Chapter I
INTRODUCTION

“The new mission for education requires substantially more knowledge and radically different skills for teachers…………….if all our children are to be effectively taught, teachers must be prepared to address the substantial diversity in experiences, children bring with them to school the wide range of languages, cultures, exceptionalities, learning styles, talents and intelligences that in turn require an equally rich and varied repertoire of teaching strategies.”


It is universally acknowledged that education is an effective means for social reconstruction and to a great extent it offers solutions to the problems a society is faced with. These problems may be economic, social, cultural, political, moral, ecological and educational. Since the teachers play a major role in education of children, their own education becomes a matter of vital concern even in today’s scenarios. Teacher education must, therefore, create necessary awareness among teachers about their new roles and responsibilities.

Today the expectations about teachers are increasing by each and every component of the society. It is acknowledged that formal professional training on continuous basis is necessary for becoming a good teacher as it caters to the development of one’s personality and sharpening of skills essential for teacher and commitment to achieve excellence.

Teacher education is an integral component of the educational system. It is intimately connected with society and is conditioned by the ethos, culture and character of a nation. The constitutional goals, the directive principles of the state policy, the socioeconomic problems and
the growth of knowledge, the emerging expectations and the changes operating in education, etc. Call for an appropriate response from a futuristic education system and provide the perspective within which teacher education programmers need to be viewed.

When India attained freedom then existing educational system was accepted as such because it was thought that an abrupt departure from the same would be disturbing and destabilizing. Thus a predisposition to retain the system acquired preponderance and all that was envisaged by way of changes was its rearrangement. Consequently, education including teacher education largely remained isolated from the needs and aspirations of the people. During the last five decades certain efforts have been made to indigenize the system.

1.1 Historical background of Teacher Education in India

It has been well explained in NCTE Teacher Education Curriculum Draft (2011) "Education has continued to evolve, diversify and extend its coverage since the dawn of history. Every country develops its system of education to express and promote its unique socio-cultural identity and also to meet the challenges of time". Teacher education in India has a long past but a short history.

1.1.1 Teacher Education before independent India

Gurukul-centered tradition of the Vedic period was somewhat modified and enriched under the influence of Budhistic vihara-based system. This continued till the 11th century A.D. The arrival of the Muslims witnessed the rise of a parallel Maktab-based tradition and the two traditions thrived side by side till the coming of the British. Both the traditions underwent some modification during this period. Historical records of the decisions taken, the finances made available and their implementation and later evaluation became relatively more systematically organized because of the documentation by the British.
Before the arrival of 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 Scrampur near Calcutta. In Madras Dr. Andrew Bell started the experiment of Monitorial System which formed the basis of teacher training programme for the time being.

Sir Munro, in his Minute dated 13 December 1823, gave same ideas for the improvement of the education of teachers. In June 1826, the first normal school was started with the finance of the British government in Madras, Initially; it prepared teachers for the district schools.

The Wood’s Dispatch, an important educational document was released on 19 July, 1854. It gave some very valuable suggestions for the improvement of the education of teachers. It urged the establishment of training school in each presidency in India. The Dispatch suggested the introduction of pupil teacher system 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.

The Indian Education Commission 1882 recommended that an examination in the principles and practice of teaching be instituted. For graduates it suggested a shorter course of training than for others. This also led to the opening of new teacher training institutions.

Government of India Resolution on Education Policy, 1904 made some very vital suggestions for the improvement of the teachers-training Programme. These were a) Training Colleges b) Training Schools.
a) Training Colleges: The resolution enunciated the if Secondary Education was to be improved then the teachers should be trained in the art of teaching. Intermediates or Graduates could seek admission to these colleges.
b) Training Schools: The Resolution recommended opening of more training schools, particularly in Bengal.

Some of the suggestions of the Resolution were not implemented. Some changes took place in the field of teacher training. Universities instituted ‘Bachelor of Training’ degree for graduate teachers. Rethinking on the syllabus improvements in facilities etc. Were the outcomes of the resolution.

The Government of India Resolution on Education Policy, 1913. It suggested periodical repetition and improvement course for teachers. The Sadler Commission, 1917 It pointed out the painful inadequacy of training institutions and the poor quality of training provided in them. It suggested that the training programme should not make the trainee a competent classroom teacher but also a good administrator. The recommendations of the Sadler Commission had salutary effect on the teacher training programmed in India. The sadler commission was further carried on by the Hartog Committee in 1929. It suggested that teachers for rural areas should be indicted from persons who were close to rural. It suggested that journal for teacher in the vernacular, refresher courses, conferences and meeting of teacher associations can do much to brighten the lives of the teachers and improve their work. Working on the recommendations of the Sadler Commission 13 out of 18 universities set-up faculties of education. Andhra University started a new degree the Bachelor of Education in 1932. Bombay launched a post-graduate degree the M.Ed. in 1936.

1.1.2 Teacher Education in Independent India

India’s independence, division of the country and related disturbances took place almost simultaneously and drew the attention of national leaders. Transformation of the ‘economy of scarcity’ into the ‘economy of plenty’, and reducing unemployment of the youth and food
shortage became their main priorities. The system of education and teacher education established by the Raj continued without substantial modification. It was feared that an abrupt departure from the existing system might bring about disruption and destabilization. But as the situation improved, greater attention was paid to education and teacher education. The first step in this direction was setting up of the University Education Commission (1948).

Subsequently, the Secondary Education Commission (1953) appointed to examine the conditions of school education made specific suggestions about the preparation of teachers. The Committee on Higher Education for Rural Areas, (1954) and that on Women’s Education (1959) also made valuable suggestions for teacher education in their respective areas, but they did not attract national attention because of their limited scope.

The Education Commission (1964-66) submitted a comprehensive report, which served as a basis for establishing a uniform national structure of education covering all stages and aspects of education. It emphasized the necessity of professional preparation of teachers for qualitative improvement of education. Recognizing teacher education as a distinct academic discipline of higher studies different from pedagogy, it suggested establishing schools of education in certain universities, starting of extension programmes, and increase in the duration of training of teachers, opening of comprehensive colleges of education, exchange of teacher educators, and revision and revitalization of courses of study. It recommended that its isolation be removed and laid stress on the importance of practice teaching and in-service education. It recommended allocation of more funds for teacher preparation, better salaries and improved service conditions for teachers and their educators to attract the competent people to this profession. Based on the
recommendations of the Commission, the National Policy on Education (1968) was formulated. The working of National Council for Educational Research and Training (NCERT) was also reviewed. The NCERT and its Regional Colleges of education were expected to play a greater role in the education of teachers. The non-statutory National Council for Teacher Education (NCTE) was set up in 1974 by a resolution of the Government of India and was located in the NCERT. (It brought out its first curriculum framework in 1978.) The statutory NCTE established by an Act of Parliament in 1993 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.

In each five year plan after independence some stress was given in Teacher Education which is summarized in the following chart:

1.1.3 Five year plan and thrusts in Teacher Education

1. 1st 5 year plan : Expansion of training facilities for Teachers

2. 2nd 5 year plan : Intensification of expansion of training Facilities

3. 3rd 5 year plan : Teacher training for basic education

4. 4th 5 year plan : Correspondence courses for untrained Teachers and enrichment of in service programmes

5. 5th 5 year plan : Curricular reorientation

6. 6th 5 year plan : Enhancing holding power of schools

7. 7th 5 year plan : ICT input for Inservice training of Teachers

8. 8th 5 year plan : Establishment of NCTE as statutory
1.2 Teacher Education: Current Status

India has one of the largest systems of teacher education in the world. Besides the university departments of education and their affiliated colleges, government and government aided institutions; private and self-financing colleges and open universities are also engaged in teacher education. Though most teacher education programmes are nearly identical yet their standard varies across institutions and universities. Teacher education programmes are essentially institution-based.

The present system of teacher education needs to demonstrate greater sensitivity to its educational as well as social contexts, which required the following changes in teacher education:

1) Their students need to be exposed more and more to the realities of school and community.

2) Internship, practice of teaching, practical activities and supplementary educational activities need to be better planned and organized more systematically.
3) The curriculum, pedagogy and evaluation of teacher education programmes need to be made more objective as well as comprehensive.  
4) Despite improvement of service conditions and perks, the profession is yet to attract the best talent.

1.3 Scenario of Teacher Education

The manpower planning is practically absent in teacher education. The situation at the elementary level in certain states is comparable to international standards, where DIETs, CTEs and IASEs are making tangible impact on pre-and in-service teacher education. But the same cannot be said about the preparation of secondary, vocational and pre-school teachers.

The programme of teacher education is institution based. The students are not exposed to the realities of school and community. Internship, practice of teaching, practical activities and supplementary educational activities are not paid proper attention. The curriculum, pedagogy and evaluation of teacher education need improvement and radical transformation. Despite the commendable improvement in service conditions and perks, the profession is yet to attract best brains.

1.3.1 Teacher Education Curriculum at Present

In the draft of curriculum framework by NCTE (2010) noted that during the last two decades, the teacher education curricula have received severe criticism and their weaknesses have been well exposed. Some educationists and social activists call it insipid, irrelevant because they do not address the needs of contemporary Indian schools and society. They do not prepare teachers who can impart quality education in our schools. One often hears that there is little difference between the performance of trained and that of untrained teachers because of the outdated and defective curriculum. To some extent, these charges may be somewhat; exaggerated often they seem to be correct.
Frequently criticized as being theoretical in its nature, the curriculum of teacher education is only partially theoretical. It is information loaded which is disconnected from each other. The 1998 curriculum framework by NCTE pointed out this weakness to an extent but the situation could not improve. There is the pressing need to integrate scattered information’s for giving them the shape of a discipline capable of promoting educational theory and practice. The reconstruction of teacher education curricula has, thus, become a pressing need of the hour. It has to be transformed from information based to experience based.

In the present curricula, a large number of activities - theoretical and practical, have to be carried out and assiduously practiced by prospective teachers for enhancing their professional competencies and commitments. Teacher education curricula have to integrate and blend them into a composite whole. The revamping of teacher education curricula has, thus, become a pressing need of the hour. The slant has to be towards a visible shift from information-based to experience- based and from the traditional instruction domination to newer constructiveness orientation.

The school education has also drastically changed after the guidelines given National Curriculum Framework 2005.

The new curriculum formwork (2005) for quality teacher education is in the offing and several realistic policies and programmes are being envisioned with an eye on empowerment teacher education. The pre service level teacher education course is in the process of getting a revamp through integration of theory and practicum components and making teacher education course rich in potentials for inculcation of newer pedagogic competencies, values and commitments and through realization of a much awaited paradigm shift in education form ‘teacher centeredness’ to ‘learner centeredness’, as currently suggested through
cognitive and neo socio constructively approaches to knowledge acquirement. The input of media and technology is also bound to give a strong fillip to teacher education programmes and hence, to the quality of teacher training, both pre service as well as in service.

For effective implementation of NCF 2005 every state in India needs a good quality teaching force. For fulfilling this need NCTE has prepared a new framework of Teacher Education Curriculum 2010.


In this framework five areas are include as follows:

Area A: Foundation of Education
   A1 Education and Development
   A2 Education: An Evolutionary Perspective
   A3 Contemporary Issues & Concerns in Secondary Education

Area B: Pedagogical Knowledge
   B1 Learner and Learning
   B2 Teaching: Approaches and Strategies
   B3 Assessment for Learning
   B4 Learning Resources
   B5 Classroom Organization and Management

Area C: Pedagogical Content Knowledge
   C1 School subject – 1
   C2 school subject – 2

Area D: School Based Experiences
   D1 Initiatory School Experiences
   D2 Internship in Teaching

Area E: Add on Courses
   E1 Language Proficiency Workshop
   E2 ICT – Skill Development
This framework is developing on the bases of objectives:

1.5 Objectives of teacher education program at Secondary Level.

Given in the draft 2010

The following objectives are given in the draft:

1. to enable the prospective teachers to understand the nature, purpose and philosophy of secondary education.
2. to develop among teachers an understanding of the psychology of their pupils.
3. to enable them to understand the process of socialization.
4. to equip them to acquire competencies relevant to stage specific pedagogy, curriculum development, its transaction and evaluation.
5. to enable them to make pedagogical analysis of the subjects they are to teach at the secondary stage.
6. to develop skills for guidance and counseling.
7. to enable them to foster creative thinking among pupils for reconstruction of knowledge.
8. to acquaint them with factors and forces affecting educational system and class room situation.
9. to acquaint them with educational needs of special groups of pupils.
10. to develop communication skills and use the modern information technology.

Almost the 50% of the objective, i.e. 4, 5, 6, 9 and 10 are related to practice teaching emplacing the importance of training of teaching in teacher education, which is commonly known as practice teaching.

1.6 Practice teaching:

The general purpose of practice teaching is to provide prospective teachers with classroom practice in a supportive environment, enabling them gradually to assume the range of responsibilities associated with fulltime professional practice. Student teaching and field experiences of
are the major vehicles for providing practical experiences in any teacher education program.

Stereotyped view of the teacher sees him/her as a person standing in front of a class of pupils dispensing information. This stereotype is also widely held by teachers and student teachers so that the transmission mode of teaching is the staple. Thus advice to student teachers on practice teaching is likely to be related to such things as writing on the chalkboard and projection of the voice and articulation. These concerns were also the concerns of nineteenth century school teachers and pointed to the essential conservatism of the approach to learning to teach that models the master teacher.

In the field of pedagogy, Stolurows (1965), phrase; master the teaching model useful guide to action although many people would have reservations about the implication that there is only one model which assumption is still in continuation. The point is that student are more likely to obtain a satisfactory understanding of the processes of teaching if their practical experience is based on mastering principles of teaching rather than imitating other teachers.

1.6.1 Issues in Practice teaching

Leavit (1991) notes that practice teaching is one of the eight worldwide issues in teacher education, and says that the problem derives from the fact that teacher education must answer to both the university and the school regarding training of teaching. Present course organization with the clearly demarcated practice teaching attachments to schools, organized and conducted in separate compartments from theoretical studies, signal to students that the two activities are distinct and preserve the archetypical conception of student teaching as apprentice teaching.

Pedagogical studies bring together theoretical ideas about the nature of teaching and the processes of human learning because they are
task oriented and not merely concerned with this transmission of information.

In training institutions where systems of teacher training exist, practice teaching forms a major component in the course training.

The essentiality of practice is reflected in one recommendation for the improvement of teaching;

Practice, practice, practice ………….. Frequent, varied, and critized practice. Observation, immediate feedback, and practice again to perfect the original performance. Practice is a variety of situations. (P.400).

1.6.2 Present Status of Training for Practice Teaching

In the Indian case, the development of teacher education has had a tremendous fillip during the post independence period. In diagnosing the maladies which arise chiefly from isolation of teacher education programmes, want of coordination, relevance and authenticity and empathy to evolve a firm scientific evidence on demand and supply of teacher’s for various school level education several interventions have been contemplated and introduced at various points of time.

There is very little evidence in any country, of systematic courses in pedagogy, that is, the systematic study and practice of general principles of teaching that attempts to unity theoretical studies and practice teaching by making use of the teaching of knowledge about factors that enable human beings to learn meaningfully and with pleasure.

The above description of practice teaching clearly shows that the trainees are not well equipped with essential abilities and skills required good and effective teaching for this purpose the teacher should be empowered with knowledge and skills.

1.7 Empowering Teacher

It is believed that teacher’s dedication and performance are the
most important features in determining the quality of education and administration everything from hiring, budgeting scheduling, textbooks and technology selections to professional develop of others, therefore, empowering teachers is need of the hour.

Teacher’s knowledge of teaching and learning is considered a valuable feature in connecting the students to their society in powerful ways.

Empowerment is the main component of the decentralized development. Empowerment stands for the expansion of assets and capabilities of empowered to participate and negotiate with influence and control, Teacher Empowerment also constitutes the same feather in subtle ways. Glenn (1990), suggests that the real power behind the concept of empowerment is authority derived form command of the subject matter and essential teaching skills. Maeroff (1988), believes that helping teachers become more knowledgeable about teaching and assisting them in developing a repertoire at strategies to teach the requisite for empowering teachers.

In the time when schools and teachers are judged by their students test scores and too many good teachers are leaving the profession, we must look at better ways to improve schools than prescriptive curricula and deskilling teachers (Apple, 1993).

Empowerment of teachers in a desirable ingredient of school improvement. Empowered teachers have ‘the autonomy to make decisions about curriculum, pedagogy and assessment (Wasley, 1991).

Empowerment encourages teachers to take risks and new roles. Similarly, administrators must attempt new ways of doing things that empower teachers. Administrators must provide assistance in changing the schedule, staffing and assigning student (Wasley, 1991).
Teacher empowerment is a process whereby school participants develop the competence to take change of their own growth and resolve their own problems, while school system increases the capacity to distribute in decision making and to increase opportunities for meaningful, collective participation (Short, P. M. 1994).

Teacher’s empowerment can help teachers to generate and amplify their voice or discourse on educational affairs, to build their living educational theory, and to construct their pedagogical knowhow. Teacher must have certain abilities which are essential for empowering them.

1.8 Teacher’s Abilities Essential for Empowerment

Teacher plays many kinds of role In that role teaching is most important role for which following abilities are essentially to be developed among them:

1. **Content Comprehension Abilities**
2. **Content Association Abilities.**
3. **Content Enrichment and Simplification Abilities**
4. **Content Transfer Abilities**

1.8.1 **Content Comprehension Abilities**

Comprehension as the ability to remember what the text was about, others as the ability to apply the knowledge conveyed in the text to concrete situation] to recognize the theme or moral at the text] to give a critical appraisal of the text, comprehension is assumed – explicitly or implicitly – to involve interpretation of the information in the text] the use of prior knowledge to do so comprehension can mean different things but it always involves a meaningful representation of the textual information. The considering the development of the comprehension skill and processes, it is important to distinguish between age differences in the type of process in which children engage during comprehension, on the efficiency of those process, and it in the content of those process. To
illustrate the importance of these distinctions, consider the role of a central aspect of cognitive development, the accumulation of cognitive development, the accumulation of experiences and background knowledge e.g. (Hutchinson & Robin 1989)

In the context of comprehension for instance, experience plays an important role in more efficient use of one’s limited working memory capacities (Siegler, 1994).

1.8.2 Content Association Abilities

The association ability consists of combination of many components, including, reliability, adaptability, capability and accountability.

The term reliability connotes positive things; reliability equals consistency experts have identified three decisively different kinds of assessment consistency. Stability reliability refers to the consistency of teacher’s performance presented to the same content on two different teaching. Ultimate form reliability describes the consistency of teachers performance on two different versions of the same content and internal consistency reliability describes the consistency with which all the separate items on evaluate measure whether they are evaluate (Popham J.W. 2009)

Adaptation included the alteration of subject matter to fit the characteristics of specific students. Considerations of students’ prior knowledge and the pedagogical objectives for the lesson influenced adaptation.

To follow for teachers about whose performance there are serious concerns and that the appraisal process has been unable to address. It is shorter and less complex than the current procedure, and complements, rather than duplicates the appraisal process. There is no informal stage in
the capability procedure. It must provide sufficient time for improvement to take place.

Accountability is an ethical concept it concerns proper behavior, and it deals with the responsibilities of individuals and organizations for their actions towards other people and agencies. The concept is used in practical setting, notably in describing arrangements for governance and management in public services and private organizations. The term is often used synonymously with concepts of transparency, liability, answerability and other ideas associated with the expectations of account giving.

The ability of teachers to association classrooms and manage the behavior of their students is critical to positive educational outcomes. Comprehensive teacher preparation and professional development in effective classroom organization and behavior management is therefore needed to improve outcomes for students in general and special education. Be flexible, assess progress and success of classroom in progress and make any necessary adjustments (in teaching style, materials, equipment, timing, sequencing, teacher/staff involvement). Current state curriculum standards and an ability to link them with teaching practice.

1.8.3 Content Enrichment and Simplification Abilities

When teacher teaches specific subject’s, he explains, he narrates, he gives examples related daily life of the student, he gives learning experiences. Through those entire things teacher give certain values to that content. Teacher gives value based learning experiences for developing cognitive, emotional and psycho motor skill’s for personality development of the students. Teacher of language not only gives the set of rules of language but he creates awareness about the flexible
communication. That is content enrichment. For the simplification of the content teacher uses the knowledge representation.

1.8.4 Content Transfer Abilities.

Transfer ability describes the process of applying the results in one situation to other similar situations. Transferability is a process performed by teachers in teaching. Teachers note the specific of the teaching content and compare them to the specifics of environment or situation with which they are familiar. To do this effectively, teachers need to know as much as possible about the original situation in order to determine whether it is similar to their own. Therefore, teachers must supply a highly detailed description of their teaching situation and method.

Teacher’s knowledge gets enriched when these abilities developed within themselves. Then only the teacher will be able to transfer the content effectively. Hence, this component essential to explore the influence of training of this component i.e. pack on the teaching performance of trainees.

1.9 Teacher’s knowledge

Issues related to what teachers know, how they acquire and store that knowledge and how knowledge informs classroom. Practices are central to the work of all concerned with the initial preparation and continuing professional development of teachers.

Researchers have argued about the various forms of teacher’s knowledge; some researchers argue for the need for generalizable knowledge of principles of teaching and learning. While others contend that teachers knowledge is inherently situational and personal stored in the tacit forms metaphors or images or the more explicit forms of stories or cases. (Anderson, Grossman 1995)

In describing different potential forms for teacher’s knowledge, this section uses Bruner’s (1986) distinction between paradigmatic and
narrative ways of knowing to describe at least two general forms at teacher knowledge.

Paradigmatic ways of knowing emphasize generalizable laws and principles applicable across a wide variety of contexts. Knowledge within the natural sciences has been described as paradigmatic knowledge. In contrast narrative ways of knowing are contextualized and situation specific. Research on teaching has experienced a shift from the search of paradigmatic knowledge to an interest in narrative knowledge a shift that has affected research on teacher knowledge.

**Paradigmatic Forms of knowledge**

Some researchers on teaching have argued that teachers need to possess scientific principles regarding teaching. Knowledge that has proved to be applicable across different contexts and setting (Gage 1978) these researchers stress the power of propositional knowledge about teaching and learning.

Some researchers in this area have argued that research knowledge can directly affect practice by providing teachers what new principles of rules of practice to use in their own teaching.

Alternative ways paradigmatic knowledge can inform practice have also been suggested some researchers have argued that results of research on teaching can inform teachers reasoning about classroom actions rather than teacher’s instructional practice (Fenstermacher 1986)

**Narrative Forms of knowledge**

Another line of work rejects the idea of generalizable knowledge and argues that teacher’s knowledge is intently personal and organized in terms of stories or narratives (Clandinin and Connelly 1987, Elbaz 1991) These researchers believe that teachers knowledge can be best understood through their own stories of teaching which preserve both the teachers voice and perspective while narratives of personal practical knowledge
offer a way of making sense of individual teachers practice readers can learn from these narratives through reflecting upon similar issues that arise in their own practice.

Another form of narrative knowledge might take the form of case knowledge. Knowledge composed of experiences with a number of cases of Particular pedagogical situation (Shulman 1991)

Like personal practical knowledge case knowledge has usually been represented in narrative form. However, most of these case narratives have explicitly pedagogical purposes.

Research on teacher knowledge has clear implications for teacher education and continuing professional development. What teachers need to know and how they can best construct this knowledge are central questions facing policy makers and teacher educators alike.

1.9.1 Types of Teacher’s knowledge
Teacher should have three types of knowledge:

1) Teacher’s practical knowledge
2) Knowledge of context
3) Knowledge of self

1) Teacher’s practical knowledge: Pursuing conceptions of knowledge, Carter (1990) reviews research on teachers’ practical knowledge. This knowledge relates to practices within and navigation of classroom settings and highlights the complexities of interactive teaching and thinking inaction. This knowledge is anchored in classroom situations and includes the practical dilemmas teachers encounter in carrying out purposeful action. Therefore, it includes both personal, practical knowledge that is based on the personal understandings that teachers have of the practical circumstances in which they work and classroom knowledge that is based on the personal understandings that teachers have
of the practical circumstances in which they work and classroom knowledge that is situated in classroom events.

2) **Knowledge of context:** It includes knowledge of the multiples including the school, district, or area, and state of region. Knowledge of context also includes teacher’s knowledge of their students and their families, as well as local community. It can also include knowledge of the historical, philosophical and cultural foundations of education within a particular country. Finally, knowledge of self includes teacher’s knowledge of their personal values, dispositions, strengths, and weaknesses, and their educational philosophy, goals for students and purposes for teaching.

3) **Knowledge of self** It is early study of teacher’s knowledge identified knowledge of self as an important face of teacher's practical knowledge. This knowledge itself includes teacher’s awareness of their own values, goals, philosophies, styles, personal characteristics, strengths, and weaknesses as they relate to teaching. Some researchers have described how teachers draw upon and use this personal knowledge to negotiate classroom dilemmas and to reflect upon their practice. (Lanpert 1985).

Knowledge of self differs in important ways from the knowledge domains discussed above as it represents neither theoretical nor abstract knowledge. Integration of knowledge domains and the creation of new knowledge while each knowledge domain has been addressed separately for analytic purposes, in actual used by teachers.

Lee Shulman (1986) has elaborated the concept of Teacher’s knowledge very deeply which introduced in India in 1978. But there was no adequate follow up. The lack of explanation about its scope and nature, and the lack of necessary research, made the concept remain vague. But it was Lee Shulman, an American scholar, who put forward
similar thoughts later in 1986. It is profitable to consider Shulman’s concept of pedagogical content knowledge.

**Pedagogical Content Knowledge**

According to Shulman (1987), “Pedagogical content knowledge is the amalgamation of content knowledge and teaching method.”

Shulman insists that it is the teacher himself who has to understand the teaching contents.

Some of the conclusions stated by Shulman have been derived through research. Deeper knowledge of the teaching unit has good effects on the selection of teaching activities by teacher trainees. They go beyond the textual material: they clarify the relationship of the teaching unit with other units and total subject area. They consciously and unconsciously state how the knowledge that is being taught was generated.

Shulman provided a list of considerations included in pedagogical content knowledge. They are as follows:

1) **Subject matter knowledge**

2) **Knowledge of General pedagogy**

3) **Curricular knowledge**

4) **Pedagogical Content Knowledge**

1) **Subject matter knowledge:** This knowledge called as “Knowledge of content “while subject matter knowledge seems intuitively important for good teaching, early co relational research did not find a relationship between teachers knowledge and students achievement. Later researchers critiqued the lack of conceptual framework to guide this early work and turned their attention to the relationships between teacher's subject matter knowledge and the processes of planning and instruction (Leinhardt and Smith 1985, Shulman 1987).
In developing curriculum for students, teachers are likely to emphasized those areas in which they are more knowledgeable and to avoided or de emphasize the areas in which they have relatively less content knowledge (Carlsen 1991, Smith and Neale 1991).

Teacher’s content knowledge also influences their interactive teaching. Teacher’s knowledge of subject matter affects how they represent the nature of knowledge within a content area to their students. (Ball 1991).

2) Knowledge of General Pedagogy: It includes knowledge about classroom organization and management, general knowledge of lesson structure, and general methods of teaching. Researchers in the area of classroom knowledge have focused on teachers efforts to establish and maintain order in the classroom managers are teachers who are more attuned to student’s signals and conscious of the over all and purpose of classroom activity (Carter 1990).

Related to work in teacher’s routines is teachers general knowledge of lesson structure, which includes the knowledge of necessary to plan and teach lessons to make smooth transitions between different components of a lesson, and to present clear explanations of content (Leinhardt and Smith 1985).

Some researcher have argued that teachers knowledge of teaching methods is organized into curriculum scripts for particular topic (Putnam 1987) both the content and method.

3) Curricular knowledge: It includes the content according to curriculum, syllabus and textbook co relation of curriculum and content covered in curriculum knowledge. There is a co ordination in these fetchers content, depth of the content, scope and limitations are depend upon all those things.
4) Pedagogical Content Knowledge

According to Shulman ‘Pedagogical content knowledge’ means the amalgamation of content and method. This is not a simple thing. When teacher teaches any subject matter teacher do, any acts to understand that matter it thinks about the nature of that content, scope of the content, student’s thinking process, student’s learn, i.e. Means the teacher transfer that content in to teaching activities for the purpose of understanding that content by the student. That transformation called as knowledge representation. For the explanation of any concept teacher uses many examples, pictures, explanations, demonstration, and illustration. These are knowledge representation. Teacher understands the content first which he is going to teach. He should know and confirm that why he is going to teach that content. Then offer he can able to do knowledge transformation. (Shulman 1989).

In this reference Grossman P.L. Wilson S.M. and Schulman L.S. (1990) are noted as

i. There are so many varieties in the education at the degree level. So any bachelor can not have knowledge about all subjects at the school level.

ii. There is no assurance about the depth and scope of subject knowledge of any bachelor.

iii. There are so many differences in the knowledge of school level and the knowledge at degree level in same subject.

iv. There is a basic difference in the knowledge of any subject and the knowledge of same faculty.

Pedagogical Content Knowledge (PCK0 exists at the intersection of content and pedagogy. This knowledge includes knowing what teaching approaches fit the content, and likewise, knowing how elements of the content can be arranged for better teaching.
Sulaman argued that having knowledge of subject matter and general pedagogical strategies, though necessary, were not sufficient for capturing the knowledge of good teachers. At the heart of PCK is the manner in which subject matter is transformed for teaching. This occurs when the teacher interprets the subject matter, finding different ways to represent it and make it accessible to learners.

It is valued as an epistemological concept that usefully blends together the traditionally separated knowledge bases of content and pedagogy.

![Diagram of Pedagogical Content Knowledge](image)

**Figure No. 1.2 Pedagogical Content knowledge**

Diagrammatically, we can represent Shulman’s contribution to the scholarship of teacher knowledge by connecting the two circles, so that their intersection represents pedagogical content knowledge as the interplay between pedagogy and content.

The B.Ed. course is based on the assumption that students have deep knowledge of the content as they are graduates & Postgraduates in their subjects. Teacher educators are just going to teach methodology of teaching. Here the content and method were separated. After implementing the B.Ed. course for so many years, we were many times dissatisfied with the performance of the pupil-teachers in proactive teaching. When these M.A./M.Sc. student teachers stand before pupils in the school, it is felt that they should have a deep and comprehension of
the subject content to be taught. Out-Ward remedies were adopted for the teachers to have knowledge and mastery over the subject that is to be taught in the schools.

The first remedy was subject test, first for standard 5-7, second for 8-9 std, and third for the whole course. It was expected that by these tests student-teachers will study the school subject textbooks deeply and there will be scope to improve their knowledge of the concerned subject.


The main findings related to their studies are as follows:
1. Content in the syllabi / textbooks is found according to the age of the students.
2. There is proper sequence in the units in syllabi/ Textbooks. There is more emphasis on knowledge than skills.
3. It is observed that the content selection may or may not be according to the objectives in curriculum.

Hence, in the whole knowledge of the teaching of any subject the training of Pedagogical Analysis is very important, which plays an important role in developing knowledge for teacher?

1.10 Present status of training for pedagogical Analysis

Initially, the training for pedagogical analysis was implemented in the form of content cum methodology which clearly implies that there will be a meaningful integration of the content and method in terms of observable skills developed in student teacher. It is not any additional content or enriched content separately provided to the trainee in his
It is rather the deeper understanding of the concepts he is required to teach in the school. (NCERT 1978, P.85).

But in the frame of curriculum 1998 the concept of ‘Pedagogical Analysis’ was newly inserted by NCTE.

1.11 Pedagogical analysis

Pedagogical Analysis is a study that attempts to scrutinize the educational objectives, curriculum framing tasks, syllabus designing methods and classroom teaching of a particular subject. Pedagogical Analysis is a process that reveals the logic behind synthesizing all the educational activities into one thread and illustrates the rational base of selecting these educational activities. It makes the teachers familiar with the minute aspects of the subject and exposes him with the ways of conveying to the recipient i.e. the students.

Need of Pedagogical Analysis:

a) Pedagogical Analysis gives insight to the teacher about the subject.

b) It reveals the nature and scope of the subject.

c) Pedagogical Analysis gives an exposure to the teacher about

- What to teach? (i.e. content)
- How to teach? (i.e. methodology)
- Why to teach? (i.e. objectives)
- Whom to teach? (i.e. learners)

d) It provides scientific base for the teaching learning process.

e) Pedagogical analysis motivates the teacher to study the content minutely. And content is a tool to achieve the objectives.

f) It helps the teacher to decide the right method/technique/approach to teach the content.

g) Pedagogical analysis reveals the principles behind selection of the content and provides philosophical and moral base to teach in the classroom.
h) It reveals the place of subject in all the educational process.

i) It an insight to the teacher to plan his teaching.

j) It distinguishes the objectives of teaching subject at different levels, and in different medium from each other. Through pedagogical analysis, a teacher also comes to know about the different objectives to be achieved by teaching different content in a classroom.

k) Pedagogical analysis is a tool to achieve the cognitive, affective and psychomotor development of a student.

1.12 Importance of pedagogical Analysis

i. For the knowledge of the teaching subject, pedagogical analysis is important.

ii. There is an important role of the pedagogical analysis to create the attitude in teacher trainees for deciding the training strategy according the different levels of students.

iii. Because of pedagogical analysis teacher trainees should be aware for the use of method according to the variations of the content.

iv. Pedagogical analysis helps the place of any unit of the textbook in the structure of the subject.

v. Teacher trainees grasp analysis to clear the specific concept through content analysis.

vi. Teacher trainee can develop the ability of critical thinking about curriculum, syllabus and textbook.

For successful teaching a teacher should have mastery of preparing teaching content, which can be gained only after through thing of pedagogical analysis.

Hence the researcher thought about the actual process of process of implementation to pedagogical analysis. What is the present status of teacher’s knowledge? How can be teaching make effectively? Can we implement special training program for enriching teaching performance
by enriching Teacher’s knowledge? What should be the nature of training model? Can we use self learning and face to face training simultaneously? With these questions the researcher selected the problem for the study.

1.13 Need of the Study :

Teaching methods are meaningful only when they are taught in relation to content of the subject matter (NCERT 1978). But there is no explanation of how the method made meaningful. The concept of pedagogical thinking applied in the teacher education institutions. But what is the pedagogical content knowledge is not clear yet.

Many universities runed up the program of content cum methodology or pedagogical analysis through workshop. The workshop of 'Pedagogical Analysis' is going on in MumbaiUniversity at last 6 to 7 years. But there is a lack of systematic procedure of training and positive attitude towards the outcomes of the workshop. The researches are very few. So the researcher has thought about this study.

1.14 Significance of the Study :

Pedagogy is totally applicational in its nature. All the theories, rules, formulae, methods propagated in the theory were considered to be impractical. It was considered to be good enough for practice teaching conducted by colleges of teacher education but not for actual classroom teaching.

This study provides an insight to the teacher trainees to plan his/her teaching. It motivates to study the content minutely. There is an important role of the pedagogical analysis to create the attitude in teacher trainees for deciding the training strategy according the different levels of students.

Present study considers different instructional questions such as how to achieve predetermined educational objectives, which teaching
methods should be used for language teaching, how they should be used for language teaching, how they should be used and which teachings strategies are necessary for successful instruction for teaching of various aspects of language.

1.15 STATEMENT OF THE PROBLEM

Effect of training for enriching teachers’ pedagogical content knowledge on teaching performance of teacher trainees-a study.

1.16 Definition of the terms

1.16.1 Conceptual Definition of Technical Terms

1) Effect – Effect means a desired or intended result through training (Oxford English Dictionary – 2004)

2) Pedagogical Content Knowledge – Pedagogical content knowledge is the category most likely to distinguish the understanding of content specialist form the of Pedagogue. (Shulman, 1987)

3) Teaching Performance – Performance of teaching by teacher trainees in real classroom situation.

4) Teacher Trainees – Participant in vocational administrative or technical training program for the purpose of acquiring and developing, job related skills.

1.16.2 Operational definition of technical Terms

1) Effect – Effect concerns with the change in teacher trainees, in the ability of classroom teaching and in the achievements of school pupils on whom the lessons are to be conducted.

2) Pedagogical content Knowledge (PCK) – Shulmans concept of Pedagogical content knowledge which includes Teachers Subject Matter Knowledge, General Pedagogical Knowledge, Pedagogical Content knowledge, and Curricular Knowledge.

3) Teaching Performance – Teaching Performance of Hindi and Marathi teacher trainees in real classroom situation.

1.17 Objectives of the study

1) To find out the status of student teachers pedagogical content knowledge (PCK)

2) To develop training modules with reference to i) subject content knowledge ii) general pedagogical knowledge iii) Specific pedagogical content knowledge iv) curricular knowledge.

3) To study the effect of training in PCK on teaching performance of Hindi teacher trainees.

4) To study the effect of training in PCK on teaching performance of Marathi teacher trainees.

5) To study the effect of training in PCK comparatively among Hindi and Marathi teacher trainees.

6) To study the effect of training in PCK of teacher trainees on pupils achievement.

1.18 Assumptions

1) Teachers’ PCK can be tested.

2) Training programe on PCK can be developed.

1.19 Research Hypotheses

1. The training with the help of PCK Package is effective in increasing the teaching performance of teacher trainees.

2. The training with the help of PCK package is effective for increasing the success rate of teacher – trainees in content knowledge.

3. The training with the help of PCK Package is effective for increasing the success rate of teacher trainees I general pedagogical knowledge.
4. The training with the help of PCK Package is effective for increasing the success rate of teacher – trainees in pedagogical content knowledge.
5. The training with the help of PCK Package is effective for increasing the success rate of teacher- trainees in curricular knowledge.
6. The modular training on PCK is effective for improving pupils achievement.

1.19.1 Null Hypothesis

1. Null Hypothesis

There is no significant difference between the mean values of general teaching performance of teacher trainees of experimental and control group in pre testing.

2. Null Hypothesis

There is no significant difference between the mean values of GTP of Hindi teacher trainees of controlled and experimented group in pretesting.

3. Null Hypothesis

There is no significant difference between the mean values of GTP of Marathi teacher trainees of experimental and control group in pretesting.

4. Null Hypothesis

There is no significant difference between the mean values of GTP of Hindi and Marathi teacher trainees of control group in pretesting.

5. Null Hypothesis

There is no significant difference between the mean values of GTP of Hindi and Marathi teacher trainees of experimental group in pretesting.

6. Null Hypothesis

The difference between the proportions and the percentage success rate of teacher trainees after content knowledge is equal to zero.
7. Null Hypothesis
   The difference between the proportions And the percentage success rate of teacher trainees after General Pedagogical knowledge is equal to zero.

8. Null Hypothesis
   The difference between the proportions And the percentage success rate of teacher trainees after Pedagogical content knowledge is equal to zero.

9. Null Hypothesis
   The difference between the proportions And the percentage success rate of teacher trainees after curricular knowledge is equal to zero.

10. Null Hypothesis
    There is no significant difference in the mean values of general teaching performance in pre and post testing of control group.

11. Null Hypothesis
    There is no significant difference in the means value of teaching performance of Hindi teacher trainees in pre and post testing of control group.

12. Null Hypothesis
    There is no significant difference in the mean values of general teaching performance of Marathi teacher trainees in pre and post testing of control group.

13. Null Hypothesis
    There is no significant difference in the mean values of general teaching performance in pre and post testing of experimental group.
14. Null Hypothesis
There is no significant difference in the mean values of general teaching performance of Hindi teacher trainees in pre and post testing of experimental group.

15. Null Hypothesis
There is no significant difference in the mean values of general teaching performance of Marathi teacher trainees in pre and post testing of the experimental group.

16. Null Hypothesis
There is no significant difference in the mean values of general teaching performance of all teacher trainees in post testing.

17. Null Hypothesis
There is no significant difference in the mean values of general teaching performance of Hindi teacher trainees of control and experiment group in post testing.

18. Null Hypothesis
There is no significant difference in the mean values of general teaching performance of Marathi teacher trainees in post testing.

1.20 Scope and Limitations of the study

1.20.1 Scope
1. This research is extended to those B.Ed. colleges which following similar teacher education program.

2. This study is helpful for teacher educator to guide in teacher trainees for the enhancement of teaching performance.

3. The conclusions of the study are useful for teacher educator and teacher trainees of Hindi and Marathi teaching Methodology.

4. The same conclusions of this research can be extended to English medium B.Ed. colleges for Hindi & Marathi Methodology.
5. The teachers PCK and teaching performance correlation can be tested in reference to Marathi and Hindi methodology.

6. The effect of modular training packages can be tested comparatively with reference to understanding of content knowledge of teacher trainees.

1.20.2 Limitations

1) The textbooks of Hindi and Marathi subjects published by Maharashtra State bureau of text book production and curriculum research, Pune (2011-12) are considered for preparation of PCK through modular training.

2) The study is limited to Government College of education, Ratnagiri affiliated to Mumbai University, Mumbai.

3) The study is limited to those B.Ed. teacher trainees admitted in academic year 2011-2012.

1.21 SCHEME OF CHAPTERISATION

CHAPTER I – INTRODUCTION

This chapter is related to logical thinking about research problem, research problem, and objectives of the research, assumptions, hypothesis, scope and limitations of the study.

CHAPTER II – REVIEW OF RELATED LITRADURE

This chapter includes review of the Indian and foreign researches about previous studies. The publications related this research subject also include in the second chapter.

CHAPTER III – RESEARCH METHODOLOGY

The experiment method design of the experiment, pre test post test, Variables in the research, preparedly stage, tools for the research, sampling, pilot study and actual experiment process described in this chapter.