Ed.) degree.

i. Diploma in elementary education programme through Open and Distance Learning System leading to Diploma in Elementary Education (D.El.Ed.).

j. Bachelor of education programme through Open and Distance Learning System leading to Bachelor of Education (B.Ed.) degree.

k. Diploma in arts education (Visual Arts) programme leading to Diploma in Arts Education (Visual Arts).

l. Diploma in arts education (Performing Arts) programme leading to Diploma in Arts Education (Performing Arts).

m. 4-year Integrated programme leading to B.A.B.Ed./B.Sc.B.Ed. degree.

n. Bachelor of education programme 3-year (Part Time) leading to Bachelor of Education (B.Ed) degree.

o. 3-year Integrated programme leading to B.Ed., M.Ed (Integrated) degree.

NCTE Regulations 2014: Highlights

NCTE completed and notified the revised Regulations 2014, along with Norms and Standards for 15 programmes on November 28, 2014 under Government of India Gazette Notification No.346 (F.No. 51-1/2014/NCTE/N&S) by following the recommendations of the Justice Verma Commission (JVC) appointed by the Government at the instance of the Hon'ble Supreme Court of India. The JVC had suggested wide range reforms in Teacher Education which the new Regulations 2014 have addressed. The new Regulations are an outcome of wider consultations with stakeholders undertaken by NCTE.

The important highlights of Regulations 2014 are as under:

a. A wide basket with 15 programmes is on offer, recognising for the first time three new programmes – 4-year B.A/B.Sc.B.Ed., 3-year B.Ed. (Part-time), and 3-year B.Ed.-M.Ed. programme.

b. The duration of three programmes – B.Ed., B.P.Ed., M.Ed. – has been increased to two years, providing more professional rigour and at par with best international standards.

c. Henceforth, in place of stand-alone institutions, teacher education shall be established in composite institutions (multi-disciplinary or multi-teacher education programmes).

d. Each programme curriculum comprises three components – theory, practicum, internship; and at least 25% of the programme is developed to school-based activities and internship.

e. ICT, Yoga Education, Gender and Disability/Inclusive Education are integral part of each programme curriculum.

f. More integrated teacher education programmes are encouraged.

g. The teacher educator M.Ed. Degree comes with specialization in either Elementary Education or in Secondary/Senior Secondary Education.

h. Open and Distance Learning (ODL) has become more rigorous with built-in quality assurance mechanisms.

i. In-service teachers have more option to acquire higher TE qualifications—DElEd (ODL), B.Ed. (ODL), B.Ed. (Part-Time).

j. NOC from affiliating university/body is mandatory while making an application.

k. Provision of application, payment of fees, visiting team reports, etc. online. Centralized computerized visiting team for transparent use by both HQs and Regional Committees for inspection/monitoring. (For this, E-Governance is in the process of finalization).

l. Each teacher education institution to have compulsory accreditation in every 5 years from an accrediting agency recognized by NCTE. (An MoU has already been signed with NAAC in this regard).

National Assessment and Accreditation Council (NAAC).

he **NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL (NAAC)** is an autonomous body established by the University Grants Commission (UGC) of India to assess and accredit institutions of higher education in the country. It is an outcome of the recommendations of the National Policy in Education (1986) which laid special emphasis on upholding the quality of higher education in India. To address the issues of quality, the National Policy on Education (1986) and the Plan of Action (POA-1992) advocated the establishment of an independent national accreditation body. Consequently, the NAAC was established in 1994 with its headquarters at Bangalore.

Vision

To make quality the defining element of higher education in India through a combination of self and external quality evaluation, promotion and sustenance initiatives.

Mission

- To arrange for periodic assessment and accreditation of institutions of higher education or units thereof, or specific academic programmes or projects;
- To stimulate the academic environment for promotion of quality of teaching-learning and research in higher education institutions;
- To encourage self-evaluation, accountability, autonomy and innovations in higher education;
- To undertake quality-related research studies, consultancy and training programmes, and
- To collaborate with other stakeholders of higher education for quality evaluation, promotion and sustenance.

Guided by its vision and striving to achieve its mission, the NAAC primarily assesses the quality of institutions of higher education that volunteer for the process, through an internationally accepted methodology.

Rationale

Assessment and Accreditation is broadly used for understanding the "Quality Status" of an institution. In the context of Higher Education, the accreditation status indicates that the

particular Higher Educational Institutions (HEI) – a College, a University, or any other recognised Unit therein, meets the standards of quality as set by the Accreditation Agency, in terms of its performance, related to the educational processes and outcomes, covering the curriculum, teaching-learning, evaluation, faculty, research, infrastructure, learning resources, organisation, governance, financial well being and student services.

Activities

In addition to many Peer Team Visits which take place every day, the NAAC also facilitates conduct of workshops and seminars in accredited institutions. NAAC also partners with various State Governments and professional bodies to create an advocacy for assessment and accreditation. Assessors Interaction Meetings (AIM), IQAC Meetings and interaction with governmental agencies are an important part of NAAC's activities.

Process

Education plays a vital role in the development of any nation. Therefore, there is a premium on both quantity (increased access) and quality (relevance and excellence of academic programmes offered) of higher education. The NAAC has been set up to facilitate the volunteering institutions to assess their performance vis-a-vis set parameters through introspection and a process that provides space for participation of the institution.

Accreditation facilitates

- institution to know its strengths, weaknesses, and opportunities through an informed review process.
- identification of internal areas of planning and resource allocation
- collegiality on the campus.
- funding agencies look for objective data for performance funding.
- institutions to initiate innovative and modern methods of pedagogy.
- new sense of direction and identity for institutions.
- the society look for reliable information on quality education offered.
- employers look for reliable information on the quality of education offered to the prospective recruits.

- intra and inter-institutional interactions.

Eligibility Criteria for Institutions (w.e.f. 1st November 2013)

1) The following types of Higher Education Institutions (HEIs) are eligible to apply for the process of Assessment and Accreditation (A&A) of NAAC, if they have a record of atleast two batches of students graduated or been in existence for six years, whichever is earlier and fulfill the other conditions or are covered by the other provisions, if any, mentioned below :

a) **Universities (Central/State/Private/Deemed-to-be) and Institutions of National Importance**

- Provided further that the duly established campuses within the country, if any, shall be treated as part of the universities / Institutions of National Importance for the A&A process
- NAAC will not undertake the accreditation of off-shore campuses

b) **Colleges**(i.e., colleges/institutions affiliated to, or constituent of, or recognized by universities, including autonomous colleges)

- Provided Teacher Education / Physical Education colleges shall have a standing of atleast three years..
- However, colleges/institutions offering programmes recognized by Statutory Professional Regulatory Councils concerned as equivalent to a degree programme of a university shall also be eligible for A&A even if such colleges/institutions are not affiliated to a university.

2) **Any other HEIs** at the discretion of NAAC.

Note: The NAAC accreditation does not cover distance education units of HEIs.

NAAC's process of assessment is towards holistic, systematic, objective, data-based, transparent and shared experience for institutional improvement.

The process for assessment and accreditation broadly consists of:

- Preparation of Self-study Report (SSR), and uploading on the institution website prior to submission of LOI.
- On-line submission of the Letter of Intent (LOI).
- On-line submission of Institutional Eligibility for Quality Assessment (IEQA) for applicable institutions.
- Submission of Hard Copies of SSR
- Peer team visit to the institution.
- Final decision by NAAC.

The procedure and time line has been revised from 1st August, 2015

Units of Assessment

NAAC's instrument is developed to assess and grade institutions of higher education through a three-step-process and make the outcome as objective as possible. Though the methodology and the broad framework of the instrument is similar, there is a slight difference in the focus of the instrument depending on the unit of Accreditation, i.e., Affiliated / Constituent colleges / Autonomous colleges / Universities / Health Science / Teacher / Physical Education.

Institutional Accreditation:

- University: University Central Governance Structure along with all the Under Graduate and Post Graduate Departments.
- College: Any College - affiliated, constituent or autonomous with all its departments of studies.

Department Accreditation: Any department/School/Centre of the University.

Presently, NAAC is undertaking only institutional accreditation. Experts groups have been constituted to work on Program Accreditation

Criteria for Assessment

NAAC has identified the following seven criteria to serve as the basis of its assessment procedures:

- Curricular Aspects
- Teaching-Learning and Evaluation
- Research, Consultancy and Extension
- Infrastructure and Learning Resources
- Student Support and Progression
- Governance, Leadership and Management
- Innovations and Best Practices

Key Aspects

The Seven Criteria is further divided into "Key Aspects". Certain important Assessment Indicators are identified under the Key Aspects and the Seven Criteria which encompasses them, as probes or leads for the Peer Team members to capture the micro-level quality parameters. These indicators facilitate the computing of the Key Aspect-wise Grade Points (KA-GPS) and the Criterion-wise Grade Point Averages (CR-GPAs) in order to arrive at the quality status of the institution.

Weightages

The NAAC has categorized the Higher Educational Institutions into three major types (University, Autonomous College, and Affiliated/Constituent College) and assigned different weightages to these criteria under different key aspects based on the functioning and organizational focus of the three types of HEIs.

The criterion-wise differential weightages for the three types of HEIs are:

Curricular Aspects	150 (U)150 (Au)100 (Aff)
Teaching-learning and Evaluation	200 (U)300 (Au)350 (Aff)
Research, Consultancy and Extension	250 (U)150 (Au)150 (Aff)
Infrastructure and Learning Resources	100 (U)100 (Au)100 (Aff)
Student Support and Progression	100 (U)100 (Au)100 (Aff)
Governance, Leadership and Management	100 (U)100 (Au)100 (Aff)
Innovations and Best Practices	100 (U)100 (Au)100 (Aff)

Institutions are graded for each Key Aspect under four categories, viz. A, B, C and D, denoting Very good, Good, Satisfactory and Unsatisfactory levels respectively. The summated score for all the Key Aspects under a Criterion is then calculated with the appropriate weightage applied to it and the GPA is worked out for the Criterion. The Cumulative GPA (CGPA), which gives the final Assessment Outcome, is then calculated from the seven GPAs pertaining to the seven criteria, after applying the prescribed weightage to each Criterion.

Advantages of CGPA

- Letter grades converted to Numerical Grade Points (overall score in Cumulative Grade Point Average)
- Qualitative measurements converted to grade points
- Wider scope for normalizing the scores
- Extreme biases (if any) could be minimized
- A one point difference between two letter grades, with 50 or 100 points assigned between two successive letter grades results in appreciable fine-tuning of the process.
- Relative evaluation would be more exact, due to a reduction in variations and standard deviations
- Inter-Peer Team variations are substantially reduced
- With scare scope for adjustment at any stage, the peer team judgment would be more accurate
- CGPA computation
-
- The Assessment indicator guidelines are used for arriving at the Key Aspect Grade Points. The Key Aspects under each criterion have their own weightages according to the relative importance of the said key aspect in the context of the type of institution. Finally, at the criterion level, there are specified differential weightages according to the type of institution. Therefore, the grade points assigned to different Key Aspects and Criteria get normalized at two levels, before the final CGPA is calculated for the

institution. The CGPA is thus calculated with the application of weightages at two different levels of assessment.

- Assessment Outcome
- There are two outcomes of Assessment and Accreditation:
- 1.PeerTeamReport

  The qualitative part of the outcome is called Peer Team Report (PTR) which is an objective report prepared by the Team highlighting its evaluative judgements, mostly using precise keywords instead of long sentences.

- 2.InstitutionalGrading

  The quantitative part of the outcome comprises the criterion-wise quality assessment, resulting in the final Cumulative Grade Point Average (CGPA), a letter grade and a performance descriptor. The CGPA, letter grade and the performance descriptor constitute the certification by the NAAC on institutional accreditation. Thus, at the end of A&A process, each applicant institution will be awarded with a Letter Grade to represent its quality level along with its Performance Descriptor and Accreditation Status, based on the CGPA earned by it through the assessment process, as mentioned below:

Range of institutional Cumulative Grade Point Average (CGPA)	Letter Grade	Performance Descriptor
3.01 - 4.00	A	Very Good (Accredited)
2.01 - 3.00	B	Good (Accredited)
1.51 - 2.00	C	Satisfactory (Accredited)
<= 1.50	D	Unsatisfactory (Not accredited)

- Institutions which secure a CGPA less than or equal to 1.50 will be intimated and notified by the NAAC as "assessed and found not qualified for accreditation".
- Period of validity of accreditation The accreditation status is valid for five years from the date of approval by the Executive Committee of the NAAC.

Re-assessment

- Institutions, which would like to make an improvement in the accredited status, may volunteer for Re-assessment, after completing at least one year but not after the completion of three years. The manual to be followed for re-assessment is the same as that for the Assessment and Accreditation. However, the institution shall make specific responses based on the recommendations made by the peer team in the first assessment and accreditation report, as well as the specific quality improvements made by the institution. The fee structure would be the same as that for Assessment and Accreditation.

Cycles of Accreditation

When an institution undergoes the accreditation process for the first time it is referred to as Cycle 1 and the consecutive five year periods as Cycles 2, 3, etc.

For Cycles 2, 3, etc. the following are essential:

- IQAC to be functional.
- Timely submission of AQARs annually.
- Institutions to submit LOI, six months before the expiry of the accreditation status.
- Submission of SSR within six months of acceptance of LOI by NAAC, failing which the HEI will lose its accreditation at the end of the fifth year.
- Other steps remain the same as first cycle.
- IQAC
- In pursuance of its Action Plan for performance evaluation, assessment and accreditation and quality up-gradation of institutions of higher education, the National Assessment and Accreditation Council (NAAC), Bangalore proposes that every accredited institution should establish an Internal Quality Assurance Cell (IQAC) as a post-accreditation quality sustenance measure. Since quality enhancement is a continuous process, the IQAC will become a part of the institution's system and work towards realisation of the goals of quality enhancement and sustenance. The prime task of the IQAC is to develop a system for conscious, consistent and catalytic improvement in the overall performance of institutions. For this, during the post-

accreditation period, it will channelize all efforts and measures of the institution towards promoting its holistic academic excellence.

- Strategies
- IQAC shall evolve mechanisms and procedures for:
- *   Ensuring timely, efficient and progressive performance of academic, administrative and financial tasks
- *   The relevance and quality of academic and research programmes
- *   Equitable access to and affordability of academic programmes for various sections of society
- *   Optimization and integration of modern methods of teaching and learning
- *   The credibility of evaluation procedures
- *   Ensuring the adequacy, maintenance and functioning of the support structure and services
- *   Research sharing and networking with other institutions in India and abroad.

Some of the functions expected of the IQAC are:

- Development and application of quality benchmarks/parameters for various academic and administrative activities of the institution
- Facilitating the creation of a learner-centric environment conducive to quality education and faculty maturation to adopt the required knowledge and technology for participatory teaching and learning process
- Arrangement for feedback response from students, parents and other stakeholders on quality-related institutional processes
- Dissemination of information on various quality parameters of higher education
- Organization of inter and intra institutional workshops, seminars on quality related themes and promotion of quality circles
- Documentation of the various programmes/activities leading to quality improvement.
- Acting as a nodal agency of the Institution for coordinating quality-related activities, including adoption and dissemination of best practices.
- Development and maintenance of institutional database through MIS for the purpose of maintaining /enhancing the institutional quality.
- Development of Quality Culture in the institution.

- Preparation of the Annual Quality Assurance Report (AQAR) as per guidelines and parameters of NAAC, to be submitted to NAAC

IQAC will facilitate / contribute:

- Ensure heightened level of clarity and focus in institutional functioning towards quality enhancement
- Ensure internalization of the quality culture.
- Ensure enhancement and coordination among various activities of the institution and institutionalize all good practices.
- Provide a sound basis for decision-making to improve institutional functioning.
- Act as a dynamic system for quality changes in HEIs.
- Build an organised methodology of documentation and internal communication.
- Composition .
- IQAC may be constituted in every institution under the Chairmanship of the Head of the institution with heads of important academic and administrative units and a few teachers and a few distinguished educationists and representatives of local management and stakeholders
- The composition of the IQAC may be as follows:
- 1. Chairperson: Head of the Institution
- 2. A few senior administrative officers
- 3. Three to eight teachers
- 4. One member from the Management
- 5. One/two nominees from local society, Students and Alumni
- 6. One/two nominees from Employers /Industrialists/stakeholders
- 7. One of the senior teachers as the coordinator/Director of the IQAC
- AQAR
- NAAC has revised the Guidelines for the Creation of the Internal Quality Assurance Cell (IQAC) and Submission of Annual Quality Assurance Report (AQAR) in Accredited Institutions. The revised guidelines will come into effect from 1st January 2014
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  The Higher Education institutions which are submitting the Annual Quality Assurance Report (AQAR) from 01-01-2014 on wards need to submit in the revised format with

effect from 1st January 2014. The Guidelines for the Creation of the Internal Quality Assurance Cell (IQAC) and Submission of Annual Quality Assurance Report (AQAR) in Accredited Institutions is placed below in word file.

- Activities
- In addition to many Peer Team Visits which take place every day, the NAAC also facilitates conduct of workshops and seminars in accredited institutions. NAAC also partners with various State Governments and professional bodies to create an advocacy for assessment and accreditation. Assessors Interaction Meetings (AIM), IQAC Meetings and interaction with governmental agencies are an important part of NAAC's activities.

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