

An Analytical Study of National Curriculum Framework for Teacher Education-2009



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I would like to thank my supervisor for his continuous help, cooperation and valuable suggestions.

I am especially thankful to my friends who always suggested me to do hard work.

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List of Abbreviations

ACARA	Australian Curriculum, Assessment and Reporting Authority
ACTE	Association for Career and Technical Education
ANOVA	Analysis of Variance
ASC	Advance Study Centre
BEd	Bachelor of Education
CABE	Central Advisory Board of Education
CBSE	Central Board of Secondary Education
CCE	Continuous and Comprehensive Evaluation
CFQTE	Curriculum Framework for Quality Teacher Education
CFTE	Curriculum Framework for Teacher Education
CIE	Central Institute of Education
CoSN	Consortium for School Networking
CSSTE	Centrally Sponsored Scheme for Teacher Education
CTE	College of Teacher Education
DEd	Diploma in Education
DIET	District Institute of Education and Training
ECCE	Early childhood care and education
ETC	Extension Training Centres
GCET	Government Colleges for Elementary Teachers
GoI	Government of India
IASE	Institute of Advanced Study in Education

ICT	Information and Communication Technology
IER	Institutes of Educational Research
IGNOU	Indira Gandhi National Open University
IQF	Indonesian Quality Framework
IT	Information Technology
KPK	Khyber Pakhtun Khwa
MEd	Master of Education
MHRD	Ministry of Human Resource Development
MOST	Mass Orientation of School Teachers
NAAC	National Assessment and Accreditation Council
NCERT	National Council of Educational Research and Training
NCESE	National Curriculum for Elementary and Secondary Education
NCF	National Curriculum Framework
NCFSE	National Curriculum Framework for Secondary Education
NCFTE	National Curriculum Framework for Teacher Education
NCSS	National Council for the Social Studies
NCTE	National Council of Teachers of English
NCTM	National Council of Teachers of Mathematics
NGO	Non-Governmental Organisation
NPE	National Policy on Education
NSTA	National Science Teacher Association
PGDE	Post Graduate Diploma in Education
PoA	Programme of Action

PSTT	Perception Scale for Teacher Trainees regarding NCFTE-2009
PTEI	Primary Teacher Education Institutions
RIE	Regional Institute of Education
RMSA	Rashtriya Madhyamik Shiksha Abhiyan
RTE	Right to Education
SCERT	State Council of Educational Research and Training
SEP	School Experience Programme
SIE	State Institutes of Education
SIEMAT	State Institute of Educational Management and Training
SLA	Second Language Acquisition
SPS	Stakeholders' Perception Scale regarding NCFTE-2009
SSA	Sarva Shiksha Abhiyan
STEP	Secondary Teacher Education Programme
TEP	Teacher Education Project
UEE	Universal Elementary Education
UGC	University Grants Commission
UNESCO	United Nations Educational, Scientific and Cultural Organisation
UNO	United Nations Organisation
USAID	United States Agency for International Development
VTE	Vocational Teacher Education

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Preface

A curriculum is a continuous reconstruction, moving from the child's present experience out into that represented by the organised bodies of truth that we call studies...the various studies are themselves experience they are that of the race which is composed of all of the experiences children have under the guidance of the teachers. Thus, curriculum considered as a field of study represents no strictly limited body of content, but rather a process of the procedure. The evolution of curriculum for teacher education has taken place from the establishment of civilisations in ignored form. After receiving the systematic arrangement of human civilisations, the role of the teacher was becoming more vital for the development of societies. Before independence, many efforts have been made by the peoples, committees of Indian society as well as British society. Since Independence and the assistant extension in education, the education system of India witnessed both visible or concealed many of changes. Since the tendency of conflict comes with every move and every time it was the main issue to shape the character of the learner by fulfilling the needs and qualities of teacher. The so-called policies or programmes on education in India inflected towards a varied diversity of education. After independence, various commission and committees practised reforming education and teacher education of India. With the establishment of NCTE (National Council for Teacher Education), teacher education got graceful progress. In the improvement of National Curriculum Framework for Teacher Education (NCFTE), NCTE received precious participation from NGOs and various experts of various areas of education; and also had the help of evaluating workout done relatively. National Education Commission (1964-66) and the National Policy on Education (NPE-1968) was prepared to give suggestions to

change in school education with maintaining the quality of teacher through the change in curriculum. The objective of this research is to provide information about the benefits of the National Curriculum Framework for Teacher Education -2009 through analysing it. This research is divided into five chapters which are described as follows.

Chapter first deals with the various curricula and its concept. In this chapter, it is discussed that what is curriculum framework and what are its elements? Further, conceptual background of the CFTE regarding universal and Indian context have been described. All the curriculum frameworks published by NCERT and NCTE have been discussed. **Chapter second** deals with the review of various educational policies, recommendation and reports of committees and commissions. Various research papers of Indian and foreign scholars in the area of teacher education have been reviewed. **Chapter third** deals with the research design of the study where selection of proper methodology, selection of sample using appropriate sampling technique, development and construction of research tool (s), process of data collection, coding and its interpretation have been discussed. **Chapter fourth** deals with the objective wise analysis, result and discussion about the NCFTE-2009. **Chapter fifth** deals with the objective wise findings, educational implications of the study and suggestions for future research.

Abstract

The following research is “An analytical study of National Curriculum Framework for Teacher Education – 2009”. In this research eight districts as **Alwar, Baran, Bharatpur, Jaipur, Jhalawar, Jodhpur, Kota** and **Bikaner** of Rajasthan were selected **randomly** using **fish-bowl techniques**. From these eight districts data have been collected from 320 teacher trainees studying and 150 teacher educators through the **survey** using ‘**Stakeholders’ Perception Scale regarding NCFTE-2009**’ and ‘**Perception Scale of Teacher Trainees regarding NCFTE-2009**’ working in various teacher training colleges affiliated to the various state government universities of Rajasthan. In this research **concurrent triangulation research design of mixed method approach** has been used. For analysing the obtained data, the one way **ANOVA** was performed using *SPSS (Ver. 25)* to compare the means scores of stakeholders of teacher education / B.Ed colleges under various universities of Rajasthan.

After the analysis the conclusions were made that NCFTE-2009 fulfills, vision and aim of preparing NCFTE-2009 for changing school setting and its stresses; preparing professional teachers; making humane teacher; inclusive education; inculcating peace education. It follows constitutional values of equality, justice, freedom, liberty, fraternity, secularism, multiculturalism, sustainable development. It follows ideal ethics like ability to work with others in a cooperative way, sensitivity towards human rights, rights of women, ethnic minorities. It follows respect for national symbols, events, days, heritage and resources. It follows appreciation and respect for cultural diversity and unity in the midst of diversity of language, religion, norms, and cultural traditions. It follows preservation of resources, austerity in

consumption of resources, valuing sustainable development through education and social justice.

After the study the perception of stakeholders in regard of NCFTE-2009, it is concluded that stakeholders, teacher trainees and teacher educators have different-different perceptions. In regard of its implementation, it is concluded that state government of Rajasthan is doing well which was aimed in the NCFTE-2009 for improving the teacher education but process is of time-taking.

Chapter-1

Introduction

A conceptual framework provides boundaries within which facts, concepts, theories, and propositions from three theoretical sources interact with clarity, coherence, and consistency. From the framework, objectives are derived. The framework gives direction to the curriculum design. Finally, the conceptual framework serves as a background against which objectives can be tested. A conceptual framework for curriculum encourages systematic curriculum evaluation that will eventually allow us to more accurately describe, explain, predict, and control the work of curriculum (Chater, 1975, p.428). A curriculum should be dynamic, and educators should constantly analyse new data to make adjustments that meet the needs of all students in this ever-changing world. Students are most successful when the curriculum (organisation, instructional strategies, programs, structure, pacing) is based on their readiness, needs, and interests (Orb, 2001, pp.16-17). Students learn more effectively when they already know something about a content area and when concepts in that area mean something to them and their particular background or culture. When prior knowledge is activated, the instruction is infused with the purpose of the students interest and curiosity. Prior knowledge acts as a lens through which we view and absorb new information. It is a composite of who students are, based on what they have learned from both academic and everyday experiences (Kujawa and Huske, 1995). Teachers who link instruction to prior knowledge build on students' familiarity with a topic (Beyer, 1991).

The Association for Career and Technical Education (ACTE), Consortium for School Networking (CoSN), National Council for the Social Studies (NCSS),

National Council of Teachers of English (NCTE), National Council of Teachers of Mathematics (NCTM) and National Science Teacher Association (NSTA) have identified the six important Principles for Learning of students and teachers, which should be incorporated in any curriculum. These principles recognise that learning in all disciplines is complex and individualised. Applying the core concepts within and outside of discipline and understanding how to teach these concepts effectively is integral to these six principles.

1. Being literate is at the heart of learning in every subject area.
2. Learning is a social activity.
3. Learning about learning establishes a habit of inquiry important in life-long learning.
4. Assessing progress is part of learning.
5. Learning includes turning information into knowledge using multiple media.
6. Learning occurs in a global context.

1.1 What is the Curriculum and Its Concept?

The word curriculum is derived from the Latin word *currere* (Pratt, 1994, p.5; Barrow and Milburn, 1990, p.84). It means to run. It is also derived from the Portuguese word '*corrida*' it means race. The meaning of *curriculum* or *curricula* is '*race course*'. We can say the curriculum is an academic and social learning race. The curriculum is mainly defined as the courses offered by a school. In general, we can say the curriculum intends to what is taught? There are three types of the curriculum –

1. Explicit: the teaching of historical ideas
2. Implicit (Hidden): the teaching of ideas with assumptions
3. Null: the set of ideas that are not taught

A curriculum is a continuous reconstruction, moving from the child's present experience out into that represented by the organised bodies of truth that we call studies...the various studies...are themselves experience they are that of the race (Dewey, 1902, pp. 11-12) which is composed of all of the experiences children have under the guidance of the teachers... Thus, curriculum considered as a field of study represents no strictly limited body of content, but rather a process of the procedure. (Caswell and Campbell, 1935, pp.66-70). Ron Barnett and Kelley Coate struggled with a problem which was expressed through a number of bothering questions, like Should we, in higher education, refer to 'the' curriculum or 'a' curriculum?, Is the concept of curriculum more of an adjective than a noun meaning that a curriculum represents intentions and hopes rather than an entity?, Is curriculum necessarily singular or can one talk about a generic curriculum as a kind of *platonian* ideal in higher education? The point made by Barnett and Coate is that if the language of curriculum inquiry is problematic, evenmore, serious are the difficulties in involving *ordinary* academics and students in curriculum matters and their discourse. It is far from saying that academics and students fail to engage with curriculum issues. But it does point to the fact that curriculum constituents may not always know how their direct involvement shapes curricula and, moreover, that they do not necessarily use the 'right' or applicable curriculum language (quoted in Costandius & Bitzwer, 2015, p.9).

1.2 Curriculum Framework and its Elements

Curriculum Framework is what is to be taught for each subject. It includes large-scale ideas, different concepts, essential skills and needful questions formed to accreditation and assessment teacher and learner with suitable, adequate content (Commonwealth of Pennsylvania). The curriculum framework consists of the following elements (Jackson, Robbins & Harjusola-Webb, 2008).

- a. Large-scale ideas: Large-scale ideas provide divergent thinking to the teacher and learner so that they focus on specific content.
- b. Different concepts: Divergent and convergent thinking help to understand the concept of any type resultant key knowledge takes place.
- c. Essential skills: By the key knowledge teacher and learner get the knowledge to use of various things and various ideas. It develops skills in the action.
- d. Needful questions: Development of skills helps to generate questions to know the necessity of society and education.

1.3 Conceptual Background of Curriculum Framework for Teacher Education

1.3.1 Universal Context

David Labaree wrote teaching existed long before teacher education. On the rise of complicated civilisations at the bank of rivers like Egypt at Nile and Babylonia between Tigris and Euphrates rivers, knowledge was very complicated to transfer person to person and from generation to generation. The reason behind is that societies were very also in complex and complicated. There was no any device or media to remain knowledge safe and save. One day I read a story about the famous teacher Socrates how he taught his pupils through questioning and answering. Therefore, the data were not saved. Thus we lost many civilisations of knowledge. It was the time of 3500 B.C.E. to 3100 B.C.E.

Of the earliest grassroots about First C.E. of the Middle East, Jews were the mainly insistent teacher that they educate all of the class like his son. They open elementary schools to taught mathematics, reading and writing from about six to 13 years old. The main aim was to teach them the first five books of the *Old*

Testament through oral cognition. They taught them, disciplines of arabbi, was known as master or teacher. At the ancient Greek, Athens and Sparta were the important centres of educators. In Athens, the superlative civilians were the persons educated to spread the peace and art of war. Life in every part has must of Concord and rhythm.

Roman education also influenced by the Greek. Cathedral, monastic and palace schools, were activated by the clergy in various parts of continents to train the religious teachers. Establishment of the universities started rising at the end of the Middle Ages, in the 12th and 13th Centuries. The curricula of Universities were classified into two groups with seven liberal arts.

1. Trivium: The religious teachers used to taught *grammar, rhetoric, and logic* in this type of curriculum.
2. Quadrivium: This type of curriculum consisted of *arithmetic, geometry, music, and astronomy*.

The fragrance of the Renaissance spread from Italy to European countries and over the continent widely. It was an uprising against the narrowness, religionism with the development of intellectual, spiritual and physical powers of man for the fortification of life. During the 17th and 18th centuries' teacher was the incompetent and hard disciplinarian. Drilling and memorisation of facts, sentences, and vocabulary were the most approved methods of learning until children understand. Till now most of the humanistic schools have no provision for studying the language because the training of mind was related to spirit. In 17th century training of Catholic and Protestant moved to linguistic studies with the establishment of a vernacular elementary school in Germany.

It was the time when *Comenius*, the Czech philosopher, shows interest to study the nature of a child and actual perception of things. Even though the full state

of education was downward, but some advance educators, philosophers struggling for educational revolt in the 20th century. From the 17th century, many philosophers suggest that mind like a blank paper (Tabula Rasa) from birth and knowledge is God-given. Locke believed that knowledge depends on the exercise of faculties on raw senses from the external world. When mind receives senses than its faculty's work of discrimination, sifting with sorting till knowledge appears.

Rousseau appears as a naturalistic teacher and also as an educator who visualised the nurturing of the body and the senses in place of the intellect. Rousseau forces on the exercise of mind. The predecessor or followers of Rousseau tries to create schools with the natural environment and according to the needs of children with controlled environment guided by the teachers. In colonial America, apprenticeship was becoming a part of training. The trained teachers were not prepared and possibly fewer than the teachers in Europe to enhance the quality of education. In most of the universities, the curriculum was humanistic but had no quality to prepare teachers. At this time most of the education reformist of the world like Pestalozzi, Herbart, Frobel, James, and Wundt, etc. help to reform the teacher education through their efforts.

The first school for the training of teacher was a regular school with the purpose to establish standards or norms for teachers and teaching, now these schools are called as teacher's training colleges, colleges of education. According to The Daily Gleaner, the first established teacher training college in Western-Hemisphere was *Mico Training College* established by *Sir Thomas Fowell Buxton* under the Lady Mico's Charity in 1834 at Jamaica (today, it is known as Mico University College) (The Daily Gleaner, Kingston, Jamaica, March 19, 1921, p. 8).

1.3.2 Indian Context

The evolution of curriculum for teacher education has taken place from the establishment of civilisations in ignored form. After receiving the systematic arrangement of human civilisations, the role of the teacher was becoming more vital for the development of societies. Before independence, many efforts have been made by the peoples, committees of Indian society as well as British society. Since Independence and the assistant extension in education, the education system of India witnessed both visible or concealed many of changes. Since the tendency of conflict comes with every move and every time it was the main issue to shape the character of the learner by fulfilling the needs and qualities of teacher. The so-called policies or programmes on education in India inflected towards a varied diversity of education. After independence, various commission and committees practised reforming education and teacher education of India. With the establishment of NCTE (National Council for Teacher Education), teacher education got graceful progress. In the improvement of National Curriculum Framework for Teacher Education (NCFTE), NCTE received precious participation from NGOs and various experts of various areas of education; and also had the help of evaluating workout done relatively. National Education Commission (1964-66) and the National Policy on Education (NPE-1968) was prepared to give suggestions to change in school education with maintaining the quality of teacher through the change in curriculum. Firstly, in 1978 the curriculum framework developed by NCTE when it was a non-statutory body. In the light of NPE-1986, a revised version of the curriculum framework was formed in 1988 by the NCERT.

Yashpal Committee Report (1993) '*Learning without Burden*' declared that self-image of pre-service training is going weak and slow rather than the past (Yashpal Committee Report, 1993, p. 22). The continuing education for teachers must

be in a formal framework. The organisation of in-service education programmes and other activities must be designed for professional development and conducted imaginatively. According to Yashpal Committee Report, a meeting of the Central Advisory Board of Education (CABE) on October 15, 1993, was discussed with the view of both reports of Yashpal Committee and MHRD (Ministry of Human Resource Development) to generate a global debate in teacher educators and educational experts.

First Curriculum Framework for Quality Teacher Education (CFQTE) was prepared in 1998 by afterwards NCTE. In 2005 NCERT developed NCF-2005 to modify and upgrade the curriculum of school education and teacher education. In 2006 a discussion paper on curriculum framework was prepared by NCTE with the help of NCERT. In the end, a discussion draft of NCFTE was finalised by the NCTE in August 2009, and resultant NCFTE-2009 was shaped.

The NCFTE-2009 accepts the fact that poorly designed and transacted teacher education curriculum cannot produce critical and rationale teachers who can be able to teach through those ways assumed in our policies and NCF-2005. It emphasises the need for careful, rigorous, and continuous support to teachers, through pre and in-service teacher education, so that they can become autonomous, reflective, and caring professionals equipped with an appropriate knowledge-base, disposition, values, abilities, and experiences of working and dealing with children. The teacher is envisioned as an empowered and self-learning intellectual who nourishes and enhances the idea of democracy and prepares our young generations for the same. They are autonomous professionals who are responsible for running the education system with accountability to the immediate community and the whole society (NCFTE 2009, pp. 19-21 and 64-67).

1.4 The Story of Curriculum Frameworks in India

1.4.1 The Curriculum for the Ten Year School: A Framework (1975)

In the year 1975, the NCERT prepared it under the chairmanship of Prof. Rais Ahmed. Perhaps, it was the first organised effort of modern India to decide the framework for curriculum after Independence. The committee for the Framework 1975 was developed in 1973 by The Ministry of Education and Social Welfare for developing the curriculum for 10+2 pattern.

1.4.2 National Curriculum for Elementary and Secondary Education-1988

The NCESE-1988 was designed in the year 1988 under the directorship of *P. L. Malhotra*. It was based on National Policy on Education 1986 to fulfil the recommendations of its. After the acceptance of 10+2+3 scheme by the parliament through (National Policy on Education) NPE-1968 it was necessary to reform the mask and role of education in India which was coming after the Independence. Therefore, A Curriculum for the Ten Year School: a Framework in 1975 was given by the NCERT to change the contemporary scenario.

1.4.3 National Curriculum Framework for Secondary Education-2000

National Curriculum Framework for Secondary Education (NCFSE-2000) was developed in 2000 under the Chairmanship of Prof. J.S. Rajput. NCFSE 2000 gave a forceful amendment to education through religion-based education. Therefore, it is known as the controversial curriculum framework of India. Finally, it was banned by the Supreme Court of India.

1.4.4 National Curriculum Framework-2005

The Executive Committee decided to revise NCFSE-2000 by the revised name NCF-2005. The NCF-2005 was prepared under the chairmanship of Prof. Yash Pal in

2005. Under the chairmanship of Prof. Yash Pal and with the help of 21 national focus groups, faculty of NCERT, Regional Centres of NCERTs, NGOs, SCERTs, etc. NCF was proposed by the National Policy on Education (NPE, 1986) to underline the problems of school and teacher education relatively through The Programme of Action (PoA, 1992).

1.4.5 NCFTE (Draft for Discussion) 2006

It is also known as *Draft Curriculum Framework for Teacher Education*. It was prepared by the NCTE (National Council for Teacher Education) in collaboration with National Council of Educational Research and Training (NCERT) to accept suggestions to remove drawbacks or implement innovations or ideas for (National Curriculum Framework for Teacher Education) NCFTE.

1.4.6 NCFTE-2009 (Draft for Discussion)

National Council acknowledged the contemporary condition of teacher education, its working and the unique issues and difficult areas of teacher education. Therefore, the draft-2009 was finished under the supervision of *Prof. Mohd. Akhtar Siddiqui* and uploaded by the (National Council for Teacher Education) NCTE on its website (www.ncte-india.org) with the expectation that all fretful will stand by their precious and valuable time to enrich National Council for Teacher Education with their contributions.

1.5 The Student-Centered Curriculum

A student or learner centred curriculum must have a purpose. Its purpose ostensibly is to provide students with experiences that will lead them to attain certain desired end states. Pre-specification of these end states provides a guide for the direction of the instructional process as well as a basis for determining if the

instructional process has been a success. Thus, a curriculum must be defined in terms of the educational goals of students. It is synonymous with saying that it must be defined in terms the educational needs of students, for the goal of the curriculum is to meet the educational needs of the students (Tuckman, 1969, p. 2). According to Ornstein (1982), the subject-centred curriculum cannot be sufficient for the complete learning and development of a learner, but a child-centred curriculum can help to impart essential key knowledge through a teacher. Therefore, a teacher should be trained thus type that he encourages learner like Rousseau and John Dewey whose single purpose was to pierce ideas into a child's brain. Friedrich Wilhelm Nietzsche (2007), the famous German philosopher wrote "dancing in all its forms cannot be excluded from the curriculum of all noble education; dancing with the feet, with ideas, with words, and, need I add that one must also be able to dance with the pen that one must learn how to write?" (p. 47). A curriculum should be student-centred because the student is the minute and supply unit of the nation's future creation. Therefore, a teacher can make the path easy for the learner, society, and nation by working as -

1. A problem solver for learner and society.
2. A communicator between learner and society.
3. A developer of society through the development of the learner.
4. An actor to play their role honestly.
5. A savior of the culture of society.
6. The constructor of values of society.
7. A philosopher to generate power to enrich the learners with logic.
8. A psychologist to all-round development of the learner and, to know the need of the learner and the society.

9. A sociologist to know about the society and interaction with its environment.
10. A creative thinker to help generate convergent and divergent thinking in the mind of the learner.
11. A counselor to guide the learner to make the decision properly.
12. A transformer to transform the knowledge.
13. An evaluator or Examiner to evaluate the knowledge of learner.
14. A trainer of skills to train the hand through training of the mind.

1.6 Challenges for Curriculum

India is known for its great ancient education system. The oldest university *Taxila* is known for greatest guru *Chanakya*, whereas biggest *Nalanda University* for its toughest entrance examination of that time. Even without patents, contributions of the Indian scholars like *Charaka* for Ayurveda, *Susruta* for surgery, *Aryabhata* and *Bhaskara* for mathematics and astrology, *Chanakya* for Economics, *Patanjali* for Yoga and *Vatsayayna* for philosophy, etc. are unforgettable. The Indian education system from ancient to today helped in preserving the ancient legacy of India by promoting its cultural and social unity which infused a sense of responsibility for social values. Indian wisdom school has been a source of inspiration to all educational systems of the world, and everywhere it spread its fragrance. It is not known evidently but these scholars are a witness of educating by a unique curriculum. Freedom fighters like Gopal Krishna Gokhale, Mahatma Gandhi, etc. had also done efforts to strengthen the Indian education system. But after the seven decades, there is no major changes are observed genuinely in the Indian education system. Every Government is reforming education policies with less focus on teacher education. Here is a need to have a brand new perception for preparing dynamic teachers. Lee Elliot, the Director

of Policy and Development of the Sutton Trust in his book “What Makes Great Teaching” wrote It’s a scandal that we are so concerned with the learning of pupils, yet neglect the professional development of teachers themselves. Good quality teachers are the agents of social mobility able to transform the achievement pupils from poorer backgrounds. This research review debunks many of the teaching myths but also reveals the core lessons for schools to help them develop great teachers. The National Curriculum Framework for Teacher Education-2009 (NCFTE) includes guidelines of RTE Act 2009 with social and moral ethics, training of brain through arts and crafts, music, physical Education and, life skills including inclusive education to ensure overall development of all type of learners.

The National Education Policy-2020 has suggests to focus on restructuring our education system for making learning holistic, integrated, enjoyable which engages all types of individual differences. This policy suggests a framework for changing and making education modern by incorporating technology into it without compromising on culture, traditions and heritage of India.

The curriculum frameworks prepared by National Council of Educational Research and Training consecutively in 1975, 1988, 2000 and 2005 specify the varieties of its contribution. NCERT, with its known position as a distinctive organisation with significant consent, is faced with enormous challenges to cater the need of teaching and learning in diverse situations and conditions. The NEP-2020 has attracted attention on following challenges of the curriculum -

1. To prepare teachers on the ground of Indian values, knowledge ethos, traditions and languages.
2. To revitalizing the education system to prepare professional teachers with quality of being humane.

3. To prepare minimum standards for teacher education institutions that do not meet basic prescribed criteria.
4. To remove malpractices in the examination system.
5. To prepare high quality content and pedagogy.
6. To shift 4-year integrated BEd programme to multidisciplinary education institutions.
7. To prepare education system for skill and vocational education.
8. To ensure range of experts in higher education institutions offering teacher education programme.
9. To maintain uniform standards for teacher education in whole country at every level.
10. To prepare diverse teacher educators to understand and able to provide training which is directly relevant to school education.
11. To prepare PhD programme of teacher education which enables teachers of understand pedagogical practices, designing curriculum, evaluation system and credible communication.
12. To prepare the curriculum for reimagining the vocational education.
13. Overemphasis on acquiring dead-end qualifications which do not lead to employment.
14. Failure to make ICT (Information and Communication Technology) as functionally integral to the management of pedagogy of education.
15. Mediocre status of a majority of higher education institutions.
16. The education system has less concentration on the emerging learning areas.

17. The education system is unable to respond to the impact of globalisation and the demands of the emerging knowledge-based economy and society.
18. The education system is unable to meet the learning needs of diverse groups of learners.
19. The education system is unable in linking education with life-skills and the world of work.
20. The education system is unable in generating concern relating to sustainable development.
21. Complicated procedures to attain objectives of education with a view to revision and upgrading of the curricula.

When any learner comes to the school, he does not know about the functioning of the school, classroom, and behaviour of teachers. Indian Vedas, Upanishads, and epics give information about the ideal image of a teacher, his characteristics, and various teaching strategies with multi-dimensional techniques which are known as Vidyas or Chakras. Today, teacher education is measured as weakest part of the whole education system of India. It is a global truth that we have the pride of being a world Guru. It has been much time studied by us every time that Lamarck is best known for his “Theory of Inheritance of Acquired Characteristics”. According to him If an organism makes some changes during his life to adapt to its environment, those changes are transferred on to its offspring (Lamarck, n.d.). Therefore, we have forgotten that the Indian mind has developed from the Sanskrit language, in which there is no place for a single error including exceptions.

Every Government is reforming education policies but less focus on teacher education. Today it is a need to have a brand new perception for preparing dynamic

and humane teachers. The director of policy and development of the Sutton Trust Lee Elliot in his book *What Makes Great Teaching* has written “It is a scandal that we are so concerned with the learning of pupils, yet neglect the professional development of teachers themselves. Good quality teachers are the agents of social mobility able to transform the achievement pupils from poorer backgrounds. This research review debunks many of the teaching myths but also reveals the core lessons for schools to help them develop great teachers”. The National Curriculum Framework for Teacher Education-2009 (NCFTE) includes guidelines of RTE Act 2009 with social and moral ethics, training of brain through arts and crafts, music, physical Education and, life skills including inclusive education to ensure overall development of all type of learners.

1.7 Knowledge Gap

There are various studies on the curriculum, curriculum framework and teacher education in Britain, China, Pakistan, and South Africa. Earlier in India, in the report of the University Education Commission (1948-49) concern is expressed about the gap. The report is of the opinion that people in India have been slow to accept that profession of education has a compulsory need of intensive care and preparation than all other. After independence, in India, different kinds of researches have been performed in the area of elementary education, school education and teacher education. But a very few investigations have been done in the area of the curriculum of teacher education. After an intensive inquiry, the researcher found that no study has been conducted in the area for NCFTE-2009 about Rajasthan.

1.8 Need of the Study

Good teachers are always sought to prepare. But it was also needed for what should be efforts to make good teachers. After independence, there were many

commission and committees developed time to time for starting and reforming the teacher education systematically. Gardner (1973) in his document “Versatility and Innovation” opined that undoubtedly, our schools could not be fully prepared for innovation in education. Because innovation is concerned with continuity and change. For instance, continuities in the human condition, continuities in our tradition and transition of other concerns. Therefore, preparing teachers for playing multiple-role in classroom or school will be a step of -

- inspiring, supporting and making humanitarian helper in teaching and learning situations which will help learners to realise their capacities, by appreciating their physical and intellectual potentialities. It will also help to strengthen their personality, be willful for societal and human ethics and play the role of responsible citizens.
- being an energetic supporter of the group of individuals who make sensible efforts to contribute towards the process of renovation of school education and teacher education curriculum. These efforts will be useful for shifting the societal needs and individual needs of learners in the light of emergent goals and educational primacies. Various researches show that teacher education is becoming a vital part of society. Every country is making an effort to improve the quality of education and India is not an exception of this. Even after various efforts, there is a lack of globalised curriculum of teacher education due to some uncertainties like individual differences, gender inequality, regionalism, environmental factors, etc.

Teachers are trying to lessen the burden of the learner feeling his pressure, by making the classroom more interactive and collaborative using technology in teaching. Some useful strategies for teaching and learning are earmarking as follows -

- by steadiness of power for the empowerment of learner..
- by selecting the content of curriculum according to the needs of learners.
- by fixing the responsibility of teacher as a guide, supervisor, supporter, inspector.
- by deciding accountability of teacher for profession through making the environment of learning and willing for learning.
- by establishing objectives and procedure of continuous and comprehensive evaluation through self-assessment and problem-solving.

In India, various committees and commissions has given few recommendations to reform teacher education - for examples University Education Commission (1948-49), Secondary Education Commission (1952-53), National Education Commission (1964-66), Chattopadhyay Committee Report (1983-85), Yashpal Committee Report (1993). After the analysis of recommendations of these commissions and committees and findings of various researches, it was experienced that there were some deficiencies in the curricula of teacher education prepared before. Therefore, a need for analysing NCFTE-2009 was felt. Rajasthan is geographically largest state of this country where a range of teacher education colleges present and the status of teacher education is worsening day by day. So in the view of the researcher, there is a need to study the factual situation of teacher education in Rajasthan.

1.9 Significance of the Study

Teacher education is the area where everyday innovations are taking places through understanding its implications of new researches and new technologies. It is a serious problem of our society that after many efforts there is a shortage of good teachers. Therefore, in present research, an effort to investigate the needs of teacher education is made. The researcher has also tried to give suggestions for the new policies on education which are implemented by the government from time to time. It is believed that dynamism is a quality of a good teacher. Therefore, it is a need of the hour to understand the need of skill, internship format, hindrances of institutions, practical situations faced by the teacher in the classroom and a part from this his personality related issues. This research may be important for investigating and suggesting innovations for teacher education. This research may also be helpful for the teachers, teacher educators and policymakers to teach, to train and to explore new ideas in the area of teacher education. The major purpose of this research is to find the gaps between practice and implementation of the NCFTE-2009. This research will put forth an idea that what is the status of implementation of NCFTE-2009 in Rajasthan.

1.10 Statement of the Problem

“An Analytical Study of National Curriculum Framework for Teacher Education – 2009”

1.11 Variables of the Study

1.11.1 Independent Variable

In this research, National Curriculum Framework for Teacher Education – 2009 is treated as independent variable.

1.11.2 Dependent Variable

In this research, Teacher Education is treated as dependent variable.

1.12 Operational Definitions of Technical Words Used in Title

1.12.1 National Curriculum Framework for Teacher Education-2009

Framework for teacher education which was prepared in 2009 by the National Council for Teacher Education to decide that what is to be taught to prepare the teacher and to make them skilful.

1.13 Research Questions of the Study

The research questions of this research are as follows-

1. What are the theoretical concepts and objectives of NCFTE-2009?
2. What is the perception of stakeholders about NCFTE-2009?
3. What is the status of implementation of policy document of NCFTE-2009 in Rajasthan at B.Ed. level?
4. What could be done for better management of teacher education institutions in Rajasthan state in regard of NCFTE-2009?

1.14 Objectives of the Study

The objectives of this study are as follows-

1. To analyse the theoretical concept and objectives of NCFTE-2009.
2. To study the perception of stakeholders in regard of NCFTE-2009.
3. To study the policy document of NCFTE-2009 in the context of its implementation in Rajasthan at B.Ed. level.
4. To give suggestions for the better management of teacher education institutions in regard of NCFTE-2009.

Chapter-2

Review of Related Literature

In a literature review database reports of primary or original source are used which may be verbal, but in vast and sensitive cases, reports are written documents. A report may be empirical, theoretical, critical, analytical and methodological in nature. A literature review attempts to describe, summarise, evaluate, clarify and integrate the content of primary reports (Cooper, 1988, p. 107). The literature may come from books, articles, reports or other sources. Literary sources may also contradict the ideology of each other. A literature review also helps distinguish what research has been done and identify what needs to be done for further research. The researcher conducted review of the following literature related to this study.

2.1 Introduction

A curriculum is regarded as the *heart* of any educational institution which means that educational organisation cannot have its existence without a curriculum. With its importance in formal education, the curriculum has become a dynamic process due to the changes that occur regular and irregular in our society. Therefore, in its broadest and liberal sense, curriculum refers to the total sum of learning experiences of individuals not only from formal learning but informal ways (Bilbao *et al.*, 2008). In most cases, the term curriculum is used to mean very different things by different users and even by the same user in different contexts (NCERT, 2006, p. 1).

In major countries, the ministry of education establishes curricular standards (Burrill *et al.*, 2015). Governments influences education through funding initiatives, such as the Free and Compulsory Education Act 2009, Right to Education Act 2009,

Mid-day Meal Project, Scholarship and Fellowship schemes etc. In most of the countries, standardised curricular goals are decided by its historical tradition or cultural values. For instance, in Namibia, the curriculum of Cambridge University was used until they became independent in 1990. Recently they have begun to develop their own curriculum standards. Brazil's measures are attributed to the history of the discipline, the prescribed curriculum, and the comparative analysis among national documents from different historical periods and national and international documents. Some countries seem to prepare their norms and guidelines based on those of countries with high achievement scores on recent international exams (National Curricular Design, 2009).

2.2 The Historical Overview of Curriculum and its Framework

Philip Melanchthon first propounded the curriculum in the informal form. In his work, '*Questions in Dialectic*', written in 1547, he wrote that "method is a habit, that is a science or an art which find and opens a way through overgrown and impenetrable places and pulls out and ranges in order the things pertaining to the matter proposed" (Ong, 1958, p. 232 quoted in Hamilton, 2013, p. 46).

Firstly, *Peter Ramus*, the professor at the University of Paris reaffirmed aspects of the dialectical method. In 1569, He wrote in his *dialectic*, which was published in many editions from 1555 to 1600, that "*method is disposition by which that enunciation is placed first which is first in the absolute order of knowledge, that next which is next and soon, and thus there is an unbroken progression*" (Ong, 1958, p. 237 as cited in Hamilton, 2013, pp. 46-47). Of course, '*curriculum*' is a *Latin* word which has been used directly over into English. Its first Latin meaning was *running*, or *race*, and now secondary is *race course* or *career* (Egan, 2003).

NCERT (2006) has defined the curriculum framework as a plan that interprets educational aims vis-a-vis both individual and society, to arrive at an understanding of the kinds of learning experiences school must provide to children (p. V of executive summary). Curriculum (what is taught) and Pedagogy (how it is taught) has always been challenging issues in the educational history of India post-independence. Obviously, it is to be so owing to the immense diversity in the contexts, needs, and opportunities of the country's population. The existing forms of curriculum and pedagogies in the country are a result of several programs and policies that took shape over the years, particularly after independence. The following three sections briefly describe the policy context in which the curriculum is designed and implemented. It begins with a brief and analytical review of the literature on curriculum policy to understand how it influences the implementation of the curriculum. It is followed by a historical review of the ideologies and its impact on successive national curriculum frameworks in India. It also outlines some of the key documented challenges faced by educators in understanding and practising the existing primary curriculum (Kidwai *et al.*, 2013). The first book entitled 'The Curriculum' was published in 1918 by Franklin Bobbitt followed by his other book 'How to make Curriculum' in 1924. In 1926, the National Society for the study of education in America published the year-book devoted to the theme of curriculum 'The Foundation and Technique of Curriculum Construction'. That is how the movement for curriculum development, from its beginning in the 1890s, started becoming a vigorous educational movement across the world (NCERT, 2006, p. 3).

The curriculum is an institutional text plan, the purpose of which is to simplify the everyday functioning of an institution (Pinar *et al.*, 2008, p. 661). The curriculum policy is an initial stage amongst its design, implementation, technology, supervision,

and evaluation of curriculum development (Pinar *et al.*, 2008). However, in practice, due to constant interactions and influences, these stages do not essentially follow a strict linear sequence. More formally, a curriculum policy can be defined as the formal body of law and regulation that pertains to what should be taught in schools (Elmore and Sykes, 1992 as cited in Pinar *et al.*, 2008, p. 666). General capabilities, which should be addressed across the curriculum, are literacy, numeracy, Information and Communication Technology, thought process, self-management, creativity, teamwork, cultural understanding, ethical behaviour and social competence (DoE, 2011, p.6). Because the national curriculum represents the learning entitlement of every student of the country from which he belongs (ACARA, 2009, p. 11).

2.3 Curriculum Framework: A Review

Curriculum Framework is a framework of content to be taught for each subject? It includes large-scale ideas, different concepts, essential skills and needful questions formed to accreditation and assessment teacher and learner with suitable, adequate content. *The framework* is a set of ideas, principles, agreements or rules that provide the basic outlines for something planned at a large stage. International Bureau of Education defined that *Curriculum Framework* is an essential overarching curriculum document, usually developed by a high-level group of curriculum and education policy experts, and reflecting a social and political consensus around a society's educational vision. A Curriculum Framework would usually include statements about underlying values, conceptions of learning, the principal aim, purposes and tasks of education, about the development of school culture, and the like. It is a core policy document that describes a range of requirements, regulations and advice which should be respected by all stakeholders in the education system, and

which should guide the work of schools, teachers and the developers of other curriculum documents (such as textbooks and teacher guides) (p. 26).

A Curriculum Framework can be viewed as a kind of *Constitution* for the education system of individual discipline. It is just in the same way, as a national Constitution defines the scope of places parameters around and legitimises a country's laws. A Curriculum Framework defines, constraints and legitimises decisions within classrooms, schools and, in many cases the whole education system. It is so vital that open discussion and consultation are essential in its construction. A Curriculum Framework can perform a range of specific functions, such as (Stabback, 2016) -

- placing national statements of vision, socio-economic context and development, educational values and education policy in a curriculum context.
- setting out the vision, aims and objectives of the curriculum at the various stages of schooling, the transitions between each and links to further education, higher education, work and lifelong learning.
- explaining the educational philosophy underlying the curriculum and the approaches to teaching, learning and assessment that are intrinsic to that philosophy.
- prescribing requirements for curriculum implementation, monitoring and evaluation, including the provision of clear advice –
 - to teachers about appropriate pedagogy and assessment methodologies.

- topolicy makers across the education system about the requirements of the curriculum and how they can contribute to the realization of the curriculum vision.
- providing guidelines to teacher educators and, if appropriate, textbook writers.
- outlining the curriculum structure, its subjects or Learning Areas and the rationale for the inclusion of each in the curriculum.
- if appropriate, allocating time to various subjects and Learning Areas in each grade or stage.

2.4 The Student-Centered Practices by the Teacher: A Review

According to *Ornstein* (1982) subject centred curriculum cannot be sufficient for the complete learning and development of a learner, but a child-centred curriculum can help to impart essential fundamental knowledge through a teacher. Therefore, a teacher should be trained in such a way that he encourages his learner in that manner, as Rousseau and John Dewey did, whom single purpose was not only to penetrate ideas into a child's brain but enabling him to create knowledge. Therefore, a teacher should be trained to be -

1. a problem solver for learner and society.
2. a communicator between learner and society.
3. a developer of society through development of learner.
4. an actor to play their role honestly.
5. a savier of culture of society.

6. a constructor of values for an ideal society.
7. a philosopher to generate power to enrich the learners with logic.
8. a psychologist to all round development of learner by knowing the need of learner and society.
9. a sociologist to know about the society and interaction with its environment.
10. a creative thinker to help generate convergent and divergent thinking in the mind of learner.
11. a counselor to guide the learner to make decision properly.
12. a transformer to transform the knowledge.
13. an evaluator or examiner to evaluate the knowledge of learner.
14. a trainer of skills to train the hand through training of mind.

2.5 Objectives of Curriculum Development: A Review

A child starts his journey of learning from his babyhood by feeling the nature and its things, connecting with persons and their ideas, by self-instinct and by a rudimentary type of education of his community and society. As he (child) learns to talk, he suggests a name first and then speaks on the concept of that name. Richmond as being a child (1919) believed that the most familiar and delightful presence for all children is called 'mother' while different one of more doubtful and tough intention is called 'father'; there is a small place called 'bed' and a large place called 'out'; there is a state of harmony called 'good' and mysteriously discordant state called 'naughty'

(p. 54). This belief enables us to make the sense by which we do classify contents of knowledge as curriculum. A common understanding says that it is silliness of talking about a stone in comparison with butter. Slowly up-gradation of intelligence by the natural development of the child is the essence of the necessary development theory. Therefore, comprehending care (Richmond, 1919, p. 58), societal involvement (Weissglass, 1999), cultural assimilation (Barnhardt, 1981), ideal ethics (Ozar, 2001), conceptualistic knowledge (Scott, 2014; Sherrington, 2015), social and cultural values (Ryan, 1993; Corrigan, 2014; Sulayman, 2014), and skills developing objectives are needed to prepare a fundamental, inclusive and dynamic curriculum.

2.6 Need of the Curriculum: A Review

Over time, many countries have changed their local standards to national standards. For example, Brazil found that the lack of national standards contributed to unequal opportunity for education (Cho, 2015, p. 6). The commitment for achieving and maintaining equality of gender and race through education has emphatically and apparently been repeated through the policy documents of independent India, including the reports of the two Commissions related to school education and the National Policy on Education 1986 with its review in 1992 (NCERT, 2006, p. 3).

The analysis of various policy documents indicates that achieving equality through education has been consistently and unequivocally voiced, over the years. However, the challenge of translating the vision of equality into a curriculum framework has remained unanswered. The basic problem that emerges has been conceptualising flexibility or diversity which is closely linked to the systems inherent limitation and inability to define the role of the curriculum and its transaction. Related to this are the associated problems in defining syllabus, standards and going beyond

the core curriculum. This reluctance of the system to allow for true plurality and flexibility in the curriculum, as well as the restricted meaning of the term curriculum itself is most clearly evident in the report '*Learning without Burden*' (GoI, 1993).

Subsequently, Education Commission (1964-66) continued to highlight the poor quality of school education and commented on the low quality of textbooks owing to the lack of research related to preparation and production, and the lack of interest of top-ranking scholars in this area. It called for the definition of *national standards* and recommended centralised textbook production to conform to those, starting at the national level and also supporting-establishment of bodies at the State level. In hindsight, we can see that the problematic role of the textbook continuing from the colonial education system, which has assumed a sacrosanct position in the school and the classroom, marginalising the role of the curriculum and the syllabus, was further strengthened from the then expectation that the nationally produced textbook would far more precisely indicate the national standards (GoI, 1971).

2.7 Principles of Curriculum Development: A Review

In the 1950s, Ralph Tyler raised four basic questions in his book *Basic Principles of Curriculum and Instruction* which should be compulsorily followed in developing any curriculum and plan of instructions. These four questions are –

1. What educational purposes the school seek to attain?
2. What learning experiences be achieved that are likely to attain these purposes?
3. How can these educational experiences be effectively organised?
4. How can we determine whether these purposes are being attained?

He believed that the structure of any curriculum also should be the mirror of following these three central elements of an educative experience -

1. the nature of the learner (his development, interests, needs and life experiences, etc.).
2. the values and aims of society (democratising principles, ideal values, traditional ethics and attitudes).
3. knowledge (what is believed to be reliable and usable knowledge).

In the answering of *Ralph Tyler's* these four questions, following principles for developing a new curriculum framework arises.

2.7.1 The Principle of needs

A curriculum development depends on the needs of the learner, teacher and finally of the whole society. If we know the needs of these, then we can think about what kind of education would help to fulfil the requirements of all of them.

2.7.2 The Principle of action

We know that there is no chance of action without response. So to take from the teacher, learner and society firstly we must give inputs then we can get outputs.

2.7.3 The Principle of new research

A learner, teacher and society everyone is like a researcher either directly or indirectly, If all of these, thinks that how to learn? How to teach? and How to know? These are the qualities of a researcher. Researcher means a person that has curiosity in searching for something.

2.7.4 The Principle of innovations

Every new thing creates curiosity in the mind of every child. But we should never forget that we also have a child inside us because every person wants to take the complete knowledge of the universe as how was it born, what will happen in future? etc. Therefore, everything which is new for us is an innovation.

2.7.5 The Principle of value

Every society has its own culture, rules and regulations. These are the values of society. It wants to save its values by the preservation in mind of its followers. So education is the safety weapon and sprinkler of values of society. It helps to decide teacher and techniques to frame the knowledge of society.

2.7.6 The Principle of transmission of information

We know that an essential part of knowledge to which we remained untouched because either there was no material developed to store data or no suitable person found. In the current scenario, it is necessary to transfer knowledge/information.

2.7.7 The Principle of Child-Centred Curriculum

Those who advocate the child-centered curriculum advocates that the child is the foundation to decide the type of knowledge and the curriculum. Although, developing-child and their environment are influenced by society, needs of society and it's paramount. Francis Parker stated that many decades ago, "The centre of all movement in education is the child" (as cited in Folsom & VanTassel-Baska, 2009, p.14). Throughout the last three decades, three main child-centred curriculum movements have aroused to affect education, open education.

2.8 Types of Curriculum: A Review

Since curriculum exhibits the models of instructional delivery chosen and used by an organisation, some expert might indicate that curriculum could be categorised according to the standard psychological classifications of the four families of learning theories social, information processing, personalist, and behavioural (Wilson, 2015). Longstreet and Shane (1993) have dubbed divisions in curricular orientations as a child-centred, a society-centred and knowledge-centred or eclectic. Common philosophical orientations of the curriculum beliefs espouse different philosophical orientations like idealism, realism, perennialism, essentialism, experimentalism, existentialism, constructivism, reconstructivism or are like them. Therefore, the curriculum of different courses of teacher education can also be different. There are following types of curricula being used by the different institutions.

Table (2.1)Types of Curriculum

Type of Curriculum	Definition
Overt, evident, explicit or written curriculum	It may refer to a curriculum document, texts, films, and supportive teaching materials that are openly chosen to support the wide plan of a school. Thus, the explicit curriculum is usually confined to those written understandings and directions formally designated and reviewed by administrators, curriculum directors and teachers collectively (Wilson, 2015).
Societal curriculum (or	Cortes (1981) defines this curriculum as the massive, ongoing, informal curriculum of family, peer groups,

social curriculum)	neighbourhoods, religious institutions, organisations, occupations, mass media, and other socialising forces that educate all of us throughout our lives (p.24). This type of curriculum can be expanded to include the powerful effects of social media like YouTube, Facebook, Twitter, etc. and it can actively help to create new perspectives with shaping individual and public opinion.
The hidden or covert curriculum	Longstreet and Shane (1993) defined that a hidden curriculum which refers to the kinds of learning children derives from the varied nature and organisational design of the organisation and behaviours and attitudes of its members (p.46). It emphasises on sequentially room management, formal instruction arranged in time series, discipline with concentration equates to student behaviours. For instance, they are sitting up straight and are continually quiet, students getting in and standing in a pattern as in queue or distracted, students quietly raising their hands to be called on, the endless competition for grades, etc.
The null curriculum	The null curriculum includes the things which are not taught in schools; perspectives and ideas the children may never know about; why individual differences exist; and the concepts, theories and skills that are not part of their intellectual understanding (as cited in Flinders <i>et al.</i> , 1986, p.34).

Phantom curriculum	The phantom curricula are information and intimations transmitted through media. Yarbrough and Bruce (1974) defined the phantom curriculum is the great un-indexed system of data acquired by children (p.226).
Concomitant curriculum	Concomitant curriculum refers to what is taught at home or those experiences which are part of a family or its sanctioned experiences. Srivastava and Kumari (2005) describe the concomitant curriculum that is received at church, mosque or temple which includes values, morals or ethics based on a family's preferences (as quoted in Mitchell, 2016, p.301). Mayfield (2008) described that the concomitant curriculum is concerned with self-reflection and critical analysis providing students with autonomy and it is the autonomy which is part of the concomitant curriculum.
Rhetorical curriculum	The rhetorical curriculum comprises of reports and ideas provided by policymakers, school officials, administrators, or politicians (Wilson, 2015).
Formal curriculum, official curriculum or curriculum-in-use	The formal curriculum is a pre-planned programme of objectives, content, teaching-learning experiences, required resources and assessment offered by an organisation. It is sometimes called the official curriculum also (UNESCO, 2017). It comprises those content and concepts, are printed or available in textbooks. The curriculum-in-use is the actual curriculum that is delivered

	and presented by every teacher.
Received curriculum, learned or enacted curriculum	The received curriculum is, what student takes out of the classroom of those concepts and content that are truly learned and remembered. The enacted curriculum includes the teacher-learner interactions focused on instructional materials and the teacher-intended curriculum (IGI Global, 2017).
The internal curriculum	It refers to the processes, content, knowledge combined with the experiences and realities of the learner to create new knowledge. In this curriculum, a teacher uses instructional assessments like exit slips, reflective exercises or debriefing discussions to know what students remember from a lesson. It is also useful to develop insight to find out, what does it mean, for the learner and what does it work (Wilson, 2015).
The electronic curriculum	Hendricson <i>et al.</i> (2004) using a more formal approach referred to it as the <i>E-curriculum</i> . E-curriculum refers to computer-based learning, electronic educational materials (online subjects, CDRoms), online databases to search for materials, online evaluations and assessments, and formal academic communication through email (p.1042).

2.9 Curriculum Development: A Review

Curriculum development referred to systematically planned, purposeful, progressive process to create positive improvements in the educational system. Every time, big changes or developments are happening around the world. There is a need to

update them for addressing society's needs. However, when the effects of discoveries and inventions became inevitable, ancient people's way of life had changed for the better. As a result, education became formal, and curriculum development evolved as systematic, planned, purposeful and progressive, even today (Bilbao *et al.*, 2008). David Labaree (2008) wrote teaching existed long before teacher education. On the rise of complicated civilisations at the bank of rivers like Egypt at Nile and Babylonia between Tigris and Euphrates rivers, knowledge was very complicated to transfer person to person and from generation to generation. The reason behind is that societies were quite complex. We lost many civilisations of knowledge.

Of the earliest grassroots about the First AD of the Middle East, the Jews were the mainly insistent teacher that all of the classes be educated by them like their son. The Jews initiated elementary schools to taught mathematics, reading and writing from about six to thirteen years old. At the ancient Greek, *Athens* and *Sparta* were the important centres of educators. Roman education also influenced by the Greek. Establishment of the universities started rising at the end of the Middle Ages, in the 12th & 13th Centuries. Curricula of Universities were classified into two groups with seven liberal arts. First one *Trivium* (the religious teacher taught in this grammar, rhetoric and logic) and other one *Quadrivium* (the religious teacher taught in this arithmetic, geometry, music and astronomy) (Preece and Collison, 2016). After the renaissance, drilling and memorisation of facts, sentences and vocabulary were the most approved methods of learning until children understand. Till that time most of the humanistic schools have no provision for studying the language because the training of mind was related to spirit. In 17th century, training of Catholic and protestant moved to linguistic studies with the establishment of a vernacular elementary school in Germany.

From the 17th century, supporters of Aristotelian philosophy of Tabula Rasa (Blank Slate) like Locke suggested that mind is like a blank paper from birth and knowledge is god gifted. Erst supporters of faculty theory believed that the knowledge depends on the exercise of faculties of mind on senses with the external world. Though, the common seventeenth-century opinion assumed that *all the Faculties of the Mind, both active and passive, are mightily heightened and improved by exercise* (Rymer, 1965). Locke, Rousseau and some others focused on the activity of mind for the fixation of knowledge. The predecessor or followers of Rousseau tried to create schools with the natural environment and according to the needs of children with controlled environment guided by the teachers.

Since, in colonial America, the apprenticeship programme of teachers was being procedural and running in the primary stage. Therefore, the trained teachers were not prepared and possibly fewer than the teachers in Europe to enhance the quality of education, and in most of the universities, the curriculum was humanistic without maintaining quality to prepare teachers (Hutton, 2015, pp.29-31).

At that time, Pestalozzi believed that if the teacher does not want to impose knowledge on the child rather than, he must rely on him and the environment around him for acquiring the knowledge. He was wishing to communicate that the teacher is not going to pour the knowledge into the children's brain and then it will be up to the child to find the knowledge on their own. He also earmarked that without observing the behaviour of the child, the teacher will not be able to get all of the answers needed to succeed in his teaching (Hopkins, 2013).

The first school opened for the training of teacher was a normal school with the purpose to establish standards or norms for teachers and teaching, now that-type

of schools are called as teacher's training colleges or colleges of education. According to *The Daily Gleaner*, the first established teacher training college in Western-Hemisphere was *Mico Training College* (Today Mico University College) in 1834 in Jamaica by Sir Thomas Fowell Buxton under terms set out by Lady Mico's Charity (*The Daily Gleaner*, 1921, p.8).

2.10 Trivialisation of the Curriculum

Only for preparing a curriculum, learning and participating in school can be trivialised, therefore. Such trivialization can lead to rendering schooling irrelevant and meaningless for many students. A summary of trivialisation appears below (Wood, 1990). Wiggins and McTighe (2007) expressed their frustration about the uneasy relationship of teachers and curriculum in schooling by differentiating by mission, action and achievement that "Over the years, we have observed countless examples of teachers who though the industrious and well-meaning act in ways which suggested that they misunderstand their jobs. It may seem odd-poorer to hearing that many teachers misconceive their obligations. But we believe, it is neither the subject of being surprising nor an aspersion on the character and insight of teachers. We believe that teachers do not act on an accurate understanding of the role of an ideal teacher because they imitate what they experienced, and their supervisors rarely make clear that the job is to cause understanding, not merely to headway through the curriculum and hope that some content will impose" (p.128).

2.11 Encouragements for the Quality Curriculum

Both Knowledge and education have been considered as the significant factors contributing to the sustainable development, economic growth and reduction of poverty. It is the curriculum which is viewed inversely as the foundation for educational reforms aimed at the achievement of high-quality learning outcomes. The

curriculum represents consciously, systematic selection of knowledge, skills and values to shapes the way of learning, teaching and assessment are organised by addressing questions such as what and, why, when and how students should learn. A curriculum lies at the crossroads of these four key aspects of Sustainable Developmental Goal that education - (i) should be inclusive and equitable; (ii) should be characterised through the quality learning; (iii) should promoting lifelong learning; and (iv) should be relevant to holistic development. The curriculum works as a bridge between education and development. It is competently associated with lifelong learning which has aligned with development needs in the comprehensive and holistic sense of the term (Stabback, 2016, p.4). In detailed, the curriculum is also treated as a political and social agreement which reflects societies shared and collective visions while taking into account local, national and global expectations. The International Bureau of Education has a universal mandate to support the development of excellent quality curriculum in the Member States of UNESCO (Stabback, 2016, p.6).

2.12 Values, Knowledge and Skills in the Curriculum

The development in learners, of broadly defined strength and abilities such as creative and divergent thinking, depends on the integration of three primary learning aspects as values, knowledge and skills. A report by the International Alliance of Leading Education Institutes (2008) put that teachers are required - (i) to engage with the moral and social purposes of schooling; (ii) to value and sustain the intellect; (iii) to work collaboratively with other stakeholders in education; (iv) for being responsible and accountable; and (v) for being committed to lifelong learning and reflexivity (NIE, Singapore, 2008). Therefore defined values, knowledge and skills are mandatory to impart in a curriculum given as -

Values - refers to earned behavioural strengths — for instance, attitude, moral behaviour, motivation, will and wishes, and commitment, etc.

Knowledge - the fact or condition of knowing something with familiarity gained through experience or association. Mainly knowledge refers to *a body of facts and principles accumulated by mankind with time* (Clarke, 1992).

Skills - Abilities to use one's knowledge effectively and readily in execution or performance (Merriam-Webster Dictionary).

2.13 Curriculum and the use of Technology

If teachers and learners are not ready to change and exchange ideas and approaches, then there is no application of (ICT) information and communication technology for curriculum design and innovation. Usability of opportunities and the ideological transition has contributed to the curriculum innovations. Therefore, a happening of information and communication technology helped to empower the curriculum framework of our education system. The conception of teaching and learning as a form of empowerment (Freire, 1970) liberation and democratic experience (Dewey, 1934) is not new, but the appropriation of the information and communication technology as both a space and instrument of autonomy in and beyond the classroom still is. Technology as the tool for learning and teaching provides spaces for participation and engagement in broader contexts than those that can be offered in a classroom setting (Buckingham, 2013). Curriculum design which promotes the integration of digital technologies is underpinned by democratic values of openness, sharing, interactivity, diversity and community. Such values are not very different from the principles put forward by Bourdieu (1985) as suggested indicators of a curriculum reform relevant to that contemporary society.

2.14 Curriculum Attempts in India

The University Education Commission is of the opinion that ‘people in this country have been slow to recognise that education is a profession for which intensive preparation is necessary as it is in any other profession’ (GoI, 1948-49). The first positive and major attempt at curriculum reconstruction in India was made in 1937 when Mahatma Gandhi propounded the idea of Basic Education whereas the *Zakir Husain Committee* furnished the strategies of *Basic Education*. During foreign rule, in India, much work in this direction could not be done. However, during colonial India, the regular charter of East India Company was used to renew after every twenty years. In the charter of 1833, the British Parliament increased the yearly fund for developing education in India from one lac to one million. Therefore, for consuming this fund for a particular wound area of the education, a committee entitled “Board of Control”, was formed under the presidentship of Sir Charles Wood. In original, the *Wood’s Despatch* 1854 was written by John Stuart Mill, the famous thinker and clerk of the East India Company. Objectives of this dispatch were to impart (i) knowledge, information and culture of the west to the Indians, (ii) to prepare public servants from Indians, (iii) to promote intellectual development by raising moral character of the young generation and, (iv) to provide vocational skill training to the Indian for increasing productions in their factories. The Despatch recommended for establishing the Department of Education and Universities in provincials like Bengal, Bombay, Madras, Punjab and North-West. It also recommended the establishment of schools for teacher training and training for the teachers of engineering, medicine and law. It suggested for the better pay scales the teacher educators and scholarships for the teachers during the training period. In the shadow of Independence, University Education Commission (1948-49) and Secondary Education Commission (1952-53)

were foundational achievements to suggest and recommend for the education system of India on the road to curriculum development.

National Education Commission (1964-66) and the National Policy on Education (NPE-1968) was prepared to give suggestions to change in school education with maintaining the quality of teacher through a change in curriculum. Firstly, in 1978 the curriculum framework developed by NCTE when it was a non-statutory body. In the light of NPE-1986, a revised version of the curriculum framework was developed in 1988 by the NCERT.

Yashpal Committee Report-1993 '*Learning without Burden*' was declared that self-image of pre-service training is going weak and slow rather than the past (Yashpal Committee Report, 1993, p. 22). "The continuing education of teachers must be institutionalised. The organisation of in-service education programmes and other activities aimed at professional growth of teachers be systematically designed and conducted imaginatively".

According to Yashpal Committee Report, a meeting of the Central Advisory Board of Education (CABE) on October 15, 1993, was discussed with the view of both reports of Yashpal Committee and MHRD Group to generate a global debate in teacher educators and educational experts.

First, (CFQTE) Curriculum Framework for Quality Teacher Education was decided in 1998 by afterwards NCTE. In 2005 NCERT developed NCF-2005 to modify and upgrade the curriculum of school education and teacher education. In 2006 a discussion paper on curriculum framework was prepared by NCTE with the help of NCERT. In the end, a discussion draft of NCFTE was finalised by the NCTE in August 2009, and resultant NCFTE-2009 has appeared.

NCFTE-2009 accepts the fact that poorly designed and implemented teacher education curriculum cannot produce critical and quality teachers who can teach in those ways which have been visualised in our previous policies and NCF-2005. In the improvement of National Curriculum Framework for Teacher Education (NCFTE), NCTE received precious participation from NGOs and various experts of various areas of education; and also had the help of evaluating workout done relatively. NCFTE emphasises the need for careful, rigorous, and continuous support to teachers, through pre-service and in-service teacher education, so that they can become autonomous, reflective, and caring professionals equipped with an appropriate knowledge-base, disposition, values, abilities, and experiences of working and dealing with children. The teacher is envisioned as an empowered and self-learning intellectual who nourishes and enhances the idea of democracy and prepares our young generations for the same. They are autonomous professionals who are responsible for running the education system with accountability to the immediate community and society (NCFTE: 2009, pp.19-21; 64-67).

2.15 The Curriculum for the Ten Year School: A Framework (1975)

The NCERT developed it in 1975 under the chairmanship of *Prof. Rais Ahmed*. Perhaps, it was the first organised effort of modern India to decide the framework of curriculum after Independence. The committee for the Framework 1975 was developed in 1973 by *The Ministry of Education and Social Welfare* for developing the curriculum for 10+2 pattern with the following recommendations –

1. There should be Flexibility in principles and values to be inculcated in the behaviour of children.
2. It should be applied to life, needs and aspirations of peoples and society.
3. Science and math should be taught with the application in daily wages of life.

4. Any type of work experience should be used as a source of learning.
5. It should impart of consciousness of social justice, democratic values and national integration.
6. It should follow the Tri-Language Formula.
7. For the creativity drawing, painting, singing etc. subjects should be included.
8. Some health developing activities concerned subjects must be added.
9. Value-based and character developing education should be given.
10. Some characters like decision making, compassion, endurance, courage and respect to each other should be developed through some special training like NCC, sports activities.
11. Its implication should apply to the self-learning process.
12. Efforts should be done to stop escape and encourage nomination.
13. Practices for Continuous evaluation should be done by adopting semester system.
14. The Curriculum should fulfil its objectives.
15. Evaluation of learner and textbook material should be part of it.
16. The need for harmonious coordination and collaboration with the other agencies like NGOs are working in the area of education.
17. Interdisciplinary research should be included in the curriculum.
18. It should encourage teachers for researches.
19. It should provision for compulsion of Mathematics, Science, Hindi, English, Social Science, Physical education with Third Language up to class X.

2.16 Efforts for implementation of these recommendations

1. At the national and state level through various governing bodies, NGOs are working in the area of education and curriculum development.
2. Through promoting the research, training, extensions, coordination and clearinghouse activities.
3. Through changing the environment of schools and by giving facilities to schools. For instance, today Government of India (GoI) is doing efforts by the 'Swachh Bharat Abhiyan' for arrangement and cleanliness of toilets for girls in every school of India.
4. Through improvement in community and society by facilitating the self-awareness among them.

2.17 National Curriculum for Elementary and Secondary Education-1988

It was designed in the year 1988 under the Directorship of *P. L. Malhotra*. It was based on recommendations done in National Policy on Education 1986. After the acceptance of 10+2+3 scheme by the parliament through (National Policy on Education) NPE-1968, it was necessary to reform the image and role of education in India as was felt after the Independence. Therefore, to change the contemporary scenario, a framework in favour of the school education was given in the year 1975 by the NCERT entitled '*A Curriculum for the Ten Year School: A Framework*'. Unfortunately, it was possible that some of the recommendations made in the NCF-1975, NPE-1968 and NPE-1986 have also been left. In 1977, The Ishwarbhai Patel Committee compiled suggestions to study an optional subject at the school level. It was realised that some drawbacks might remain therefore Government of India (GoI) recommended to do following changes on priority in the NCESE-1988 –

1. Renewal of curriculum.
2. Intervention of suggestions.
3. Consideration of socio-cultural, political and economic area.
4. Equality of education with opportunity.
5. Preservation and valuation of cultural heritage.
6. Strengthening the national identity and unity.
7. Learning of values.
8. To make the curriculum for global perspective.
9. Inculcate study related to environment and conservation of it.
10. Prepare curriculum for all round development of learner.
11. Make curriculum for future oriented based.
12. Evolve child centered approach.
13. Make possible how to learn.
14. Introduce scientific temper with creativity in learning.
15. Introduce technological learning.
16. Adopt continuous and comprehensive evaluation.

2.18 National Curriculum Framework for Secondary Education-2000

The National Curriculum Framework for Secondary Education (NCFSE-2000) was developed in 2000 under the Chairmanship of Prof. J. S. Rajput. The NCFSE-2000 did forceful amendments in school education through -

1. Implementation of socio-cultural scenario.
2. By changing education as lifelong learning process.
3. To prepare and reach at frontline curriculum.
4. By value education.
5. By deciding minimum levels of learning.

6. By preparing scheme of studies.
7. By deciding areas of curriculum at different stages.
8. Through project work education, practical education, physical and health education.
9. By open learning process.
10. By instructional approaches.
11. Through strategic curriculum management.

2.19 National Curriculum Framework-2005

The Executive Committee decided to revise *NCFSE-2000* by the revised name *NCF-2005*. It was prepared under the chairmanship of *Prof. Yash Pal* in 2005. Under the chairmanship of Prof. Yash Pal and with the help of 21 national focus groups, faculty of NCERT, Regional Centres of NCERTs, NGOs, SCERTs, etc. NCF-2005 was proposed by the National Policy on Education (NPE, 1986) to underline the problems of school and teacher education relatively through The Programme of Action (PoA, 1992).

By the revision of curriculum of 2000, there are some efforts made to improve teacher education although efforts are being made from the 1960s but even after recommendations of National Education Commission (1964-66), Chattopadhyaya Committee (1983-85) and Yash Pal Committee (1993), the teacher education did not show expected changes.

NCF-2005 suggests the easiness of subject and expansion of boundaries of subjects to taste outer knowledge with joyful understanding. It includes gender equality and gender justice in sensitive issues with SC/ST and minor communities. Every chapter of NCF-2005 explores theoretical and practical recommendations, in

brief, to change and implement the teacher education and school education. This NCF-2005 gives concentration on four areas of the curriculum as – (i) work; (ii) the arts and heritage crafts; (iii) health and physical education; and (iv) peace.

In NCF-2005 definition of learning is given as “*learning takes place through interactions with the environment around, nature, things and people, both through actions and through language. Physical activity of moving, exploration and doing things, on one’s own, with one’s peers or in the company of adults, using language-to read, to express or ask, to listen and to interact, are the key processes through which learning occurs*” (NCF, 2005, p.18).

In teacher education, essential attempts are required to invalidate the traditional trend. There should be a comprehensive area to aware and cooperation. There are some recommendations given in NCF-2005 to improve the teacher education and school education. Some points given below to strengthen the national education system to be noted -

1. Values preserve in the Indian constitution
2. Decrease burden of curriculum and bag
3. Establish quality of education
4. Systematically changes
5. Integrated school system

Therefore, NCF-2005 is framed to keep some ideas in the mind as recommendations follows –

1. To connect the knowledge with the daily life including school life.
2. To change the routine old methods.

3. To give knowledge beyond text books also with innovations in curriculum.
4. Through flexibility and continuity in evaluation.
5. To provide identity to the curriculum and education of the nation at universal level.
6. To respect the curriculum and education policies of outsiders.
7. Through promoting the research in development of curriculum.
8. Medium of instruction should be mother language.
9. Early childhood care and education (ECCE).
10. Transparencies in internal evaluation and assessment.
11. Universal Elementary Education (UEE)

2.20 NCFTE (Draft for Discussion) 2006

It is also known as the Draft Curriculum Framework for Teacher Education. It was drafted by the NCTE (National Council for Teacher Education) in collaboration with National Council of Educational Research and Training (NCERT) to attain suggestions to remove drawbacks or implement innovations or ideas for NCFTE with the following objectives –

1. Reframe the curriculum of teacher education, its content, its perspectives and pedagogical approach.
2. To boost the identity of teachers through realistic development.
3. Linking of school services with knowledge generation services.

2.21 NCFTE-2009 (Draft for Discussion)

This draft was shaped under the supervision of Prof. Mohd. Akhtar Siddiqui. It was uploaded by the (National Council for Teacher Education) NCTE on its website (www.ncte-india.org) with the expectation that all fretful will provide their precious

time, for enriching the National Council for Teacher Education. With accepting the present condition of teacher education, it's working. The issues and acknowledging difficulty areas, a planned framework for the training of a teacher is discussed below.

1. To engage the teachers to the socio-political framework with which education correlated and where the learners are situated.
2. To engage the teachers with real contexts of children and throughout research oriented studies in relation it.
3. Bring the teacher education curriculum near to the assumptions, beliefs, knowledge and learning style of children.
4. Help teacher to rise above the gender, caste, class, poverty, linguistic and regional variation, community, equity and justice.
5. To promote the learner for self-regulating thinking, mutual learning and the teachers to adjust in the process of teaching-learning with the shifting educational needs of children and also society.
6. To train the teacher thus type that their knowledge and practice reflect in the learning of children and development of society.

2.22 National Curriculum Framework for Teacher Education-2009

Sometimes for a teacher, we hear some fruitful words that you are the future maker, you are ideal; etc-etc. Conventional thinking is that if a teacher wishes to see the movie, counted as a bad teacher. But the role of a teacher in a movie used to like by us. An example of mine that in the year 2007 a movie released namely “Taare Zameen Par” gives a message to the teachers of the world. It is showed in the movie, how a teacher understands the problems of the child and helps him by knowing his interest in painting. On the other side, stick lover teachers were also shown in the movie, who is scaring children. The movie signs, how to interact with children and,

how to behave. We need not a teacher only like a mother or like a father. A teacher who has the quality of father and mother both will be a good teacher. A curriculum for the teacher should be versatile and globally valid.

It is envisaged in the NCFTE-2009 to act as a channel for changing the shape of teacher education that the teacher education institutions grow for being active centres not only of making inquiries but also of training intended for improvement of educational technique and curriculum. It is an issue of certainty that if teacher education institutions are structured in accordance to rules and enable them to work for being active centres of progressive educational actions, the complete task of educational reform would be easily facilitated. This framework shows implementation strategies as follows -

1. NCFTE-2009 advocates the correction at any stage in this framework with great suggestions that are given by the NCERT, NGOs, SCERTs, DIETs, CIE, RIEs, Universities and other personalities.
2. The NCTE will organize groups of scholars to implement the NCFTE-2009, its processing and provisions.
3. The NCFTE has suggested the requirement for exercise to prepare the teachers for the co-curricular activities for health and environmental education and effectively serve the services related to these particular areas.
4. This NCFTE gives suggestions to organize training programme for professional development of teacher all-round the country.
5. In NCFTE steps are updated to promote and proved openness to the special and talented in teacher education programme.

This NCFTE suggests that evaluation of In-service and Pre-service teacher must be done on the basis of CCE (Continuous and Comprehensive Evaluation) during training and teaching session.

2.23 Different Studies in the Area of Curriculum

The different studies in the area of curriculum are reviewed under three dimensions which are as follows –

2.23.1 Curriculum Analysis and Curriculum Renewal

Verma, S. (2014) researched “*Curriculum Analysis of Secondary Teacher Education Programme: A Comparative Study of India and Bhutan*”. Objectives’ of the research were to analyse the teacher education curriculum of India concerning its relevance for the emerging education, to analyse the curriculum of teacher education of Bhutan with the relevance of emerging trends, to compare the teacher education curriculum of India and Bhutan. Data were collected from the sample of Royal University of Bhutan and University of Pune, India. She concluded that various subject papers of teacher training programmes like Biology, Physics, Psychology, Chemistry and Mathematics have some discrepancies of values, skill reflection and skill development and social concerns.

Andabai, P. W. (2013) convoked a study entitled “*The Impact of Teaching Practice on Trainee Teachers in the Nigerian Tertiary Institutions: The Niger Delta University Experience*” to evaluate the effect of teaching practices on trainee teachers in tertiary institutions in Nigeria. The sample of 120 students-teachers was selected using simple random sampling method. Data were collected through a survey with a questionnaire. The result showed that trainee teachers profited really in participating in teaching practice because they were able to shape reasonable confidence and

proficiency in lesson planning and developed skills and superiority of a teacher during the workout. It was also shown that teaching practice supports trainee teachers to learn how to preserve records of assigned projects and also sharing in school activities. He suggested that the government should offer financial remuneration for trainee teachers and teachers engaged in the training programme. A suitable placement for trainee teachers should be carried out. University and affiliated colleges should organise the workout very well to provide the best professional practice to the trainee teachers. The university should demand to non-governmental organisations to assist in improving educational and learning resources that would prepare the students.

Huma, Afshan (2013) conducted a study entitled “*Interpretive analysis of new teacher education curriculum reform introduced in Pakistan*” with objectives’ to study the new teacher education curriculum, to compare modern and old teacher education curriculum, to examine the teaching-learning practices and procedure of assessment, and to study the expected outcomes of the new curriculum of teacher education. She found that it is hazardous for teacher educators and teacher trainees to reach the institutions because of the institutions established in an unsafe environment. Sometimes the institutions remain closed for many days and even for weeks due to the absence of teacher trainees and teacher educators, but for the same, the curriculum has no flexibility. She found that the syllabus was always incomplete after trying best by the teacher educators. Owing to the incomplete syllabus and rough evaluation, unfinished teachers were preparing. She also found that some of the educators wanted to bring change in contents of this uniform curriculum of teacher education, which was developed by the USAID-TEP (The United States Agency for International Development-Teacher Education Project) team and approved by the National

Curriculum Review Committee at the Higher Education Commission of Pakistan. But their ideas and suggestions have not been given values due to some political pressures.

Lam, B.& Tsui, K. (2013) analysed a curriculum entitled “Examining the Alignment of Subject Learning Outcomes and Course Curricula through Curriculum Mapping”. They conducted a curriculum mapping through content analysis of course objectives, course content of 14 compulsory courses, onto the five Subject Learning Objective of the Department of Curriculum and Instruction of teacher education institution in Hong Kong. They found that the Subject Learning Objective appears either as a group or whole in the courses by suggesting an associative and dominated nature among them. The situation can be handled by the planned integrated learning experience emphasising specific Subject Learning Objective in response to change in the educational context. Comparison of the coverage of Subject Learning Objective in the Bachelor of Education (BEd) and Postgraduate Diploma in Education (PGDE) was performed. After the conclusion, they suggested that the design of the BEd programme has more curriculum space for the students to achieve this set of Subject Learning Objective factors than the PGDE. They recommended that curriculum mapping is a convenient tool for evaluating the extent for the courses offered by any institution is in alignment with its agreed Subject Learning Objectives.

Parkes, R. J. (2013) published his research entitled “*Challenges for Curriculum Leadership in Contemporary Teacher Education*”. He concluded that designing the curriculum of teacher education is not an easy task. Because the complex conditions of the current setting have tended to move many design decisions which are away from curriculum makers, they also found some other problems like

bureaucracies, adoption of new public management practices, conflicting ideologies, frustrations and biases to the challenges of meetings, student commitments which are faced by the curriculum makers.

Sigauke, A. T. (2013) convened a study entitled “*Citizenship Education in the Social Science Subjects: An Analysis of the Teacher Education Curriculum for secondary schools*”. Objectives’ were to examine the nature of and the extent of the curriculum of social science of teacher education, to analyse six areas which were contextual studies, learning and teaching, early childhood, humanity education, science education and professional experience of the curriculum of social science of Pre-service teacher education programme of Australian University. He found that the curriculum of social science of Pre-service teacher education supports three categories of citizen’s rights and follows Marshall’s model of “personality responsible citizenship”. The curriculum favours, to be honest, self-disciplined, and hardworking.

Sunny, Jacob (2013) conducted a study on “*An Analytical and Comparative Study of ICSE, CBSE and Jharkhand Board Curricula with Special Reference to class 9 and 10 Standard*” intending to compare the curriculum of ICSE, CBSE and Jharkhand Board. Data were collected from all three boards. In this study, he found that the CBSE is awarding grades in the examination results while ICSE and Jharkhand Board Marks. The concept of “Main Frame Curriculum” has been put in place in CBSE that requires syllabus be done on an ongoing basis and 10 per cent of the irrelevant or outdated material is replaced with the more pertinent matter. He also found that the examination schedule in CBSE is more students friendly.

Wang, D., Moloney, R.& Li, Z. (2013) attended a comparative study entitled “*Towards Internationalising the Curriculum: A Case Study of Chinese Language*”

Teacher Education Programmes in China and Australia". The objective was to the inquiry of teacher education programmes of Chinese as a foreign language in China and Australia. Data were collected by capturing voices from teacher educators and pre-service teachers through in-depth interviews to supplement curriculum document reviews of Degree of Master of Arts and Degree of Master of Education from Beijing, Hong Kong and Sydney. The results identified differences in educational aims and objectives, learning content, methods of delivery and assessment of curricula of both countries. They suggest aspects of the curriculum which must be negotiated to move towards the globalisation, to facilitate the mobility and adaptation required in global teaching contexts. The study ended with a discussion for the urgent development of an internationalised curriculum of Chinese language teacher education and situated teacher education programmes.

Awofala, A. O. (2012) disclosed in his research paper entitled "*An analysis of the new 9-years education mathematics curriculum in Nigeria*" which was written with objectives' to explain the history of curriculum development; and to revise according to the primary and secondary education, and to find out the gap between old and new curriculum of mathematics. He found that most of the new curricula fail to take up the challenges contextually. For better improvement of a curriculum for an increase in willingness to learn and conducive learning environment are the requirements.

Ministry of Women and Child Development (2012) in his framework draft entitled "*Early Childhood Education Curriculum Framework (Draft)*" focused on physical development, motor cognition, language development, cognitive development, socio-personal and emotional development and emotional development

aspects, are needed for preparing a multi-approach curriculum. The draft of ECECF also emphasised on the role of teacher for identifying the needs and capabilities of the learner, for planning challenging and holistic activities for insightful learning, for continuous interaction with learners, parents and society, for organising supportive learning activities.

Yurekli, A. (2012) arranged a study on “*An Analysis of Curriculum Renewal in EAP Context*” with objectives’ to describe the new approaches teaching English and to analyse the curriculum approaches of English teaching. Data were collected from the sample of 1005 freshman students, 17 freshman EAP (English for Academic Purposes) course instructors and 35 departmental teachers through a survey with a questionnaire, which was based on listening, speaking, reading, writing and nonlinguistic skills. He found that the study gave attention to the need for an integrated approach to EAP teaching which centres on the achievements of certain tasks expected by students’ department teachers. The findings also highlight the need for an approach which is content-based and specific to students’ study areas.

Papier, J. (2010) performed a study entitled “*From policy to curriculum in South African vocational teacher education: a comparative perspective*”. The objective was to analyse recent national policy on the training of college lecturer of South Africa in the light of traditional curriculum through suggesting skill development programme for the training of vocational teachers internationally. The National Department of Education published the policy with the suggestive standards for college teaching which includes academic competence, work experience and pedagogic expertise. However, qualifications are being designed, developed and offered until now by universities and other providers that hold responsibility for

teacher education. The research explored local and global Vocational Teacher Education (VTE) policies and curriculum in an attempt to highlight the agreed-upon elements of the curriculum that could cover ways of implementation of South African policy on vocational lecturers for enhancement of their skill.

Shenoy, Sainath Pandurang (2006) conducted “*A Critical Study of Secondary School Curriculum with reference to Developing Skills for Crisis Management among Students of selected English Medium High Schools of Mumbai*”. Objectives’ were to study the relation of objectives of the present high school curriculum and crisis management skills for suggesting a model curriculum which will be effective in training students to handle the crisis in life. Data were collected from available samples of 2457 students, 152 teachers and 168 parents’ who responded to the questionnaire. The sample of 93 teachers and 81 parents was interviewed. He found that the study has made meaningful recommendations for framing the curriculum. The recommendations have been made for Teachers, NCERT, SCERT, CIBE, Education Department, and Teacher Education at State and Central levels. The study has contributed significantly to make the school curricula contextual. The Study clarifies the field of Life Skilled Education. The concrete inputs available were proposed to have immense potential for developing Humane Excellence.

United States Agency for International Development (USAID 2006), was established in 1961, submitted a report to the UNESCO entitled “*Situation Analysis of Teacher Education in Pakistan: Towards a Strategic Framework for Teacher Education and Professional Development*”. The purpose of this analysis was to review the past attempts which were taken for teacher education to reform and assess

current policies and, practices for developing a framework to transform the basic problems into policy points for dialogue and action. This situation analysis was not just to show deficiencies of the system of teacher education, but it is hoped that the provocative guidelines of this analysis will help to improve the new policies and practices of teacher education. The recommendations of this report were to prepare a workable policy and active strategic framework for teacher education, to mould the running institutions according to this new framework, to develop core competencies of pre-service and in-service teachers, to recruit teacher by fair selection procedure, to prepare healthy supporting structure of school and to monitoring and proper evaluation of all procedures.

NCERT (2005) felt through its 21 National Focus Groups which were based on '*Teacher Education for Curriculum Renewal*' about needs of enhancing the professional identity of school teachers. These focus groups forced to think the NCERT that there is a vital need for establishing strong expressive links between pre-service and in-service teacher education. Therefore, a need for professional quality teacher educators and innovations in teacher education is a must. These focus groups through the paradigm shift and with the need to redesign the curriculum of teacher education recommended that all types of teacher education programme from pre-primary, primary, secondary and postgraduate should rest with the university. It also recommended that complete freedom should be given to teacher and educators to do whatever they think fit while implementing new teacher education programme. It suggested an ideal period of five-year duration after completion of 10+2 level of school education and forced to prepare an integrated universal model for teacher education.

Mishra, P. and Muzaffar, I. (2004) revealed in the study entitled “*Visions and Mandates: An Analysis of Three Indian IT Curriculum Guides*”. The objective was the rhetorical and pragmatic analysis of the Curriculum Guide of NCERT, modules of the teacher education of IGNOU and the syllabus of Shreemati Nathbai Damodar Thackersey Women’s University at Mumbai. They found the fundamental split between all three its utopian vision and implementation. They have discussed practices for developing IT (Information Technology) curriculum in India. They suggested for essential skill development to unlock the potential and power of ITs.

Rasinen, A. (2003) attended a study on “*An Analysis of the Technology Education Curriculum of Six Countries*” for analysing curricula of the six countries in more depth. She used the systematic analysis method to examine this study. She found that there were no particular contradictions among any elements of the six curricula, nor significant differences in the emphasis placed on the various sub-areas of technological studies. She observed that technology education in the junior and senior secondary schools in the countries studied is usually taught by specialised subject teachers. However, integration of surrounding society was done for teaching different subjects, at least in theory.

NCERT (2000) prepared a new “*National Curriculum Framework for Secondary Education*” in the year 2000 under the Chairmanship of Prof. J.S. Rajput. It is pointed out in the NCFSE-2000 that the history of Indian education shows that various cultural and religious groups established their educational institutions to suit their specific requirements. The religious institutions of India have provided education for the development of the whole individual body, mind and spirit. They always worked for infusion of a spirit of piety and religiousness, formation of

character, development of personality, inculcation of respect for civic and social duties, production of social efficiency, and preservation and spread of national culture (NCERT 2000, p.1). NCFSE-2000 did a forceful amendment to change the education for the lifelong learning process, prepare for frontline curriculum, and decide areas of the curriculum at different stages. The NCFSE-2000 recommended that teaching should be geared to making students know 'how to learn.' The NCFSE-2000 itself has implications for both the pre-service as well as in-service teacher preparation programmes. It also recommended that "...for teachers to be potential actors in the change process, appropriate and adequate teacher education is essential, both in terms of pre-service and in-service programmes. Experiences of learners have to be an integral part of the curriculum development process. Experience must be included in the training as well as evaluation procedures. Curricula have to be sensitised the teacher about the new curricular concerns, issues and transactional approaches. For this, print materials in simple, jargon-free languages of the region and also audio-video materials need to be developed and disseminated through direct and distance modes.

Mutebi, P. M. (1996) concluded his report of *analysing the primary education curriculum framework of Uganda*. This report was submitted to UNESCO in 1996. He reported in this report that revising the old curriculum or preparing new curriculum is the essential requirement for making students of future with knowledge, skills, attitudes, values and behaviours to contribute to the development of Uganda. The report also emphasised the hopes to implement a new curriculum from political goodwill and commitment.

Kakkad, G. M. (1983) performed a study on “*Secondary Teacher Education Curricula - An Analytical Study and Developing Teacher Education Programme*”. Objectives of the study were - to analyse the existing B.Ed curriculum of various universities of four different regions of the nation, to analyse the formal and unique aspects of secondary teacher education programme and to understand the unexpected changes which were happened in Secondary Teacher Education Programme. An interview schedule and a questionnaire were used to collect data from the sample. He recommended that the duration of the STEP should be of two academic sessions and an internship of three months with rural and urban teaching in school. The phases of STEP should be the educational theory, daily teaching practice, community services, work experience and other extra-curricular activities. He suggested that there should be two subjects for the methodology of instruction and number of lessons plans should be fifteen in each topic, separately examination should be held in theory and practice with the declaration of result in marking or grading system.

2.23.2 Monitoring and Quality Control

MHRD (2015) presented a “*Report of the Joint Review Mission on the Centrally Sponsored Scheme of Teacher Education*” of the Joint Review Mission of Ten members, was constituted by the Department of Education and Literacy of Government of India. Objectives’ of the mission were to review the current status of budget and funds provided to improve the quality of education and teacher training, quality the curriculum, resource material considering officials of SSA (Sarva Shiksha Abhiyan) and RMSA (Rashtriya Madhyamik Shiksha Abhiyan). The commission found that there was no linkage between CBSE and state board of Rajasthan. It also found that there was no evidence of any interaction between teacher education institutions of Government and the private sector. The recommendations of the

mission were that the quality of classroom interactions must be audited independently by a third party. The Government must also consider the proposal to create a separate cadre of teacher educators. The mission also recommended for the interaction of In-services with the agencies or authorities were engaged in textbook writing.

Susilo (2015) performed a study for analysing the “*Curriculum of EFL (English as a Foreign Language) for TEIQF (Teacher Education and Indonesian Qualification Framework)*”. The objectives of this study were following - (i) how Indonesian teachers should develop their curriculum according to the quality framework of Indonesian descriptors; (ii) how macro-social factors in SLA (Second Language Acquisition) such as global and national status of L2, limitations for and characteristics of SLA, institutional forces and barriers should be remembered when developing the curriculum of English language for teacher education; and, (iii) how the 21st-century trends should be blended in the curriculum. He found that The IQF holds a legal endorsement in the form of Presidential Decree no. 8-2012 to specify equivalencies between Indonesian and foreign qualifications, thus improving Indonesia’s international competitiveness and making the country more open to the global trend. As a consequence, the structures of the curriculum in all Indonesian educations should be based on this document of IQF. He also found that Indonesia needs English language teacher education with appropriate structures of curriculum relevant to the global world and 21st-century learning.

Donnelly, K. & Wiltshire, K. (2014) conducted a “*Review of the Australian Curriculum*” on the recommendation of the Department of Education of the Australian Government. They concluded in the final report that this basic curriculum has focused on the well-being and individual progression of students. They indicated

that the curriculum linked to parental and societal support for implementation. Australian Government approved systematic and holistic approaches to education policy, teaching-learning process and communicative resources. The teacher training bodies and other educational authorities focused on the teacher's quality, ability and accountability. Australian Curriculum, Assessment and Reporting Authority (ACARA) revised the policy document of the curriculum to less the complexity and unwieldy by imparting operative and functional characteristic. This curriculum also reformed for the special education by addressing the needs of disabled with flexibility in nature.

MHRD (2013) presented a report of the constituted mission entitled "*Joint Review Mission on Teacher Education in Punjab*". The purposes of the mission were to assess the progress, process, strengths and weaknesses of Centrally Sponsored Scheme for Teacher Education (CSSTE) of various states towards implementation and to review the status of teacher education considering issues related to programme preparation, its implementation, monitoring and evaluation at each level of Institutions. The mission found that the Education Development Forum of Punjab and others concerned with primary schools unlike most Teacher Unions are focusing on real issues of education, the status of teachers and the condition of primary education in Punjab. The forum has organised children festivals which involve children, teachers and the community to communicate with each other. The mission also found that the mid-day-meal cooks play an essential role in the forum, where they have begun monitoring not only the quality of the food served but also the quality of education and teacher attendance in the schools in which they work. Such peoples' initiatives, integrating all the primary stakeholders, i.e., students, teachers, community

and government, can go a long way in building a people-centric public education system.

Khan, S. H. & Saeed, M. (2010) attended a study entitled “*Evaluating the quality of B.Ed programme: students’ views of their college experiences*”. The main objective was to estimate the knowledge of B.Ed students comparing their opinions. They also aimed to evaluate the internal efficiency of B.Ed programme of Government Colleges for Elementary Teachers (GCETs). Data from 600 B.Ed students of GCETs of Punjab province of Pakistan were collected by survey with questionnaires. In this study, they found that the B.Ed course was effective in terms of updating knowledge with skills of student teachers. The study also found that student-teacher favoured the lesson planning using audio-visual aids for effective teaching. Female student teachers were also found satisfied with their opinion about the current curriculum.

Arora, G. L. (2009) in his article entitled “*School experience programme and quality in teacher education*” which was published in Quality Enhancement in Teacher Education, a refereed document of NAAC, discussed that the School Experience Programme (SEP) constitutes the essential component of a teacher preparation programme. It is different from the conventional teaching practice programme as it attempts to provide experiences to the trainees in respect of all the roles they are expected to perform. For instance, a teacher plays his role of being an instructor, being facilitator of learning, being an organiser of co-curricular activities and counselling provider, etc. He also suggested that before sending the trainees to the schools for the School Experience Programme (SEP), the teacher education institutions are expected to organise many activities to prepare them mentally and

professionally. The preparatory activities include the demonstration of quality teaching, practising of teaching skills, an organisation of discussion lessons, an organisation of training workshops on action research, guidance and counselling, preparation of teaching aids, etc. He concluded that the scheme of institutional evaluation in the context of School Experience Programme (SEP) should have based on the quality of its implementation in schools and on the variety of preparatory activities carried out by the institution.

Yadav, M. (2006) in his conference paper entitled “*Curriculum Transaction for Quality Teacher Education: a few considerations*” at National Assessment and Accreditation Council on Quality Enhancement in Teacher Education focused that the relevant curricular inputs could be prepared through a participative process by competent teacher educators. National Council for Teacher Education (NCTE), perhaps, should initiate such exercises. Care needs to be taken that the inputs prepared are of good quality. They can be utilised for discussions in advance level seminars and workshops, and refined. Such inputs may form the basis of organising curriculum transaction on values and attitudes during Teacher Education Programmes. The emphasis in these interactions may be on what a teacher and students have to reflect in their behaviours. The expected outcomes may not be the development of attitudes and values to a high predetermined degree. However, one can expect that the student-teachers will get initiated to viewing educational processes and the problems encountered professionally. It is this mindset that needs to be developed through teacher training. Also, such tasks for qualitative improvement in teacher education must be viewed as ordinary pursuits. For instance, courses at Master’s level (M.Ed. & M.A. in Education), PhD (Education) should be geared to contribute towards such

goals of seeking theorisation about educational practices and to develop effective practices.

Rajput, J. S. (2004) wrote in *Encyclopaedia of Indian Education* about the findings of the first national seminar for the education of Primary teachers which was held in October 1969. The results reflected a sad state of affairs of elementary teacher education. He wrote that institutions having poor educators were never equipped in proper ways, while inspections of those institutions were being done from time to time. Looking at such circumstances, He recommended the selection of some training institutions as models for developing primary teacher education on the right lines. He suggested doing 200 seats of trainees as the optimum size of training institutions. He advocated the setting up of State Institutes of Education (SIEs). Resultant, during 1962-63 Extension Training Centres (ETCs) in Primary Teacher Education Institutions (PTEIs) started functioning. The State Institutes of Education established by 1964 and a Department of Teacher Education established at the National Institute of Education (NIE).

Sahoo, Swarnaprava (2002) conducted a study on “*Development of a Curriculum Framework for Human Rights Education for the children below fourteen years of age*” with a sample of 400 children, 200 parents, and 94 teachers drawn through quota sampling method. The findings were - A majority of the school children belonging to urban and rural areas are provided with adequate nutrition, clothing and housing, whereas, a majority of the children belonging to urban slums and the tribal regions are deprived of these facilities. There is no wide variation between the boys and girls studying at the elementary level in their enjoyment of the right to nutrition, clothing and housing. The leading cause of deprivation in urban and

rural areas is poverty which results from price rise and the high cost of living, whereas, in urban slums and the tribal regions it is poverty which results mainly from addiction of parents to country liquor. A curriculum framework has been well designed for human rights education for the children below the age of 14 years.

Parameswaran, O. P. (2001) studied on “*Development of Art Education Curriculum at the Secondary School Level*”. A sample of 68 Art teachers and 204 students were selected through a stratified random sampling technique. The findings were that the developed secondary Art education curriculum was playing an effective role in the achievement of the secondary school students which was visible in their creative works of Art done during the period of this experiment. The results were indicating the progress achieved by the students in the original Artworks, and they were enjoying participating in art classes. This study pointed out that the developed curriculum should be based upon appropriate methods to meet the needs and requirements of the secondary students. Thus the experiments conducted for one academic year were effective.

NCTE (1998) prepared a “*Curriculum framework for quality teacher education*” under the chairmanship of Prof. J. S. Rajput in the year 1998. His concern was to find the gaps which are still widely spread and becoming visible in teacher education. Objectives of this framework were (i) to build teacher education according to Indian cultural ethos, (ii) to prepare professional and competent teachers, (iii) to upgrade the standards of teacher education through developing a sense of commitment in teachers. The committee of framework with the help of SCERTs (State Councils of Educational Research and Training) prepared a long term plans to ensure that (1) pre-service and in-service become mandatory and mutually re-

enforcing, (2) comprehensive plans should be developed for teachers at all levels so that every teacher can get an opportunity to participate in in-service programmes and undertakes to continue educational programmes, (3) multi-channel learning, distance education techniques and communication technologies should be fully utilised, and quality study materials should be prepared and made available to all educational resource centres.

UNESCO (1998) organised a world conference on “*World declaration on higher education for the Twenty-first century: vision and action*” and “*Framework for priority action for change and development in higher education*” on October 9, 1998. The aim of the conference was of preparing the new generation for creating sources of knowledge. For the world conference, UNESCO released a policy for change and development in higher education through improving teacher education within the objective of life-long learning. UNESCO recommended for enhancement of sustainable development of teacher education imparting societal ethics through moulding the teacher education by preserving Human Rights of citizens. It focused on enhancing the participation of women in teacher education with role promotion. It suggested for advancing the teacher education for research in science, arts and humanities. UNESCO emphasised for reinforcing the role of teacher, enhancing the equity in teacher education by diversifying the components of teacher education, recasting the curriculum of teacher education in perspective of gender, cultural, historical and economic development.

GoI (1992) revised its NPE-1986 in 1992 which is known as the “*Programme of Action-1992*”. This PoA-1992 emphasised mainly on the functioning of teacher education institutions. The PoA-1992 envisaged that in 1986-87 about 17.62 Lacs

school teachers were oriented under the Mass Orientation of School Teachers (MOST) programme to improve their professional competence. In 1987, teaching-learning material was provided to schools under Operation Black Board Scheme, but due to lack of implementation, the PoA-1992 was started by the Central Government of India. The PoA-1992 recommended for upgrading the STEIs (Secondary Teacher Education Institutions), IASEs (Institutes of Advanced Study in Education), CTEs (Colleges of Teacher Education) and SCERTs (State Councils of Educational Research and Training). It also recommended for modifying the existing programmes of teacher educators and special orientation programmes for in-service school teachers, strengthening the SCERTs by making them autonomous bodies. The PoA-1992 committee provided statutory status to NCTE for deciding standards for teacher education programmes and teacher education institutions. Establishing and strengthening the department of education in universities was also recommended.

NCERT (1988) on suggestions of the *Ishwarbhi Patel Committee* realised that some drawbacks might remain in teacher education norms decided previously. Therefore, in 1988 NCERT (National Council of Educational Research and Training) organised a committee under the chairmanship of P. L. Malhotra. This curriculum framework committee prepared a “National curriculum for elementary and secondary education”. The NCESE-1988 gave some recommendations for the reorientation of the existing practices of curriculum development and content selection. It suggested to make them child-centred and to mould as pre-tested teaching and learning models. It also recommended for the reorientation of in-service teachers through a national level school improvement programme with the use of mass media; to enhance the ability of curriculum development centres nationwide to generate innovative ideas and practices

for curriculum development; and, to prepare the teacher to develop self-instructional and teaching-learning material.

Bhatia, R. (1987) performed a study on “*Evaluation of new B.Ed curriculum in the colleges of education affiliated to the University of Bombay*”. The objectives were (i) to study the relevance of the topics in the revised B.Ed curriculum, (ii) to explore the significance of practice teaching programme, (iii) to study the effectiveness of the evaluation in the new B.Ed curriculum and to suggest for improving it. Data for the study were collected using the normative and descriptive survey method. He concluded that there were some significant changes made in the new B.Ed syllabus and some topics repeated. He found that it was challenging to implement the new curriculum. Teacher educators consistently agreed that the area of practice teaching was an essential part of the B.Ed programme. A vast majority found that the B.Ed curriculum is mechanical and books oriented. The study indicated that the burden of theory should be brought down and the ratio of the theory and practice should be 50:50.

GoI (1986) through the Indian parliament finalised the “*National Policy on Education-1986*”. NPE-1986 affirmed that the status of the teacher reflects the socio-cultural philosophy of a country and no one can grow above the marks of its teachers. The government and the society should make an effort to create conditions which will help to inspire teachers on constructive and inventive lines. The NPE-1968 made recommendations that the recruitment procedure of teachers will be restructured to make individual merit, impartiality and conformity with spatial and practical recruitment. It also recommended that the pay and remunerations have to be increased with their responsibilities and the new teacher education programmes will be

connected to continuing education. It opined for its plan that DIETs (District Institutes of Education and Training) would be established, NCTE (National Council for Teacher Education) would guide to the teacher education institutions for the curriculum and methods, a network would be created between teacher education institutions and departments of education of universities.

GoI (1990) constituted 'The Review Committee of National Policy on Education-1986' in 1990 under the chairmanship of *Acharya Ramamurti*. Therefore, it is also known as *Ramamurti Committee*. The committee recommended that required characteristics like aptitude, responsibility, talent and promising attitude to the profession should be ensured before teacher training or recruitment takes place. The committee decided the guidelines for the teacher education and in-service programmes. The committee gave sound attention to three aspects, explicitly training in academic inputs, training in psychological inputs and research and development. It was also recommended that SCERTs at State level and NCERT at National level would implement the several programmes of research and training separately. DIETs will be established with the proficiency to organise pre-service and in-service courses for the elementary school teacher and the personnel working in non-formal and adult education. The National Council for Teacher Education (NCTE) will provide the necessary resources and skill to recognise institutions for teacher education and provide guidance regarding curriculum and procedures.

Under the chairmanship of **Chattopadhyaya, Debi Prasad (1985)** the **Chattopadhyaya Committee** was constituted. The Committee published his report in 1986 with the title "*The teacher and society: report of the National Commission on Teachers-I*". It was recommended in this report to communicate and to feel the

national integrity and unity by the pupils, the need for a scientific attitude, commitment to excellence in standard of work and action and faith for society. The commission observed that knowledge delivered in our teaching or training institutions is insufficient for preparing the teacher as a professional teacher. Therefore, the commission also recommended for teacher education to re-frame according to the roles and responsibilities of the futuristic teacher. The committee suggested five-year training for a secondary teacher following the completion of class XII and to establish education department in existing Science and Arts colleges and four years integrated course for the elementary and secondary teacher.

Deva, Satya (1985) exposed a report on “*Challenge of Education: A Policy Perspective*” published in 1985 by the Ministry of Education. He found that teacher performance is the primary input in the field of education. Policies may be laid down in the final analysis and to be implemented by teachers as much through their example as through teaching-learning processes. In India, many developments in technologies have been taken places by which are likely to revolutionise the classroom teaching. There is a lack of capable and committed teachers in service. Therefore, the education system cannot have any suitable instrument for national development. He felt the need for the teacher to be able to acquire adequate and sufficient knowledge for developing skills, interests and attitudes. The work of a teacher has become more complicated and technical because of the new changes in education and its components. So, a teacher should be skilled, schematic worker and imaginative.

Olson, J. K. (1977) in his published paper entitled ‘*Teacher education and curriculum change: reexamining the relationship*’ opined that in the wave of curriculum development in recent decades the role and importance of a teacher, and

also teacher education has too been neglected. Most of the programmes or projects for developing education and its components have emphasised only on material preparation, their implementation and students' achievement. In this article, he suggested bringing teachers and designers together at all levels of teacher education through sharing the problems of teacher education. He also suggested understanding the original role of the teacher.

NCERT (1975) prepared a curriculum framework for the school education entitled "*The curriculum for the ten-year school*". This framework had been considered as a tool of education for social transformation prepared by the Ministry of Education and Social Welfare under the chairmanship of Prof. Rais Ahmed. It was recommended in this framework to review the curriculum of teacher training institutions, the teaching of second and third languages until the learner is not able to expose and operate these languages. It suggested preparing the teacher to work as a guide, a helper and a wise friend of the learner with being an ideal example. This curriculum framework also recommended studying of socio-psychological implications of the curriculum for determining ways and means of ensuring the active participation of the community and society. This framework suggested imparting principles and values with connecting the education with life, needs and aspirations of peoples and culture.

GoI (1968) prepared the "*National Policy on Education-1968*" which observed that "of all the factors which determine the quality of education and its contribution to national development, the teacher is undoubtedly the most important. It is of his qualities and character, his educational qualifications and professional competence that the success of all educational endeavours must ultimately depend.

Teachers must, therefore, be accorded an honoured place in society. Their emoluments and other service conditions should be adequate and satisfactory having regard to their qualifications and responsibilities (p. 39)". The NPE-1968 gave suggestions to enrich the education system of India through the academic freedom to teachers for pursuing and publishing Independent studies and researches. There should be provided rights to speak and write about significant national and international issues with protection.

GoI (1964-66) in 1964 constituted the *National Education Commission* of India under the Chairmanship of *Dr D.S. Kothari* which is also known as the *Kothari Commission* to advise on the educational set-up. The Commission felt the need for a sound programme of professional education for teachers to improve the quality of education. The Commission pinpointed the weakness of the contemporary system with suggestions. It recommended that isolation of teachers' colleges with the universities and schools should be removed. For quality enhancement, it recommended orientation of subject and introduction of some integrated courses of general and professional education. It advised all the State Governments to prepare a plan for innovating the training facilities. The commission very correctly diagnosed the ills in teacher education and suggested possible remedies. As a result of the suggestions of the National Education Commission, 1964-66, a few changes were made in teacher education. A master degree in education (MA Education) was introduced in Aligarh, Kurukshetra, Kanpur and some other universities of India. Summer schools and correspondence courses were also added to meet the backlog of untrained teachers and some States set up State Boards of Teacher Education (SBTEs). These changes were welcome steps in the field of teacher education and were expected to meet the needs in this area.

GoI (1952-53) constituted “*The secondary education commission*” under the chairmanship of Dr A. Laxmanswami Mudaliar, then vice-chancellor of Madras University. Therefore, it is also known as *Mudaliar Commission*. It analysed the problems of teachers and training programme in depth. It emphasised that the most important factor in educational reconstruction is the teacher, his qualities, qualifications, skills and the reputation. That is why he occupies in the school and the society. Therefore, the Commission recommended on all these aspects needed for character formation of a teacher. Commission found three types of teacher training institutions which were running at that time in India viz., (i) Primary (Basic) Teacher Training, (ii) Secondary Teacher Training Institution and (iii) Training Colleges. The commission suggested two types of institutions - one for those, who contained the school leaving certificate with the experience of two years, and secondly for graduates, which had experience of one academic year with the extension of two academic years. The commission suggested that the graduate training institutions should be provided recognition and affiliation from those universities which should grant the degree, while the secondary grade training institutions should be granted permission to run any diploma teacher education programme under a separate Board. Commission also recommended training for co-curricular activities, refresher courses and research work for the persons who have to wish to get training of teacher educator through MEd degree. It suggested being contained three years’ teaching experience to get admission in MEd after graduation in education.

GoI (1948) appointed the *University Education Commission* under the chairmanship of *Dr S. Radhakrishnan*. The Commission submitted its report in 1949 with the observation of differences in the theoretical papers offered in the various teachers’ training colleges. The commission found much difference between actual

conditions and theoretical norms followed by the education system of India. For the improvement of teacher training, commission suggested (i) the theory and practice should meet with requirements of each other, (ii) trainees should be recruited through experts of school teaching, (iii) theoretical parts must be flexible and adaptable to local circumstances and needs, (iv) original work by professors and lecturers in education should not suffer from isolation and lack of inter-university planning.

The American Commission on Teacher Education - 1944 (Cited in A Design for a School of Pedagogy, p.11) formerly known as American Council of Education revealed its first and second report with the titles “*Teachers for Our Times*” and “*The Improvement of Teacher Education*”. The purpose of this commission was to stimulate institutions to improve their programmes. The commission encouraged ideological considerations and felt the need for enhancing pedagogical education. The report emphasised the contemporary social scene and the democratic way of life as points of orientation, urged teachers to be sensitive to the school’s relation to social realities and ideals. The Commission also recommended for the advancement of the design of teacher education programmes according to social responsibilities and development of institutions for effective implementation of teacher education programmes.

2.23.3 Perception and Implementation of Teacher Education Programme

GoI (2020) recommended in the ‘National Education Policy – 2020’ that the teacher education should be - for preparing teachers on the ground of Indian values, knowledge ethos, traditions and languages; for revitalizing the education system to prepare professional teachers with quality of being humane; for preparing minimum standards for teacher education institutions; for removing remove malpractices in the

examination system; for preparing high quality content and pedagogy; for shifting 4-year integrated BEd programme to multidisciplinary education institutions; for reforming education system for skill and vocational education; for ensuring range of experts in higher education institutions offering teacher education program; for maintaining uniform standards for teacher education in whole country at every level; for preparing diverse teacher educators to understand and able to provide training which is directly relevant to school education; for preparing PhD programme of teacher education which enables teachers of understand pedagogical practices, designing curriculum, evaluation system and credible communication; for preparing the curriculum for reimagining the vocational education.

Reba, A.& Inamullah, H. M. (December 2014) arranged a study to know the “*Perceptions of Teacher Educators’ Regarding Teacher Education Programme in KPK Pakistan*”. They started the survey with tools to investigate the perceptions of teacher educators regarding teacher training institutes in Khyber Pakhtun Khwa province of Pakistan through exploring the process of teaching-learning in different teacher training institutes and point out the relevance of evaluation system in teacher training institutions. Data were collected through a survey with a questionnaire from a sample of 75 teacher educators. The teacher educators were selected from Regional Institutes of Teacher Education and Institutes of Educational Research (IERs) of KPK. They concluded that the majority of teacher educators reported that there were obstacles in the teaching-learning process. Teacher educators were facing problems of lacking instructional materials, malpractices in examinations which deteriorate the quality of education and outdated lesson planning.

Boaduo, Milondzo and Gumbi (2011) conducted an analytical study on *teacher education training for Africa in the 21st century* to know what form it should take. They used the qualitative method. The findings were in their study of the 21st-century teachers are to consider themselves as researchers and use research to improve their practice, then conditions needed for being a professional teacher would need to be fulfilled in their entirety by teacher education and training institutions.

Iqbal, M. (May 2011) studied on “*Comparative Analysis of Teacher Education Programmes at Pakistan and UK*” with objectives’ to analyse and compare pre-service teacher education programmes in Pakistan and UK, to explore similarities and differences of both, and to identify gap for learning lessons. The data was collected from the sample of 138 teacher educators, where 92 interacted with a questionnaire and other 46 were interviewed by the researcher at Bradford (UK) and Peshawar (Pakistan). He found some resemblances and dissimilarities in pedagogy, contents of teaching subjects and internship period. He also found that the level of performance and satisfaction was according to cultural and social demands. He suggested for review of B.Ed course for making it less examination based and more practice focused through realistic, insightful, interactive and evaluative activities.

Working Group on Teacher Education for the Twelfth Five Year Plan (2011) was constituted by **GoI (2011)** under the chairmanship of Anshu Vaish to *review the implementation of teacher education programmes*. Objectives’ of the plan were to examine the functioning of various educational agencies (like DIETs, SCERTs, SIEMATs, IASEs, CTEs, ASCs, etc.) through estimating the demands of teachers which were needed in the XI five-year plan. This study was focused on assessing the need for pre-service and in-service teachers’ training related to human

resources and infrastructure with developing Information and Communication Technology based programme for the training of classroom pedagogy. After the findings, the Recommendations of the committee were to integrate the elementary teacher education with higher education through up-gradation of DIETs. It suggested establishing the centres for pre-service teacher education by making its curriculum research policy, learning and pedagogy, and assessment and evaluation process. It supported the professional development of teacher education, teacher resource and academic support, inter-university collaboration, etc. in central, state and deemed universities and other centres of higher education in India.

Yadav, S. K. (2011) composed *a comparative study for existing pre-service teacher education programme at secondary level in Bangladesh, India, Pakistan and Sri Lanka* with objectives' to identify different issues, to compare pre-service teacher education in Bangladesh, Indian, Pakistan and Sri Lanka and to Implement its improvement in India. Data from 24 Principals, 88 Teacher Educators and 157 Pupil-teacher of Bangladesh, Indian, Pakistan and Sri Lanka were collected through three different questionnaires. He found that duration of B.Ed programme in India, Bangladesh and Pakistan was one year while three years in Sri Lanka. There were some differences in qualifications of principals of B.Ed colleges of all four countries. In India NCTE, UGC and NCERT are the responsible bodies to decide the curriculum whereas NIE (National Institute of Education), National University and Universities of Education in Bangladesh, Pakistan and Sri Lanka respectively. The role of faculty in preparation and revision of curriculum was not specified in Pakistan and Bangladesh while in India and Sri Lanka all stakeholder were found engaged in this work. For the practice of brain through hands, skill development programmes including ICT (Information and Communication Technology) were running in all four

countries parallel. The minimum duration of the internship was 35-60 days in India, Sri Lanka and Bangladesh whereas 90 days in Pakistan.

Mohanty, Sunil Behari (2010) conducted a review of NCFTE-2009 entitled *“A Review of National Curriculum Framework for Teacher Education: Towards Preparing Professional and Humane Teacher”*. He concluded that as each chapter of this document starts with an Introduction section, it might have been better to close each chapter with a conclusion section. It has used varieties of terms for teacher trainees like student teachers, pre-service students, trainees, intern, students, teacher and teacher trainees. There have also been many repetitive criticisms. Curriculum Framework for Teacher Education of 1978 had 25 entries under errata. NCTE (1998) has mentioned general objectives with specific objectives for teacher education for the stages of early childhood, elementary, secondary, and senior secondary. This document might have enriched itself by specifying objectives or expected standards for each category of initial teacher training. As the document contains many factual errors as well as irrelevant statements, it may be better if a modified version of the document is brought out.

Biggs, A. M. (2009), conducted a study for his doctoral degree entitled *“Teaching teachers: how teacher educators view the curriculum of teacher education”*. The objective of this study was to learn what teacher educators think about curriculum and teaching-learning process is essential in forming our future teaching force. The primary methodology of this study was descriptive, using qualitative and quantitative data. Data were collected through an online survey of 2452 teacher educators of colleges under universities in Ohio. He found that most of the teacher educators feel they have quality programmes. Teacher educators believed

their courses prepare graduates well for their first year of teaching. They felt most programmes are of quality in the state of Ohio. They were pleased with the current emphasis on teaching pedagogy, subject areas, and general requirements of education. Teacher educators were worried about the importance of quality in the field and experiences of teacher education. The overall quality of teacher education programmes in Ohio was found better than in the past.

Victorian Curriculum and Assessment Authority (2008) of Seychelles analysed the curriculum of the early education from birth to 8th year entitled “*Analysis of Curriculum/Learning Frameworks for the Early Years*” with the objectives to prepare foundation for future learning, diversity of approaches to curriculum, accessibility of curriculum to a wide range of learners. The authority found that the government’s positive and active focus on children aged from birth to 8 years provides a timely opportunity to re-evaluate the provision needed for this age group. It was observed that there are more options available to Seychelles for developing early childhood care and education which ensured continuity of provision for young children. It was also found that Australia has an opportunity of developing guidelines for the National curriculum about the children from birth to age 8.

Akhtar, S. (2005) opined in his document ‘A critical note’ which is related to National Curriculum Framework 2005. In his note, he wrote that the NCF 2005 is that policy document which has been prepared to fill drawbacks of NCFSE-2000 (National Curriculum Framework for School Education). It has been written in the light of Prof. Yashpal’s report of Learning without Burden under the chairmanship of Prof. J.S. Rajput. In his report, Prof. Yashpal wrote that the NCFSE-2000 is spreading the pernicious idea about religious values through school education. After being a writ

petition in the supreme court of India against the NCFSE-2000, the Supreme Court of India banned it. Because it was violating the duty of every Indian of promoting peace for the spirit of universal brotherhood amongst the people of India transcending religious, linguistic and regional or sectional diversities. Finally, the supreme court of India rebuked the CIBE (Central Advisory Board of Education) for its go-ahead policy, and with immediate effect, it forced to make changes in this curriculum framework.

Behar, S. C. (2002) presented a conference paper entitled “*Teachers Education: Reformisms, Reforms and Transformation*” which was published by Azim Premji Foundation. Behar said that I am fully conscious that these ideas used by me cannot be considered as adequate responses to the faulty assumptions listed by me. Before developing many new paradigms of teacher education, previously suggested basic approaches can be scrutinised. Then the selection of one or more of them can be made for comprehensive development and presentation. Scientific rigour demands experimental implementation of some of the selected models and finalisation only after scientific comparison. In fact, some of the components of teacher training models are already floating around in our environment which seem in our experiences, although they have not been systematically identified for comparative study and for being used as inputs in developing a new model. It is high time we can take part in most of these challenging tasks.

Yash Pal Committee was constituted by the **GoI (1993)** under the chairmanship of Prof. Yash Pal by the Government of India as ‘*Learning without burden*’. Objectives of this committee were - (i) to examine all aspects related to curriculum and entrance criteria; (ii) to check its’ impact on higher education, educational

institutions and professional courses; and (iii) for maintaining the growth of teachers' systematically and creatively. The committee observed and felt that the problem of load on school is arising not only from poorly equipped teachers, scholarly curriculum designers but also through boundations of few selective qualifications. It also found that inadequate programmes for preparing teachers are leading poor quality of learning in schools. The committee recommended that the duration of the Bachelor of Education programme should be either one year after graduation or, three or four years after higher secondary education. The content of teacher training courses should be restructured according to the need of school education with more practical and enabling for insightful learning. The committee recommended for derecognising the degree of Bachelor of Education through correspondence mode due to its professionalism. The committee suggested institutionalising teacher education.

Griffin, G. A. (1990) in his paper on "*Curriculum decision making for teacher education*" concluded that teacher education curriculum issues apparently could be involved, particularly when these issues are expected to be attended to across a consortium of interest and action such as The Holmes Group. Holmes Institutes are those institutes provide multi-sectorial education with all required facilities. These institutions commit to providing the highest quality education for enabling and empowering the learner to seek self-improvement, irrespective of nationality, gender or belief. While there is no one best way to approach the teacher education curriculum, the do whatever you want to reach is also of little use. Griffin suggested adopting a set of guidelines to maintain institutional relationships and providing opportunities to all at the same time. In this paper, he emphasised on the maintenance of the Holmes institutions and its decision-making process to prepare the curriculum for the advancement of teacher education.

Denham, C. (1985) published a featured article in “*The expanding knowledge base of the teacher education curriculum*” for focusing on the lack of intellectual rigour. He observed that teacher education faces criticism on several fronts and the academic talent of its students is questioned. If teacher education could be able to credible response to its critics on the issue of curriculum, it would likely be in a position of making progress in the other problem areas. He suggested that an attractive and respected teacher education curriculum is essential for successful recruitment of talented students, respect for teacher educators, and university and state level support for it. He also suggested that at least two areas of teacher education curriculum deserve to give much more attention than they currently don’t receive. In which one is, the research on effective teaching and effective schools, while the other is the subject matter preparation of teachers in both the knowledge of subject matter and the techniques of the teaching of particular subjects.

Deo, D. S. (1985) studied “*The Practical Programme other than Practice Teaching in Teacher Education Institutions*”. Objectives of the study were - to study the role of practical work (besides practice teaching) in a secondary teacher education programme and to study how these programmes of actual work were implemented. In this study, he found that most of the teacher trainees felt that due to lack of time they were unable to achieve the objectives and goal of the practical programme. For work experience and socially useful productive work, sufficient time and guidance were not provided to the teacher trainees by the teacher educators, and also there was no provision of social or community work for them in the timetable. Teacher trainees were not very serious about physical education and to take participation in games and sports. Extra-curricular activities were not organised according to the interests and needs of the teacher trainees. There was no provision for psychology practical for the

teacher trainees which help them to give opportunities for the application of theories of learning.

Schaefer, R. J. (1976) reviewed and concluded the study on “*School Teacher: A Sociological Study*” which was performed by Dan. C. Lortie in 1975. Schaefer found that accomplishing what has been committed for teaching requires addressing unique challenges in learning to teach. He mentioned a crucial issue of learning to teach requires that the teachers of 21st-century should come to understand the art of teaching in ways quite different from their own experiences as students. Lortie referred the apprenticeship of observation which refers to the consideration of the response of learning which takes place in a traditional and regular classroom. He concluded that learn not only to think like a teacher but also to act as a teacher.

Research Design of the Study

3.1 Methodology of the Study

Methodology involves more than basically the technique you plan to use for collecting data. It is often necessary to embrace a concern of the notions, opinions and theories which inspire the methods. For example, if you aim to draw attention to a specific aspect of a sociological presumption or test an algorithm for some aspects of information betterment, or test the validity of a particular method, you have to prove that you know the basic concepts of the methodology. The methods should be described in an adequate amount for the study to be replicated, or at least constant in a similar way in another situation. “Methodology entails the philosophy of the research process which includes assumptions and values that serve as a rationale for research as well as the criteria used for interpreting data” (Hagan, 2000, p. 14). For the rationale of the current study mixed methodology of the research was adopted. “Mixed methods research is a research design with philosophical assumptions as well as methods of inquiry. As a methodology, it involves philosophical assumptions that guide the direction of the collection and analysis and the mixture of qualitative and quantitative approaches in many phases of the research process. As a method, it focuses on collecting, analyzing and mixing both quantitative data in a single study or series of studies. Its central premise is that the use of quantitative and qualitative approaches, in combination, provides a better understanding of research problems than either approach alone” (Creswell and Plano-Clark, 2007, p. 5).”

Thus it is more than simply collecting and analyzing both kinds of data. It also involves the use of both qualitative and quantitative approaches in concert so that the overall strength of a study is greater than either qualitative or quantitative research.

3.2 Population

Population refers to the aggregate or totality of those conforming to a set of specifications. (Polit & Beck, 2008, p. 50) Population is a complete set of elements (persons or objects) that possess some common characteristic defined by the sampling criteria established by the researcher. Population of the study consists of teacher trainees and faculties of B.Ed. colleges of Rajasthan.

3.3 Sample and Sampling Method

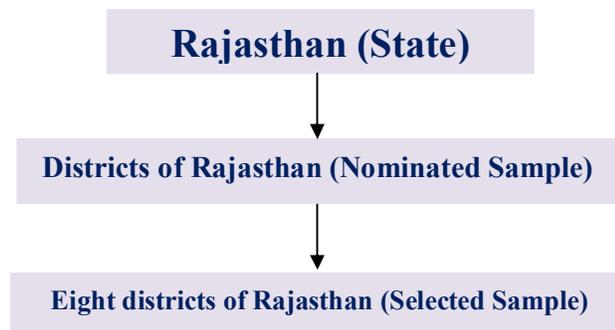
In this research Random sampling technique has been employed for drawing samples from the population. In statistics, the term *random* has a much more specific meaning than the common usage of the term. It does not mean haphazard. In statistical jargon, random means that every member of a population which has an equal chance of being selected into a sample. The major benefit of random sampling is that any differences between the sample and the population from which the sample was selected will not be systematic (Urdu, 2011, p. 3). Random sampling is defined as selecting cases from a population in a manner that ensures each member of the population has an equal chance of being selected into the sample (Urdu, 2011, p. 11).

In this phase, two criteria were decided to select sample districts – (1) only those districts were selected where more than ten teacher education college were running at district regularly from 10 years. In which 21 districts were notified; (2) the districts were selected according to density of population mentioned in Census of India 2011 with following criteria.

- (i) The districts having density between 1-200 people/square kilometer (three districts as Bikaner-78; Jodhpur-161; Baran-175 were selected randomly in this criteria).
- (ii) The districts having density between 201-400 people/square kilometer (two districts as Jhalawar-227; Kota-374 were selected randomly in this criteria).
- (iii) The districts having density between 401-600 people/square kilometer (three districts as Jaipur-595; Bharatpur-503; Alwar-438 were selected randomly in this criteria).

These eight (08) districts as Alwar, Baran, Bharatpur, Jaipur, Jhalawar, Jodhpur, Kota and Bikaner were selected randomly through fish-bowl technique for collecting data to know the perception of teacher trainees and stakeholders regarding NCFTE-2009. Data were collected using two rating scales, one of which was ‘*Stakeholders’ Perception Scale regarding NCFTE-2009*’ and other one ‘*Perception Scale of Teacher Trainees regarding NCFTE-2009*’, from 150 teacher educators and 300 teacher trainees of the B.Ed. colleges of these eight districts of Rajasthan.

Figure (3.1) Sampling



3.4 Sample Size Calculation

Sample size refers to *a number of factors, including the purpose of the study* (Israel, 1992, p. 3). Miaoulis and Michener (1976) have specified three main criteria to determine the appropriate sample size which are-

- i. The *level of precision*: It refers to the range in which the true value of the population is to be estimated (Israel, 1992, p. 1). It is also called *sampling error* or *margin of error*. Generally acceptable margin of error in *educational and social researches* is 5% or 0.05 for categorical data, and 3% or 0.03 for continuous data (Krejcie & Morgan, 1970 quoted in Bartlett *et al.*, 2001, p. 45).
- ii. The *level of confidence* or *risk*: It is based on ideas included under the *Central Limit Theorem* that when a population is repeatedly sampled, the average value of the attribute obtained by those samples is equal to the true population value (Israel, 1992, p. 1). It is also called *alpha level*. The *alpha level* used in determining sample size in most educational research studies is either 0.05 or 0.01 (Ary, Jacobs, & Razavieh, 1996 quoted in Bartlett *et al.*, 2001, p. 45).
- iii. The *degree of variability*: The degree of variability in the attributes being measured refers to the distribution of attributes in the population. The more heterogeneous a population, the larger the sample size required to obtain a given level of precision. The less variable (more homogeneous) in a population, the smaller the sample size (quoted in Israel, 1992, p. 2).

In this research, for estimating the minimum sample size, the formula of Cochran (Cochran, 1963, p. 75), discussed in his book '*Sampling Techniques*' was used.

$$n_0 = \frac{z^2 \times p(1-p)}{e^2} \dots\dots\dots \text{Equation (3.1(a))}$$

Where,

- n_0 - Sample size, which was estimated
- z^2 - Selected critical value of desired level of confidence or risk
- p - Estimated proportion of an attribute that is present in the population or maximum variability of the population
- e - Desired level of precision or margin of error

In this research, following values were used for estimating the sample size-

- n_0 - ?
- z^2 - 95% confidence level (The value of $(1-\alpha)$ in Standard Normal Distribution z-table, which is 1.96 for 95%)
- p - 50% or 0.5 variability of the population (which is maximum)
- e - 5% or 0.05 margin of error

Put the value in given formula-

$$n_0 = \frac{(1.96)^2 \times 0.5(1 - 0.5)}{(0.05)^2} = 384.16$$

A minimum sample size of **384** of stakeholders, teacher educators and teacher trainees or more can be used as sample. In this research, the researcher used **470** stakeholders, teacher educators and teacher trainees.

3.5 Purpose of the Study

Purpose is the controlling force in research [or evaluation]. Decisions about design, measurement, analysis and reporting, all flow from purpose. Therefore the first step in a research process is getting clear about purpose ... Standards for judging quality [in research and evaluation] are different. Expectations and audiences are different. Reporting and dissemination approaches are different. Because of these differences, [evaluators and researchers] must be clear at the beginning about which purpose has priority. ...With clarity about purpose and primary audience, the researcher can go on to make specific design, data-gathering and analysis decisions to meet the priority purposes and address the intended audience (Patton, 2015, p. 150). The basic frame of this study impresses that it is a qualitative or exploratory research. In this study the analysis of NCFTE-2009 regarding B.Ed. colleges of Rajasthan has been explored and studied.

3.6 Research Design of the Study

Research design is the plan, structure and strategy of investigation conceived so as to obtain answers to research questions and to control variance. (quoted in Beri, 2008, p. 61) The research design refers to the overall strategy that you choose to integrate the different components of the study in a coherent and logical way, thereby, ensuring you will effectively address the research problem; it constitutes the blueprint for the collection, measurement, and analysis of data. Note that your research problem determines the type of design you can use, not the other way around (Trochim, 2006). For this study *concurrent triangulation research design* of mixed method research has

been used and both quantitative and qualitative type of data has been collected concurrently. The concurrent triangulation approach is probably the most familiar of the six major mixed models. In a concurrent triangulation approach, the researcher collects both quantitative and qualitative data concurrently and then compares the two databases to determine if there is convergence, difference, or some combination, cross validation, or corroboration (quoted in Creswell, 2009, p. 213).

3.7 Development and Construction of Research Tools

In this study following tools were constructed to meet the objectives of this research.

- (1). Stakeholders' Perception Scale regarding NCFTE-2009
- (2). Perception Scale of Teacher Trainees regarding NCFTE-2009

3.7.1 Need of Construction of Research Tool

Teacher education in India is paying before its independence. Some positive efforts were made by the English community but only for fulfilling its self-purposes. After the independence some beneficial steps were stepped by the Indian Governments and its agencies, resultant NCTE (National Council for Teacher Education) was constituted in 1973 as advisory body which was converted in statutory body in August 1995 for regulating the teacher education in India. NCTE prepared its broad curriculum in 2009 entitled National Curriculum Framework for Teacher Education-2009. After the apple of NCFTE 2009, it has taken a period of more than half decade but after that status of teacher education is not seeing so well. In the past decades, emphasis on quality improvement of teacher education has been one of the most characteristic features of higher education in many countries. By now, in the light of NCFTE-2009, Teacher Education Curriculum have been redesigned by the

almost universities of India. The researcher felt a need of constructing separate tools for studying the perception and level of implementation of NCFTE-2009 for suggesting the better management of teacher education institutions in regard of NCFTE-2009 in the perspective of Rajasthan state.

3.7.2 Construction of Stakeholders' Perception Scale regarding NCFTE-2009

Construction of this tool went through the following steps-

1. Formulation of design of Stakeholders' Perception Scale regarding NCFTE-2009
2. Review for identifying dimensions of the research tool
3. Dimension wise categorization of items
4. Pre tryout
5. Scoring
6. Final tryout stage (Item analysis)
7. Preparation of final draft

Step-1:Formulation of Design of Stakeholders' Perception Scale regarding NCFTE-2009

The used *Stakeholders' Perception Scale regarding NCFTE-2009* is a five rating scale. Respondents were required to respond on five point rating scale in the continuum of Strongly Agree, Agree, Uncertain, Disagree and Strongly Disagree. The scoring pattern of this research tool is 5, 4, 3, 2, 1 for positively arranged items and 1, 2, 3, 4, 5 for negatively arranged items for quantification of responses. It was decided to estimate reliability and validity of each item by item analysis. In the study all 54 items were found in the scale having sufficient reliability and valid to be selected ultimately for final shape of this research tool.

Step-2:Review for Identifying Dimensions of the Research Tool

Five main dimensions were identified from review of the NCFTE-2009, which are as follows-

- A. Planning and Preparing for Student Learning
- B. Teaching and Instructions
- C. Examination and Analysis of Teaching and Learning
- D. Professional Responsibilities
- E. Social Responsibilities

Step-3:Dimension Wise Categorisation of Items of the Research Tool

All 54 items were compiled into account all five identified dimensions of Stakeholders' Perception Scale regarding NCFTE-2009. Items were categorised in appropriated dimension on the basis of experts in the field of education and curriculum preparation.

Step-4:Pre Tryout

Draft of 54 items was administered on 52 teacher educators selected from the population of the study. Pre tryout, an effort is made to evaluate the test for its quality, validity and reliability, and to delete the unnecessary items. Therefore, prior to the construction of the final form, it is essential to test the pre tryout form. This is also known as pilot study (Chadha, 2009, p. 92). Through pre tryout researcher judged the comprehensibility of items, appropriateness of instructions and grammatical structure of items. Some essential information given in the test to be filled by the respondent self is -

Name: Name of the respondent

Occupation: Currently the respondent is engaged in the work (Whatever work)

Gender: Ex. Male/Female/or Transgender

Education: Last qualification of the respondent

Age: Current age of the respondent

Rural/Urban: Geographical background of the respondent.

The following instructions were given in ‘Stakeholders’ Perception Scale regarding NCFTE-2009’ to respondents-

1. This test will be used only for research work. All information is given by you will be kept confidential.
2. This test consists of 54 items related to the perception of NCFTE-2009. Indicate your response by putting tick mark along with the continuum Strongly Agree, Agree, Uncertain, Disagree and Strongly Disagree.
3. It is necessary to give a response on each & every item.

Step-5:Scoring

Each item was shaped on Likert scale type pattern where 5, 4, 3, 2, 1 marks were given in the continuum of Strongly Agree, Agree, Uncertain, Disagree, Strongly Disagree for the positive items and 1, 2, 3, 4, 5 marks in the continuum of Strongly Disagree, Disagree, Uncertain, Agree, Strongly Agree for the negative items.

Step-6:Final Tryout Stage (Final Selection of Items)

For the final selection of item, inter item correlation of complete scale was estimated. For estimation of internal consistency of the scale *Cronbach Alpha* was computed through the *SPSS (Version 25) (Statistical Package for the Social*

Sciences). The value of Alpha Coefficient of entire scale is shown in given **Table (3.1) Alpha Coefficient**.

**Table (3.1) Alpha Coefficient
(Stakeholders’ Perception Scale regarding NCFTE - 2009)**

Cronbach’s Alpha	Part 1	Value	.867
		N of Items	27 ^a
	Part 2	Value	.889
		N of Items	27 ^b
	Total N of Items		54

Computed value of Cronbach’ Alpha of *Part 1* of Stakeholders’ Perception Scale regarding NCFTE-2009 was 0.867 and for *Part 2* was 0.889. However, in this case the high value of Alpha Coefficient confirmed that items of the Stakeholders’ Perception Scale regarding NCFTE-2009 were highly correlated to each other. It means internal consistency of the scale was very high. Therefore the scale was highly reliable.

Step-7:Preparation of Final Draft

The above Table (3.2) Alpha Coefficient, show that all 54 items of the scale were found to have high Alpha Coefficient value which confirmed high internal consistency of the scale and no any item was to be rejected. Thus all 54 items were selected finally for Stakeholders’ Perception Scale regarding NCFTE-2009. These items were categorised in five dimensions.

3.7.3 Reliability of Stakeholders’ Perception Scale regarding NCFTE-2009

The degree of consistency among test scores is called reliability (Marshall & Hales, 1972, p. 104). It consists of two aspects (i) Temporal consistency and, (ii) Internal consistency (also known as Alfa Coefficient). For estimating the reliability of the tool, *Alpha coefficient* and *Split-half reliability* were computed using *SPSS*

(Version 25). For computing *Alpha coefficient* and *Split-half reliability* following formulas were used-

$$r_{it} = \alpha = \frac{n}{n-1} \left[1 - \frac{\sum s_i^2}{s_t^2} \right] \dots\dots\dots \text{Equation (3.1)}$$

Where,

- r_{it} - Reliability between item and test
- α - Alpha coefficient
- n - Number of the items in test/scale
- $\sum s_i^2$ - Sum of variance of individual items
- s_t^2 - Total variance of the test/scale, which is the square of the standard deviation

For estimating inter-item correlation of the each dimension of the tool, value of Cronbach alpha was computed. Dimension wise inter-item correlation and value of Cronbach alpha Coefficient are given below.

**Table (3.2) Inter-Item Correlation Matrix
Dimension (A) of Stakeholders' Perception Scale regarding NCFTE-2009**

Items	A1	A2	A3	A4	A5	A6	A7	A8	A9	A10	A11	A12
A1	-	.365	.203	.140	.243	.337	.029	.051	.354	.107	.239	.084
A2	.365	-	.569	.445	.370	.103	.388	.082	.335	.139	.131	.249
A3	.203	.569	-	.396	.281	.036	.602	-.030	.325	.076	.162	.372
A4	.140	.445	.396	-	.318	-.014	.458	.105	.513	-.058	.114	.155
A5	.243	.370	.281	.318	-	.055	.169	.096	.452	.131	.122	.068
A6	.337	.103	.036	-.014	.055	-	.304	.262	.187	-.017	.326	.163
A7	.029	.388	.602	.458	.169	.304	-	.054	.284	.027	.256	.256
A8	.051	.082	-.030	.105	.096	.262	.054	-	.089	.099	.074	.245
A9	.354	.335	.325	.513	.452	.187	.284	.089	-	.143	.209	.150
A10	.107	.139	.076	-.058	.131	-.017	.027	.099	.143	-	.313	.167
A11	.239	.131	.162	.114	.122	.326	.256	.074	.209	.313	-	.173
A12	.084	.249	.372	.155	.068	.163	.256	.245	.150	.167	.173	-

As per Table (3.2) and Equation (3.1), value of Alpha coefficient (α) for Dimension (A) was obtained to be 0.843. Obtained value is high enough for indicating higher inter-item correlation or internal consistency with in dimension.

**Table (3.3) Inter-Item Correlation Matrix
Dimension (B) of Stakeholders' Perception Scale regarding NCFTE-2009**

Items	B1	B2	B3	B4	B5	B6	B7	B8	B9
B1	-	.049	.147	.171	.005	.220	.151	.361	.233
B2	.049	-	.366	.230	.199	.192	.276	-.007	.251
B3	.147	.366	-	.049	.168	.229	.321	.073	.143
B4	.171	.230	.049	-	.198	.403	.181	-.129	.008
B5	.005	.199	.168	.198	-	-.043	.341	-.076	.106
B6	.220	.192	.229	.403	-.043	-	.238	.278	.425
B7	.151	.276	.321	.181	.341	.238	-	.443	.388
B8	.361	-.007	.073	-.129	-.076	.278	.443	-	.405
B9	.233	.251	.143	.008	.106	.425	.388	.405	-

As per Table (3.3) and Equation (3.1), value of Alpha coefficient (α) for Dimension (B) was obtained to be 0.822. The obtained value is higher and indicates higher inter-item correlation or internal consistency with in dimension.

**Table (3.4) Inter-Item Correlation Matrix
Dimension (C) of Stakeholders' Perception Scale regarding NCFTE-2009**

Items	C1	C2	C3	C4	C5	C6	C7
C1	-	.615	.532	.196	.127	.230	.237
C2	.615	-	.558	.191	-.024	.010	.192
C3	.532	.558	-	.213	.095	.204	.321
C4	.196	.191	.213	-	.318	-.090	.273
C5	.127	-.024	.095	.318	-	.382	.054
C6	.230	.010	.204	-.090	.382	-	-.021
C7	.237	.192	.321	.273	.054	-.021	-

As per the Table (3.4) and Equation (3.1), estimated value of Alpha coefficient (α) was 0.784. The value is higher which confirmed the internal consistency or inter-item correlation within Dimension (C).

**Table (3.5) Inter-Item Correlation Matrix
Dimension (D) of Stakeholders' Perception Scale regarding NCFTE-2009**

Items	D1	D2	D3	D4	D5	D6	D7	D8	D9	D10	D11	D12	D13	D14	D15	D16
D1	-	.669	.593	.383	.511	.250	.403	.237	.435	.460	.456	.432	.374	.011	.099	.274

D2	.669	-	.475	.398	.325	.411	.279	.249	.248	.368	.208	.256	.306	.067	.083	.142
D3	.593	.475	-	.465	.335	.221	.562	.345	.390	.550	.439	.518	.281	.160	.244	.206
D4	.383	.398	.465	-	.364	.348	.610	.430	.326	.416	.377	.445	.421	.245	.319	-.050
D5	.511	.325	.335	.364	-	.177	.462	.233	.228	.344	.449	.294	.321	-.046	.020	.336
D6	.250	.411	.221	.348	.177	-	.406	.521	.155	.302	.321	.175	.192	.113	.040	.070
D7	.403	.279	.562	.610	.462	.406	-	.749	.304	.420	.579	.501	.427	.177	.271	.185
D8	.237	.249	.345	.430	.233	.521	.749	-	.403	.336	.434	.389	.407	.101	.322	.046
D9	.435	.248	.390	.326	.228	.155	.304	.403	-	.564	.314	.295	.251	.055	.185	.188
D10	.460	.368	.550	.416	.344	.302	.420	.336	.564	-	.505	.459	.368	.008	.078	.151
D11	.456	.208	.439	.377	.449	.321	.579	.434	.314	.505	-	.505	.371	.115	.250	.055
D12	.432	.256	.518	.445	.294	.175	.501	.389	.295	.459	.505	-	.621	.359	.443	-.065
D13	.374	.306	.281	.421	.321	.192	.427	.407	.251	.368	.371	.621	-	.356	.411	.117
D14	.011	.067	.160	.245	-.046	.113	.177	.101	.055	.008	.115	.359	.356	-	.665	.415
D15	.099	.083	.244	.319	.020	.040	.271	.322	.185	.078	.250	.443	.411	.665	-	.344
D16	.274	.142	.206	-.050	.336	.070	.185	.046	.188	.151	.055	-.065	.117	.415	.344	-

Value of Alpha coefficient (α) was estimated 0.798 using Equation (3.1) for the Dimension (D), which is shown in Table (3.5). This estimated higher value confirmed the internal consistency or inter-item correlation within Dimension (D).

**Table (3.6) Inter-Item Correlation Matrix
Dimension (E) of Stakeholders' Perception Scale regarding NCFTE-2009**

Items	E1	E2	E3	E4	E5	E6	E7	E8	E9	E10
E1	-	.091	.380	.103	.164	.393	.232	.376	.352	.454
E2	.091	-	.157	.282	.314	.177	.084	-.140	.165	.090
E3	.380	.157	-	.296	.418	.316	.441	.370	.568	.453
E4	.103	.282	.296	-	.124	.323	.188	.469	.380	.281
E5	.164	.314	.418	.124	-	.257	.272	.132	.347	.499
E6	.393	.177	.316	.323	.257	-	.630	.383	.345	.372
E7	.232	.084	.441	.188	.272	.630	-	.186	.362	.286
E8	.376	-.140	.370	.469	.132	.383	.186	-	.488	.453
E9	.352	.165	.568	.380	.347	.345	.362	.488	-	.270
E10	.454	.090	.453	.281	.499	.372	.286	.453	.270	-

Using Equation (3.1), the value of Alpha coefficient (α) was estimated. The obtained value 0.849 is higher enough for Dimension (E), which is shown in Table (3.6). This higher value confirmed the internal consistency or inter-item correlation within Dimension.

3.7.4 Split-Half Reliability

For the entire scale entitled ‘Stakeholders’ Perception Scale regarding NCFTE-2009’, split-half reliability was estimated using Spearman-Brown Prophecy equation.

$$r_c = \frac{2r_h}{1+r_h} \dots\dots\dots \text{Equation (3.2)}$$

Where,

r_c - Reliability of entire test/scale

r_h - Reliability of half test/scale

The value of Spearman-Brown coefficient was obtained to be 0.877 using Equation (3.2). High value of Spearman-Brown coefficient confirmed the reliability of entire scale/tool.

3.7.5 Validity of Stakeholders’ Perception Scale regarding NCFTE-2009

The developed Stakeholders’ Perception Scale regarding NCFTE-2009 was validated by means of face validity or content validity. Since there was no other test available. For that purpose three subject experts working in the field of education and curriculum researches were identified and tool was given to them. Thus, validity was ensured. In the following rating scale *product scale approach* is used to select and reject the item. This approach is a combination of *equal appearing interval method* of Thurston and *summative rating scale method* of Likert.

Initially, Thurston approach is used to establish content validity of items of the rating scale. In this approach or method experts having expertisation in curriculum of teacher education were requested to rate items of the rating scale in the continuum of Strongly Agree, Agree, Uncertain, Disagree and Strongly Disagree containing the scoring pattern as 5, 4, 3, 2, 1 for positively arranged items and 1, 2, 3, 4, 5 for negatively arranged items. On the basis of score gained by the experts, median and

quartile deviation of each item was calculated. Finally items having more quartile deviation than its range were discarded. Because more dispersion of quartile deviation shows that there is discordance in experts. Thurston's method analyses the item on the basis of individual view of expert then views of number of experts. Therefore, Likert's summative rating scale method is used to resolve this problem of knowing views of targeted population.

3.7.6 Construction of Perception Scale of Teacher Trainees regarding NCFTE-2009

Construction went through the following steps-

1. Formulation of design of Perception Scale of Teacher Trainees regarding NCFTE-2009
2. Review for identifying dimensions of the research tool
3. Dimension wise categorization of items
4. Pre tryout
5. Scoring
6. Final Tryout stage (Item analysis)
7. Preparation of final draft

Step-1:Formulation of Design of Perception Scale of Teacher Trainees regarding NCFTE-2009

The used 'Perception Scale of Teacher Trainees regarding NCFTE-2009' is a five rating scale. Respondents were required to respond on five point rating scale in the continuum of Strongly Agree, Agree, Uncertain, Disagree and Strongly Disagree. The scoring pattern of this research tool is 5, 4, 3, 2, 1 for positively arranged items and 1, 2, 3, 4, 5 for negatively arranged items for quantification of responses. It was

decided to estimate reliability and validity of each item by item analysis. In the study all 46 items were found in the scale having sufficient reliability and valid to be selected ultimately for final shape of this research tool.

Step-2:Review for Identifying Dimensions of the Research Tool

Five main dimensions were identified from review of the NCFTE-2009, which are as follows-

- A. Planning and Preparing for Student Learning
- B. Teaching and Instructions
- C. Examination and Analysis of Teaching and Learning
- D. Professional Responsibilities
- E. Social Responsibilities

Step-3:Dimension Wise Categorisation of Items of the Research Tool

All 46 items were compiled into account all five identified dimensions of Perception Scale of Teacher Trainees regarding NCFTE-2009. Items were categorised in appropriated dimension on the basis of experts in the field of education and curriculum preparation.

Step-4:Pre Tryout

Draft of 46 items was administered on 50 teacher trainees selected from the population of the study. Pre tryout, an effort is made to evaluate the test for its quality, validity and reliability, and to delete the unnecessary items. Therefore, prior to the construction of the final form, it is essential to test the pre tryout form. This is also known as pilot study (Chadha, 2009, p. 92). Through pre tryout researcher judged the comprehensibility of items, appropriateness of instructions and grammatical structure

of items. Some essential information is given in the test to be filled by the respondent self, which is-

Name: Name of the respondent

Occupation: Currently the respondent is engaged in the work (Whatever work)

Gender: Ex. Male/Female/or Transgender

Education: Last qualification of the respondent

Age: Current age of the respondent

Rural/Urban: Geographical background of the respondent.

The following instructions were given in ‘Perception Scale of Teacher Trainees regarding NCFTE-2009’ to respondents-

1. This test will be used only for research work. All information is given by you will be kept confidential.
2. This test consists of 46 items related to the perception of NCFTE-2009. Indicate your response by putting tick mark along with the continuum Strongly Agree, Agree, Uncertain, Disagree and Strongly Disagree.
3. It is necessary to give a response on each & every item.

Step-5:Scoring

Each item was shaped on Likert scale type pattern where 5, 4, 3, 2, 1 marks were given in the continuum of Strongly Agree, Agree, Uncertain, Disagree, Strongly Disagree for the positive items and 1, 2, 3, 4, 5 marks in the continuum of Strongly Disagree, Disagree, Uncertain, Agree, Strongly Agree for the negative items.

Step-6:Final Tryout Stage (Final Selection of Items)

For the final selection of item, inter item correlation of Perception Scale of Teacher Trainees regarding NCFTE-2009 was estimated. For estimation of internal consistency of the scale *Cronbach Alpha* was computed through the *SPSS (Version 25) (Statistical Package for the Social Sciences)*. The value of Alpha Coefficient of entire scale is shown in given **Table (3.7) Alpha Coefficient**.

**Table (3.7) Alpha Coefficient
(Perception Scale of Teacher Trainees regarding NCFTE-2009)**

Cronbach's Alpha	Part 1	Value	.843	
		N of Items	23 ^a	
	Part 2	Value	.877	
		N of Items	23 ^b	
	Total N of Items		46	

Computed value of Cronbach' Alpha of *Part 1* of Perception Scale of Teacher Trainees regarding NCFTE-2009 was 0.843 and for *Part 2* was 0.877. However, in this case the high value of Alpha Coefficient confirmed that items of theScale were highly correlated to each other. It means internal consistency of the scale was very high. Therefore the scale was highly reliable.

Step-7:Preparation of Final Draft

The above Table (3.8) Alpha Coefficient, show that all 46 items of the scale were found to have high Alpha Coefficient value which confirmed high internal consistency of the scale and no any item was to be rejected. Thus all 46 items were selected finally for Perception Scale of Teacher Trainees regarding NCFTE-2009. These items were categorised in five dimensions.

3.7.7 Reliability of Perception Scale of Teacher Trainees regarding NCFTE-2009

The degree of consistency among test scores is called reliability (Marshall & Hales, 1972, p. 104). It consists of two aspects (i) Temporal consistency and, (ii) Internal consistency (also known as Alfa coefficient). For estimating the reliability of

the tool *Alpha coefficient* and *Split-half reliability* were computed using SPSS (Version 25). For computing *Alpha coefficient* and *Split-half reliability* following formulas were used-

$$r_{it} = \alpha = \frac{n}{n-1} \left[1 - \frac{\sum s_i^2}{s_t^2} \right] \dots\dots\dots \text{Equation (3.3)}$$

Where,

r_{it} - Reliability between item and test

α - Alpha coefficient

n - Number of the items in test/scale

$\sum s_i^2$ - Sum of variance of individual items

For estimating inter-item correlation of the each dimension of the tool, value of Cronbach alpha was computed. Dimension wise inter-item correlation and value of Cronbach alpha Coefficient are given below.

**Table (3.8) Inter-Item Correlation Matrix
Dimension (A) of Perception Scale of Teacher Trainees regarding NCFTE-2009**

Items Code	A1	A2	A3	A4	A5	A6	A7	A8	A9	A10	A11
A1	-	.343	.335	.167	.250	.367	.348	.245	.000	.461	.300
A2	.343	-	.068	.039	.287	.294	.167	.298	.071	.087	.068
A3	.335	.068	-	.265	.195	.171	.423	.216	.280	.302	.173
A4	.167	.039	.265	-	.089	.512	.132	-.045	.036	.234	.355
A5	.250	.287	.195	.089	-	-.007	.407	-.030	.170	.325	.089
A6	.367	.294	.171	.512	-.007	-	.134	.126	.015	.240	.096
A7	.348	.167	.423	.132	.407	.134	-	.390	.258	.477	.331
A8	.245	.298	.216	-.045	-.030	.126	.390	-	.197	.215	.269
A9	.000	.071	.280	.036	.170	.015	.258	.197	-	.201	.099
A10	.461	.087	.302	.234	.325	.240	.477	.215	.201	-	.519
A11	.300	.068	.173	.355	.089	.096	.331	.269	.099	.519	-

As per Table (3.8) and Equation (3.3), value of Alpha coefficient (α) for Dimension (A) was obtained to be 0.835. Obtained value is high enough for indicating higher inter-item correlation or internal consistency with in dimension.

**Table (3.9) Inter-Item Correlation Matrix
Dimension (B) of Perception Scale of Teacher Trainees regarding NCFTE-2009**

Items Code	B1	B2	B3	B4	B5	B6	B7	B8	B9
B1	-	.450	.471	.249	.416	.160	.111	.117	-.006
B2	.450	-	.337	.197	.574	-.051	.006	.107	-.050
B3	.471	.337	-	.270	.480	.065	.107	.032	.195
B4	.249	.197	.270	-	-.051	.101	.131	-.003	.063
B5	.416	.574	.480	-.051	-	.043	-.196	-.080	.040
B6	.160	-.051	.065	.101	.043	-	.096	.135	-.008
B7	.111	.006	.107	.131	-.196	.096	-	.427	.025
B8	.117	.107	.032	-.003	-.080	.135	.427	-	-.016
B9	-.006	-.050	.195	.063	.040	-.008	.025	-.016	-

As per Table (3.9) and Equation (3.3), value of Alpha coefficient (α) for Dimension (B) was obtained to be 0.791. The obtained value is higher and indicates higher inter-item correlation or internal consistency with in dimension.

**Table (3.10) Inter-Item Correlation Matrix
Dimension (C) of Perception Scale of Teacher Trainees regarding NCFTE-2009**

Items Code	C1	C2	C3	C4	C5	C6
C1	-	.417	.139	.239	.215	.350
C2	.417	-	.111	.238	.386	.368
C3	.139	.111	-	.054	-.141	.212
C4	.239	.238	.054	-	.163	.012
C5	.215	.386	-.141	.163	-	.162
C6	.350	.368	.212	.012	.162	-

As per the Table (3.10) and Equation (3.3), estimated value of Alpha coefficient (α) was 0.826. The value is higher which confirmed the internal consistency or inter-item correlation within Dimension (C).

**Table (3.11) Inter-Item Correlation Matrix
Dimension (D) of Perception Scale of Teacher Trainees regarding NCFTE-2009**

Items Code	D1	D2	D3	D4	D5	D6	D7	D8	D9	D10	D11	D12
D1	-	.671	.373	.196	.375	.281	.429	.331	.075	.152	.313	.524
D2	.671	-	.328	.224	.345	.276	.427	.325	.201	.118	.334	.552
D3	.373	.328	-	.435	.193	.140	.336	.239	.029	.238	-.014	.103
D4	.196	.224	.435	-	.186	.034	.492	.032	-.124	.100	-.094	.198
D5	.375	.345	.193	.186	-	.337	.381	.285	.392	.237	.582	.291
D6	.281	.276	.140	.034	.337	-	.144	-.037	.107	.159	.125	.424

D7	.429	.427	.336	.492	.381	.144	-	.341	.002	-.107	.260	.467
D8	.331	.325	.239	.032	.285	-.037	.341	-	.178	-.032	.454	.249
D9	.075	.201	.029	-.124	.392	.107	.002	.178	-	.373	.256	.074
D10	.152	.118	.238	.100	.237	.159	-.107	-.032	.373	-	.119	-.028
D11	.313	.334	-.014	-.094	.582	.125	.260	.454	.256	.119	-	.345
D12	.524	.552	.103	.198	.291	.424	.467	.249	.074	-.028	.345	-

Value of Alpha coefficient (α) was estimated 0.805 using Equation (3.3) for the Dimension (D), which is shown in Table (3.11). This estimated higher value confirmed the internal consistency or inter-item correlation within Dimension (D).

**Table (3.12) Inter-Item Correlation Matrix
Dimension (E) of Perception Scale of Teacher Trainees regarding NCFTE-2009**

Items Code	E1	E2	E3	E4	E5	E6	E7	E8	E9	E10
E1	-	.091	.380	.103	.164	.393	.232	.376	.352	.454
E2	.091	-	.157	.282	.314	.177	.084	-.140	.165	.090
E3	.380	.157	-	.296	.418	.316	.441	.370	.568	.453
E4	.103	.282	.296	-	.124	.323	.188	.469	.380	.281
E5	.164	.314	.418	.124	-	.257	.272	.132	.347	.499
E6	.393	.177	.316	.323	.257	-	.630	.383	.345	.372
E7	.232	.084	.441	.188	.272	.630	-	.186	.362	.286
E8	.376	-.140	.370	.469	.132	.383	.186	-	.488	.453
E9	.352	.165	.568	.380	.347	.345	.362	.488	-	.270
E10	.454	.090	.453	.281	.499	.372	.286	.453	.270	-

Using Equation (3.3), the value of Alpha coefficient (α) was estimated. The obtained value 0.833 is higher enough for Dimension (E), which is shown in Table (3.12). This higher value confirmed the internal consistency or inter-item correlation within Dimension.

3.7.8 Split-Half Reliability

For the entire scale entitled ‘Perception Scale of Teacher Trainees regarding NCFTE-2009’, split-half reliability was estimated using Spearman-Brown Prophecy equation.

$$r_c = \frac{2r_h}{1+r_h} \dots \dots \dots \text{Equation (3.4)}$$

Where,

r_c - Reliability of entire test/scale

r_h - Reliability of half test/scale

The value of Spearman-Brown coefficient was obtained to be 0.824 using Equation (3.4). High value Spearman-Brown coefficient confirmed the reliability of entire scale/tool.

3.7.9 Validity of Perception Scale of Teacher Trainees regarding NCFTE-2009

The developed Perception Scale of Teacher Trainees regarding NCFTE-2009 was validated by means of face validity or content validity. Since there was no other test available. For that purpose three judges working in the field of education and curriculum researches were identified and tool was given to them. Thus, validity of the scale was ensured.

Initially, Thurston approach is used to establish content validity of items of the rating scale. In this approach or method experts having expertisation in curriculum of teacher education were requested to rate items of the rating scale in the continuum of Strongly Agree, Agree, Uncertain, Disagree and Strongly Disagree containing the scoring pattern as 5, 4, 3, 2, 1 for positively arranged items and 1, 2, 3, 4, 5 for negatively arranged items. On the basis of score gained by the experts, median and quartile deviation of each item was calculated. Finally items having more quartile deviation than its range were discarded. Because more dispersion of quartile deviation shows that there is discordance in experts. Thurston's method analyses the item on the basis of individual view of expert then views of number of experts. Therefore, Likert's summative rating scale method is used to resolve this problem of knowing views of targeted population.

3.8 Analysis

Since we are located *in the non-place of Empire* (independent sovereignty of global Empire) (Hardt & Negri, 2000, p. 208). Therefore, the advantages of mixed methods research include the potential to offer more comprehensive understanding of a complex process, including the convergence, corroboration, expansion, and elaboration of findings (Greene, Caracelli & Graham, 1989 quoted in Suter, 2012, p. 370). Hamilton and Weiner suggested for the curriculum analysts and researchers of the future that in the research, the extent to which the balance is tipped toward the human subject considerations will be important (Pinar, 2003, p. 27). In the following study mixed analysis was used.

3.8.1 Qualitative Analysis

Qualitative analysis is systematic and that researchers report on their impression in a structured and transparent form (OU, 2017, p. 13). There are two ways of analysing qualitative data. One approach is to examine your findings with a pre-defined framework, which reflects your aims, objectives and interests. This approach is relatively easy and is closely aligned with policy and programmatic research which has pre-determined interests. This approach allows you to focus on particular answers and abandon the rest. We refer to this approach as ‘framework analysis’ (Pope *et al.*, 2000 quoted in OU, 2017, p. 14). As mentioned in the introductory portion of the chapter that mixed methods has been used for conducting this very research. In above sections quantitative portion of research has been explained whereas in this section qualitative portion is discussed and following steps were followed-

- 1 Vision and aim of preparing NCFTE 2009

- 2 Values ear-pinned in the NCFTE 2009
- 3 Approaches
 - 3.1 Behavioural
 - 3.2 Managerial
 - 3.3 Systems
 - 3.4 Academic
 - 3.5 Humanistic
 - 3.6 Re-conceptualistic
- 4 Nature and function of the NCFTE 2009
- 5 Components and phases of development of NCFTE 2009
- 6 Selection of contents
- 7 Organisation of contents
- 8 Evaluation process and techniques
- 9 Implementation strategies for NCFTE 2009

3.8.2 Quantitative Analysis

In this study *t-test* was used for comparing mean scores of male and female obtained on administration of *Stakeholders' Perception Scale regarding NCFTE-2009* and *Perception Scale of Teacher Trainees regarding NCFTE-2009*.

3.9 Field Visit for Data Collection

Field visit is the empirical evidence of collecting data using a tool. Therefore, Field notes should include an account of events, how people behaved and reacted, what was said in conversation, where people were positioned in relationship to one another, their comings and goings, physical gestures, your subjective responses to what you observed, and all other details and observations necessary to make the story

of the participant observation experience complete. Field notes may be written either discreetly during participant observation or following the activity, depending on where you go and how much you participate (Mack *et al.*, 2005, p. 21). In this research, the researcher prepared and maintained a field note diary so that possible and genuine events could be noted systematically.

3.10 Data Collection and Data Interpretation

Strategies for data collection are open and depend on context. Revisions are made until the researcher is satisfied that the direction taken affords the greatest potential for discovery, meaningful answers to questions posed, or the generation of new hypotheses (or questions) (Suter, 2012, p. 343). The process of data gathering goes through three phases of *noticing*, *collecting* and *thinking* (Seidel, 1998, p. 1) about things which, i) prevents our being taken in by coincidences; ii) make sense of observed patterns in ways that can suggest other possibilities; iii) can shape and direct research efforts, pointing toward likely discoveries through empirical observation (Babbie, 2011, p. 33). On a general level, noticing means making observations, writing field notes, gathering documents, etc. In the thinking process examination is undertaken of things that have been collected. The main aims are, i) to make some type of sense out of each collection; ii) look for patterns and relationships within and across collections; and iii) to generalise the results. Interpretation of the data involves two parts, i) presenting the result(s) of the analysis; and ii) providing additional information that will allow others to understand the meaning of the results (AED, 2006, p. 19). In this research triangulation method was used for data interpretation.

3.11 Data Coding in the Study

Coding is the process of organizing and sorting your data. Codes serve as a way to label, compile and organise your data. They also allow you to summarize and

synthesize what is happening in your data (CER, 2012, p. 1). A good code (i) should be sufficiently precise; (ii) should enable a large part of data to subsume under it; and, (iii) should be relevant to the research (Kelle and Kluge, 1999 quoted in ESF, 2012).

3.12 Stages in Data Coding

3.12.1 Stage1 (Reading for Overall Understanding)

Immersion in the raw data to comprehend its meaning in its entirety (Pope, Ziebland, and Mays, 2000) is first important step in the analysis. Reviewing data without coding helps identify emergent themes without losing the connections between concepts and their context. For identifying the major themes and for on the whole understanding of data, the researcher systematically read data so that the emerging ideas could be identified (Bradley *et al.*, 2007).

3.12.2 Stage2 (Coding Qualitative Data)

Charmaz (2001) describes coding as the *critical link* between data collection and their explanation of meaning... In qualitative data analysis, a code is a researcher generated construct that symbolises and thus attributes interpreted meaning to each individual datum for later purposes of pattern detection, categorisation, theory building, and other analytic processes (quoted in Miles *et al.*, 2014, p. 72). Codes are labels or tags that allocate units of meaning to the data being analysed (Miles and Huberman, 1994 quoted in Walker, 2010, p. 215), which are assigned to whole documents or segments of documents (i.e., paragraphs, sentences, or words) to help and catalogue the key concepts while preserving the context in which these concepts occur. Researcher coded every emerging theme for suitably quantify the data.

3.12.3 Stage3 (Ground Theory Approach and Deductive Approach)

a. Grounded Theory Approach for Developing Code Structure

Grounded theory coding requires us to stop and ask analytic questions of the data we have gathered. During initial coding we study fragments of data words, lines, segments, and incidents closely for their analytic import. Throughout the process, we compare data with data and then data with codes and signposts and guides make our sojourn with coding accessible and ease our way around obstacles (Charmaz, 2006, p. 42). Therefore, data are reviewed line by line in detail and as a concept becomes apparent, a code is assigned by the researcher. Upon further review of data, the analyst continues to assign codes that reflect the concepts that emerge, highlighting and coding lines, paragraphs, or segments that illustrate the chosen concept. Using this *constant comparison* method, the researchers refined the dimensions of existing codes and identify new codes. Through this process, the code structure evolved inductively, reflecting *the ground*, i.e., the experiences of participants (quoted in Bradley *et al.*, 2007, p. 1762).

b. Deductive Approach to Develop Code Structure

In this approach, the initial step defines a structure of initial codes before line-by-line review of the data. Preliminary codes can help researchers integrate concepts already well known in the extant literature (quoted in Bradley *et al.*, 2007, p. 1763). Both ground theory approach and deductive approach were used by the researcher as per the requirement of the research work.

3.12.4 Stage4 (Finalising and Applying the Code Structure)

The codes and code structure can be considered finalised at the point of theoretical saturation (quoted in Bradley *et al.*, 2007, p. 1764). This is the point at which no new concepts emerge from reviewing of successive data from a theoretically

sensitive sample of participants, i.e., a sample that is diverse in pertinent characteristics and experiences.

3.12.5 Stage5 (Applying the Finalised Code Structure)

One approach to apply the finalised code structure to the data is to have two to three members adapt in qualitative research to re-review all the data and applying independently the codes from the finalised code structure (quoted in Bradley *et al.*, 2007, p. 1764). This process contributed to enhance the credibility of the research by satisfying the issue of observer triangulation.

In this research following coding was done for analysing the data obtained from “Stakeholders’ Perception Scale regarding NCFTE–2009 (SPS)” and “Perception Scale of Teacher Trainees regarding NCFTE-2009 (PSTT)”–

Table (3.13) Coding of items of Stakeholders’ Perception Scale regarding NCFTE – 2009

Sr. No.	Item	Code
1	I use psychological principles while planning of instruction and assessment.	A1
2	I usually monitor the instructional and assessment strategies during teaching-learning process.	A2
3	I have detail information of the content covered and instructional methods used by teachers at college.	A3
4	I frequently refer to and use information from the teachers’ guides associated with the curriculum materials adopted by my college.	A4
5	I suggest my colleagues to include teaching learning material.	A5
6	I criticise any type of punishment for the learner.	A6
7	I encourage implementation of co-curricular activities in my college.	A7
8	As I opine, time allocated for internship of teacher trainees is sufficient.	A8
9	I believe continuous faculty development programme should be compulsory.	A9
10	I never allow innovative teaching methods without permission of Government.	A10

11	As I opine, increase in duration of teacher education is not a good decision.	A11
12	As I think in the sense of quality, only M.Ed. programme is not sufficient to prepare teacher educators.	A12
13	I never suggest my colleagues to use only lecture method for teaching.	B1
14	I prefer my colleagues to use innovative methods for teaching.	B2
15	I appreciate my colleagues to use technology in an interactive way.	B3
16	I never neglect responses from colleagues.	B4
17	I suggest that theory classes should be less than daily practice of teaching.	B5
18	I opine that teacher education needs to be skilled with Information & Communication Technology.	B6
19	I feel teachers do not need in-depth study of pedagogy.	B7
20	I believe that printed books are sufficient to provide knowledge to teacher trainees.	B8
21	I feel, there is no need to remember classroom schedule.	B9
22	I evaluate academic activities continuously.	C1
23	I am involved in action research.	C2
24	Teachers need to be prepared to view subject content critically within inter-disciplinary frames.	C3
25	Present evaluation procedure of teacher training programmes is too theoretical.	C4
26	Present evaluation procedure of teacher training programmes is excessively quantitative.	C5
27	Existing procedure of teacher training programmes lacks comprehensiveness.	C6
28	Evaluation in teacher education needs more objectivity.	C7
29	I am aware that teacher education in India is governed by the NCTE.	D1
30	I demonstrate appropriate professional conduct for my colleagues.	D2
31	I discuss my personal administrative/Teaching experiences with my colleagues.	D3
32	I extend my support to my colleagues.	D4
33	I have experience of different aspects of the curriculum.	D5

34	I actively encourage my colleagues.	D6
35	I am cooperative with my colleagues as well as all teacher trainees.	D7
36	I respect my colleagues.	D8
37	I am aware that NCTE provides affiliation to the teacher training college.	D9
38	NCFTE-2009 is prepared for the improvement of teacher education.	D10
39	I encourage my colleagues to attend professional development activities.	D11
40	I am aware about Right to Education Act 2009.	D12
41	I am aware about the Child Rights.	D13
42	I do not give suggestions to teacher trainees about study techniques.	D14
43	I never discuss curriculum with my colleagues.	D15
44	I opine that a teacher should be fully professional.	D16
45	I feel value education is important for teacher trainees.	E1
46	I encourage my colleagues and all teacher trainees to practice yoga.	E2
47	I try to provide accessible environment for differently abled persons up to maximum possible extent.	E3
48	Responsibly, I try to promote equitable and sustainable development for all sections of society.	E4
49	Inclusive Education is the right of differently abled.	E5
50	The new teacher education curriculum framework may be more effective if it integrates peace education with existing curriculum.	E6
51	In my opinion, schools need to get closer to society.	E7
52	I understand and try to sort out the problems of trainees as well as my colleagues.	E8
53	I try to promote gender equality.	E9
54	In present time, preparing professional and humane teacher is needed.	E10

Items in research tools are coded by assigning alphabet A, for Dimension (1) Planning and Preparation for Student Learning; alphabet B for Dimension (2) Teaching and

Instructions; alphabet C for Dimension (3) Examination and Analysis of Teaching and Learning; alphabet D for Dimension (4) Examination and Analysis of Professional Responsibilities; alphabet E for Dimension (5) Examination and Analysis of Social Responsibilities.

Table (3.14) Coding of Items of Perception Scale of Teacher Trainees regarding NCFTE-2009

Sr. No.	Item	Code
1	Teacher Education in India is governed by the NCTE.	A1
2	Today yoga education is compulsory for the teacher trainees.	A2
3	The teacher creates an inclusive, nurturing, stimulating, and academically challenging learning environment in classroom.	A3
4	The courses of teacher education aim to active engagement of pupil teacher for effective learning.	A4
5	During teacher training programme trainees learn to manage classroom, student learning and student behaviour.	A5
6	Co-curricular activities are the essential part of teacher training courses.	A6
7	It is compulsory to prepare teaching-learning material during internship in schools, like models, charts, transparencies etc.	A7
8	Preparing lesson plan helps in time management for teacher trainees.	A8
9	Micro-teaching sharpens teaching skills of teacher trainees.	A9
10	Internship plays pivotal role in teacher training.	A10
11	Formal school knowledge need to be linked with societal needs.	A11
12	The teacher reflects an understanding of subject matter and subject-specific pedagogy during planning.	B1
13	The teacher educators use teaching-learning material and, information and communication technologies during teaching.	B2
14	The teacher uses principles of learning and addresses learner diversity during teaching.	B3
15	Effective classroom communication uses verbal, nonverbal, and media techniques.	B4
16	Teacher should innovate, self-made teaching-learning material as per the need of learner.	B5
17	Teacher educators encourage for experiments in classrooms.	B6

18	Teacher educators often express their professional views in classrooms.	B7
19	It is taught trainees to maintain positive behaviour in daily practices.	B8
20	A teacher should be friendly and skilled in Information & Communication Technology and tools.	B9
21	Preparation of question paper is not a part of teacher training.	C1
22	Continuous and comprehensive evaluation is the work of an effective teacher.	C2
23	Present evaluation procedure is too theoretical.	C3
24	Present evaluation procedure is excessively quantitative.	C4
25	Existing evaluation procedure lacks comprehensiveness.	C5
26	Inclusion is the process of welcoming learner's diversity.	C6
27	Course of teacher education is professional one.	D1
28	Leadership is the characteristic of an effective teacher.	D2
29	The teacher behaves as mentor.	D3
30	The teacher treats in authoritative way.	D4
31	Trainees need to submit every assignment within given time limit.	D5
32	It is duty of a teacher to improve the overall quality of teaching in classroom.	D6
33	NCTE provides affiliation to teacher training colleges.	D7
34	Trainees should be aware about the NCFTE-2009 regulations.	D8
35	Inclusion is the right of persons with disability.	D9
36	NCFTE-2009 pleads the Right to Education Act.	D10
37	Trainees should be aware about the Child Rights.	D11
38	I feel, trainees should give suggestions and feedback suggestions for the books published by NCERT/SCERT etc.	D12
39	The teacher establishes and maintains collaborative relationships with colleagues and families.	E1
40	The teacher continuously demonstrates appropriate professional conduct.	E2

41	Daily life of teacher affects classroom instructions and interaction.	E3
42	Teacher should not interfere with daily life of trainees.	E4
43	The effective teacher should discuss personal experiences with students.	E5
44	The teacher behaves like friend.	E6
45	I am cooperative with my colleague teacher trainees.	E7
46	NCFTE-2009 is towards preparing professional and humane teacher.	E8

Items in research tools are coded by assigning alphabet A, for Dimension (1) Planning and Preparation for Student Learning; alphabet B for Dimension (2) Teaching and Instructions; alphabet C for Dimension (3) Examination and Analysis of Teaching and Learning; alphabet D for Dimension (4) Examination and Analysis of Professional Responsibilities; alphabet E for Dimension (5) Examination and Analysis of Social Responsibilities.

Table (3.15) Coding of gender

Gender	Code
Female (F)	1
Male (M)	2

For the qualitative analysis, the coding of gender is done where 1 is assigned for Female and 2 for Male.

Table (3.16) Coding of area of respondents

Residence	Code
Rural (R)	1
Urban (U)	2

For the qualitative analysis, the coding of area of the respondent is done where 1 is assigned for Rural and 2 for Urban.

Table (3.17) Coding of qualification of respondents

Qualification	Code
Doctoral Degree	1
Master Degree	2

For the qualitative analysis, the coding of qualification of the respondent is done where 1 is assigned for Doctoral degree and 2 for Master degree.

Table (3.18) Coding of Universities

Name of University	Code
Maharaja Surajmal Brij University, Bharatpur	1
University of Rajasthan, Jaipur	2
University of Kota	3
Jai Narayan Vyas University, Jodhpur	4
Maharaja Ganga Singh University, Bikaner	5
Raj Rishi Bhartihari Matsya University, Alwar	6

For the analysis of data, the coding of area of universities is done where 1 is assigned for Maharaja Surajmal Brij University, Bharatpur; 2 for University of Rajasthan, Jaipur; 3 for University of Kota; 4 for Jai Narayan Vyas University, Jodhpur; 5 for Maharaja Ganga Singh University, Bikaner; 6 for Raj Rishi Bhartihari Matsya University, Alwar.

Chapter-4

Analysis, Result and Discussion

Research on decision making by teachers is not clear about which of the factors are considered and, when and how the factors are considered in teacher's pre-active planning decisions to determine how specific curriculum should be taught (Shavelson & Stren, 1981). This chapter deals with analysis, result and interpretations grounded upon different objectives of the current research on the National Curriculum Framework for Teacher Education-2009 (NCFTE-2009).

4.1 Objective (1). To study the theoretical concept and objectives of NCFTE-2009

Policy related to education raised recently by Barber (2000) in his keynote '*the evidence of things not seen: re-conceptualising public education*'. He addressed these issues at the Netherlands Rotterdam International Conference which was held on 'Schooling for tomorrow'. He focused on the five strategic challenges, which are - (i) reconceptualising teaching; (ii) creating high autonomy / high performance; (iii) building capacity and managing knowledge; (iv) establishing new partnerships; and, (v) reinventing the role of government, and four deliverable goals which are - (i) achieving universally high standards; (ii) narrowing the achievement gap; (iii) unlocking individualisation; and, (v) promoting education with character (Barber, 2000; Zajda, 2005).

These newly constructed imperatives of strategies and goals in educational policy could serve well part as a global and hegemonic role within the global framework for teacher education. But before it, Curriculum development for the

global benefit, building the logical plan of study and curriculum analysis need unpacking the curriculum to understand the plan.

4.1.1 Vision and aim of preparing NCFTE-2009

It is a common belief too that the academic and professional standards of teachers constitute a critical component of the essential learning conditions for achieving the educational goals (NCTE, 2009, p. 1). If the curriculum is considered to be the instrument of change in education, its meanings and operational terms must be clearer (Toombs & Tierney, 1993, p. 195). The National Curriculum Framework for Teacher Education (NCFTE-2009) elaborates the context, concerns and vision through this insight that teacher education and school education have a symbiotic relationship in both these sectors mutually reinforce the concerns necessary for qualitative improvements of the entire educational system (NCTE, 2009, p. iii). If we can peep in the past, then we will find that the period of study or training was of indeterminate length and depended on teacher educators choice. History reveals, medieval universities and colleges derived their power and reputation not from teaching, research or a coherent programme of studies but from the right to certify and examine the scholar (Toombs & Tierney, 1993, p. 195). Today, the NCFTE-2009 explains issues and perspectives related to inclusive education, equitable and sustainable development, gender-equalisation, the role of community and ICT in schooling as well as e-learning became the centre stage in the Framework.

It highlights new applicable theories of teacher education and explains curriculum and pedagogical aspects, basics of education and school practicum or internship. Curriculum and pedagogy, deals with curriculum studies, pedagogic studies and, assessment and evaluation studies. The basics of education include

learner studies, contemporary studies and educational studies. The school internship is visualized by situating the practice of teaching in the broader context of vision and the role of teacher and sustained engagement with learners and schools. The school internship is visualized by situating the practice of teaching in the broader context of vision. It is necessary to understand first the role of the teacher to be consistent with the learners and the schools. The length of academic preparation, the level and quality of subject matter, knowledge of content, the repertoire of pedagogical skills, diverse learning situations, the degree of commitment to the profession, sensitivity to contemporary issues and problems as also to learners and the level of motivation critically influence the quality of curriculum transaction in the classrooms. Therefore, learning has been countable as the larger process of social transformation (NCTE, 2009, p. 2).

The NCFTE-2009 suggests establishing TLC (Teaching Learning Centre) to be used as laboratories for the practice of teacher training. It has been emphasised in the NCFTE-2009, also on process-based models for practising teachers to adopt/adapt. Though the Framework does provide directions towards change in the structural aspects of teacher education at elementary, secondary and post-graduate levels, nevertheless, the conventional models of teacher education may be continued in schools (p. iv) if they satisfy the learning.

It is visualised by the policymakers of teacher education that the policy prepared by them must work as a catalyst to change the profile of teacher education so that the teacher education institutions become active centres not only for research but also for the experiment. Eventually, they believe that the policy will direct to improve the educational methods and curriculum.

The initial draft of the NCFTE-2009 was developed by an Expert Committee involving of Prof C. L. Anand, Prof S. V. S. Chaudhary, Prof V. K. Sabharwal, Prof C. Seshadri, Prof R. S. Khan, Prof. Raja Ganesan and Prof L. C. Singh which was based on the ideas shared in the consultative meets which were held at Udaipur and Hyderabad. In these meetings members of the committee for preparing NCFTE, scholars, teachers, teacher educators, experts of NGOs, faculty members of NCERT, SCERTs, DIETs, IASEs, CTEs, and universities shared their ideas openly. We honestly acknowledge their valuable participation in shaping this document (p. v). This policy document was imposed on the website of NCTE to get extensive feedback. Some experts, teachers, teacher educators, including Prof Krishna Kumar (Director of NCERT); Dr Chongchong from University of Florida; Dr Rohit Shetty from University of Michigan; English and Foreign Languages University; DIETs and NGOs provide their considered views to improving the Framework (p. v).

The country has to address the need of supplying well qualified and professionally trained teachers in larger numbers in the coming years. At the same time, the demand for quality secondary education is steadily increasing. It is recommended that the aim should be to reach universal secondary education within a maximum of ten years. Given the problems of inadequate quality in most secondary schools due to poor infrastructure and insufficient and poorly equipped teachers, the need for addressing the professional education of secondary teachers acquires great importance (p. 1). It is well known that the quality and extent of learner achievement are determined primarily by teacher competence, sensitivity and teacher motivation. The National Curriculum Framework-2005 places different demands and expectations on the teacher, which need to be addressed both by initial and continuing teacher education (p. 1).

4.1.1.1 Vision and aim of preparing NCFTE-2009 for changing school setting and its stresses

Much of the discussion in educational reform depends upon the view that whether school matters and if matters till where. Many educational experts, who are mainly associated with the determination of the standards, believe that the spell of improving student's performance lies in improving the schools. The NCFTE-2009 is prepared with the aim to create an integrated school setting for providing equal opportunities to all children (p. 13). It endorses meta-activity which is related to the demonstration of how tasks are performed at school and classroom levels. This meta-activity explains the reason of happening things with the basic theory and principles behind classroom practices. NCFTE-2009 recommends school internship (p. 23) during teacher education, which is a necessary element for the development of perspective, professional abilities, teacher's sensitivity and general performance of the skill. Design of School Internship should hold the choice of selecting school subjects to be taught by an intern (p. 26).

The NCFTE-2009 suggests for exploration of epistemology, more in-depth assurance and school knowledge for the various level of school education. Teachers are needed to be prepared to investigate the subject content critically, within the frame of disciplines as well as within inter-disciplinary frameworks.

The NCFTE-2009 attracts attention on issues related to the social milieu, aims of education, the vision of education in India and at the global level. It supports the maintain self-identity, understanding diversity of classroom through equality of education, gender and social. It advocates inculcating ideas of educationists, peace education, and value education in the core curriculum. It accepts physical health, child

rights and human rights as necessary things for developing the self. The NCFTE-2009 accepts that the proposed process will demand a training schedule that enables student teachers to participate as regular teachers for a sustained length of time, with the advantage of the institutes' support to analyse their experiences as a teacher. Sustained involvement in the life of the school during the programme and long periods with learners would help student teachers to address the unplanned and uncertain aspects of classroom teaching which often originate in interaction and not from generalized models of learners' development (p. 26). In India, significant development has been observed in school education since independence. According to the report of the Ministry of Human Resource Development of 2004-05, more than 82 per cent children of 5-14 age groups were in schools. But the dark side of this data is that 50 per cent of children of them had dropped out the school after class 8th (MHRD, 2008). The finding was showing that regionalism, social isolation, gender disparities are roots of problems of drop out which exist till now. This challenge is being a barrier for implementing the Right to Education Act 2005 and, in particular, the role and place of the school teacher. The common acknowledgement is that the existing system of schooling imposes nosogenic pressure on our children's mind. This pressure arises from an incongruous curriculum which has no relation to the personal and social environment of children and prepared in imaginative ways. The NCFTE-2009 suggests preparing teacher to be a facilitator of children's learning in a manner that helps children to construct knowledge and meaning and, equipped with and adequate understanding of curriculum, subject content and pedagogy with an understanding to make a deep connection with the community, school and management (NCTE, 2009, p. 3). It recommends that education is not a mechanical activity of information transmission and teachers are not information dispensers.

Therefore, teachers need to be looked at as crucial mediating agents through whom curriculum is transacted, and knowledge is co-constructed along with learners. For this to ensure, there is a need to connect knowledge to life outside the walls of the school and enrich the curriculum by making it child-centred (NCTE, 2009, p. 3).

4.1.1.2 Vision and aim of preparing NCFTE-2009 for preparing professional teachers

It is a general belief that that good teaching matters forever. Most of us think we know good teaching when we see it comparatively. But there are four quality indicators as teacher qualifications, teacher characteristics, teacher practices, and teacher effectiveness which should be nourished necessarily (Goe & Stickler, 2008, p. 1). Various studies specify that convinced type of professional development contributes more to teacher quality and student achievement. Explicitly, professional development that continues, united with the curriculum and focused on teaching, is helpful to influence school-level performance at both the elementary and high school levels (Cohen & Hill, 1998; Kannapel *et al.*, 2005; Wenglinsky, 2000). Although Harbison and Hanushek (1992) did not found any beneficial relationship between professional development and student achievement in rural schools, they speculate that their finding may be useful in targeting particularly underqualified teachers for participation in the professional development programmes studied.

According to Ornstein (1982) subject centred curriculum cannot be sufficient for the complete learning and development of a learner but a child centred curriculum can help to impart essential key knowledge through a teacher. Therefore, a teacher should be trained thus type that he encourages learner like Rousseau and John Dewey whose single purpose was to pierce ideas into a child's brain. So that a teacher can be

able to play a role of – (i) problem solver for learner and society; (ii) communicator between learner and society; (iii) developer of society through development of learner; (iv) actor to play their role honestly; (v) savior of culture of society; (vi) constructor of values of society; (vii) philosopher to generate power to enrich the learners with logic; (viii) psychologist to all-round development of learner and to know the need of learner and society; (ix) sociologist to know about the society and interaction with its environment; (x) creative thinker to help generate convergent and divergent thinking in the mind of learner; (xi) counselor to guide the learner to make decision properly; (xii) transformer to transform the knowledge; (xiii) evaluator or Examiner to evaluate the knowledge of learner; and, (xiv) trainer of skills to train the hand through training of mind.

The NCFTE-2009 has guided teacher education institutions for remembering the context, concerns and vision of teacher education. It has also contributed for reinforcing the qualitative improvement by focusing on perspectives for equitable, sustainable development, gender perspectives, role and participation of society in education, use of ICT (Information and Communication Technology) in schooling as well as teacher training courses. The NCFTE-2009 suggests that the internship programme for teacher education are visualised and decided by remembering the broader context of vision and role of teacher, and sustained engagement with learners and schools (p. iv). Therefore, the focus on process-based teacher education has been attempted as models for practising teachers (NCTE, 2009, p. iv). After the independence, due to more and more focus on Universalisation of Elementary Education (UEE), by the 86th amendment in Indian Constitution, Free and Compulsory Education was transferred to Article 21(A) of Fundamental Rights from Article 45. On that basis, the RTE Act 2009 came into force from April 1, 2010.

Therefore, the pressure of globalisation (NCTE, 2009, p. 4) with increasing competition (NCTE, 2009, p. 4) and need to train poorly equipped teacher (NCTE, 2009, p. 1) gave strong reason to prepare professional teachers for the growing Indian society. In the NCFTE-2009, it has been noted that a teacher educator should be trained for preparing the teachers who can - contribute as resource person; be able in formulating educational policies (NCTE, 2009, p. 64); be able to do research on the effectiveness of their training programmes within the government system (NCTE, 2009, p. 64); be able to works towards training of teachers for universalisation and inclusion (NCTE, 2009, p. 65). The NCFTE-2009 focuses on the role of agencies are engaged in preparing and development of teacher and teacher educators. It suggests that these agencies must be determined, planned, implemented, monitored (NCTE, 2009, p. 64) approaches of professional development by enabling the teacher educators for commitment to constitutional values and for preparing teachers for overcoming discrimination in the classroom (NCTE, 2009, p. 65); to implement, achieve specific target and use of curriculum and technology in classes, and to enhance their role in education system; to work as medium of transferring experiences of community to learners through teachers. Therefore, it is needed of empowering teacher educators for personality development of teachers by - preventing their training from frameless quick-fix strategies and activities (NCTE, 2009, p. 67); promoting them as a globally mobile researcher (Fahey & Kenway, 2010, p. 52) to get skilled in current and valuable trends of teacher education. It is observed in the NCF Position Paper on Teacher Education that existing training programmes of teacher educators such as the M.Ed. have become are woefully inadequate in facilitating a deeper discourse in education and an opportunity for interdisciplinary enquiry. These offer little scope for the professional development of teacher educators (NCTE, 2009,

p. 79). It is becoming clear that apart from addressing the immediate needs of preparing teachers, postgraduate courses of education need to contribute towards building the discipline and the knowledge-base of education especially within the Indian context (NCTE, 2009, p. 80). Therefore, in addition to revamping the existing M.Ed programme, a fresh discourse has to be initiated in teacher education to arrive at tangible understandings of the implications of aspects such as creating multilateral entry points for the study of educational studies as a pursuit in higher education; broad-basing the profile of teacher educators by infusion of persons who have knowledge of disciplines generic to teacher education so that the discipline of education grows into specialization requiring persons to be well-versed in cognate disciplines outside education; working out possibilities to pursue educational study at the post-graduate level through the route to teacher education involving bridge courses, wherever required and considered necessary (NCTE, 2009, p. 80).

4.1.1.3 Vision and aim of preparing NCFTE-2009 for making humane teacher

Maslow wrote a musician must make music, an artist must paint, a poet must write to be ultimately at peace (quoted in Schultz & Schultz, 2013, p. 249). The theory of the Hierarchy of Needs of Abraham Maslow indicates that needs, move from unsaturated to saturation. Since the needs of global society and contexts of education are changing day by day. Therefore, demands of modifying curricula for the welfare of global society and globalised education system motivate countries to prepare humane teachers. Some foundational demands are discussed in the NCFTE-2009 for the need of making a humane teacher to teach values which are inducted into the constitution of countries. The responsibility of the all-round development of children with the application of knowledge should be fixed for teacher and teacher educators. They should be enabled for making efforts to empower the children and to

keep children free from fear, depression and anxiety. Teacher and teacher educators should be capable of comprehensive and Continuous evaluation of the knowledge of children for increasing understanding and ability to use knowledge. The NCFTE-2009 focuses on knowledge of gender equality with an understanding of sex to provide a practical environment for learning to children. It suggests independent understanding to prepare teacher as - facilitator to construct knowledge, curricula, textbooks and teaching-learning material. It recommends stopping the proliferation of non-qualified and untrained teachers by understanding the role of vital need of a humane teacher for the right knowledge of peace to save humanity.

4.1.1.4 Vision and aim of preparing NCFTE-2009 for inclusive education

When asked, what blind people wanted from their communities, one woman who is visually impaired said the right to be equal and the opportunity to do something different (Hatlen, 1996). This quote focuses on needs of skills for differently abled children. Inclusive education refers to a philosophical position as well as an arrangement of institutional facilities and processes. Inclusion ensures access to and conditions of success in education for everybody including those in the margins either with learning difficulties because of physical or mental disabilities or because of their social position (NCTE, 2009, p. 13).

Edger Dale opined that 90% of what we learn comes from performing a task (Dale, 1969, p. 108). He suggested that skills of daily life need to be trained in the way that they can be able to promote best practice, so the student will be able to generalise the skills into different and realistic settings. Today, the concern is to make teacher education liberal, humanistic and responsive to the demands of inclusive education (NCTE, 2009, p. 19). For this reason, instruction should not always be

occured only during classroom hours. It should always be during optimal learning times when learning is deriving from everyday experiences (Koenig & Holbrook, 2000 quoted in Lohmeier, 2005, p. 33).

The NCFTE-2009 promotes the inclusion of locally relevant content in the curriculum as well as pedagogy (NCTE, 2009, p. 14). However, just because the core curriculum is compulsory for all students and equal reach is mandated, do not mean the curriculum gives a fair chance for all students (Lohmeier, 2005, p. 26). The NCFTE-2009 suggests an added accountability on the teacher for which he needs to be prepared to select and organise teaching content and learning experiences besides the walls of the classroom. It is therefore vital for the development of thoughts, perceptions, opinions and beliefs in children as well as the use of school knowledge in actual life that formal experience should be associated with community knowledge (NCTE, 2009, p. 14).

The NCFTE-2009 recommends that understanding the development of children in diverse contexts is necessary to equip student teachers to address diversity in the classroom and to teach within the frame of inclusive education (p. 28). The PWD Act 1996 (Persons with Disabilities-Equal Opportunities, Protection and Full Participation) provides for free and compulsory education up to the age of 18 years for all children with disabilities. For enabling and implementation of the Act, teacher education institutions should be the primary need to reframe courses including the perception, impression and approaches of inclusive education. With the commencement and need of technology, ICT is a rising demand that it has become a teaching approach in schools. The NCFTE-2009 guides teachers to be equipped to overcome on biases of the social exclusion of caste, religion and economic status.

Teachers need to be sensitive to bring girls in the classroom transaction and to provide equal opportunity too. It is demanded in the NCFTE-2009 for being aware of the philosophy of inclusive education. A teacher should be well known of the different types of adjustments and positive defence mechanisms which are useful for deciding necessary infrastructure for schools with curriculum, teaching methods and other teaching practices according to the needs of all learners.

4.1.1.5 Vision and aim of preparing NCFTE-2009 for inculcating peace education

The NCFTE-2009 agrees that frames and persuasions of peace education within the national and international contexts would be some of the critical units of study (p. 33). It is well known that true education is the process of developing the human personality in all its extents as physical, mental, social, spiritual, emotional, intellectual and moral. Peace provides an integrating principle for the value positioning of education. Education for peace is education for life, not merely training for a livelihood. Equipping individuals with the values, skills and attitudes, they need to be wholesome persons who live in harmony with themselves and others and are responsible citizens is the goal of education for peace (NCERT, 2006, p. 1). For the spread of peace, in 1994 UNESCO declared a framework of action on education for peace, human rights, and democracy. On the basis, this action plan the makers of NCFTE-2009 believed that ideology of educational thinkers such as Mahatma Gandhi, Rabindranath Tagore, John Dewey, Jiddu Krishnamurthi, Maria Montessori and others examined in their social and educational contexts would provide the philosophical basis to the education.

Although, Non-Governmental Organisations (NGOs) have been contributing to different aspects of peace studies by preserving human rights, gender equalisation and making unity in the social environment, etc. But they do not impact peace

education adequately at the school level. Therefore, it is a need for networking among all such institutions to enhance their effectiveness (NCERT, 2006, p. 6). The NCFTE-2009 recommends that teachers should be educated through perspectives of gender equity, perspectives that develop values for peace, to respect the rights of all, and to respect and value work (p. 13).

4.1.2 Values earpinned in the NCFTE-2009

Durkheim (1969) suggested education is the symptom and result of the social transformations in terms of which it is to be explained (Lau, 2001, p. 30). Humane education not only instils the desire and capacity to live with compassion, integrity, and wisdom but also provides the knowledge and tools to put our values into action in meaningful, far-reaching ways (Mims & Waddell, 2015, p. 189). Ban Ki-moon, former UN-Secretary-General, once stated that education gives us a deep understanding that we are closely connected as citizens of the global community and our challenges are also interconnected (UNESCO, 2015, p. 14). The demand for training of teachers in value education often expressed as value orientation of teachers' education, has arisen as the logical sequel to the introduction of value education in schools (Seshadri, 2005, p. 9). Accordingly, the concerns for value education have been reflecting on our key policy documents from time to time (NCERT^b, 2005, p. 1). Brady (2011) evidentially informed about professional ethics, relationship making, caring, respect, professionalism, commitment and cooperation these teacher values should be internally generated by training.

4.1.2.1 Constitutional values

In 20th of November 1959, a resolution of 1386 (XIV) related to the right of the child was adopted by the United Nations Organisation (UNO, 1959). This

resolution was the primary agenda for all member countries. In India, the Constitution of India made provisions to protect human and child rights. Many efforts for awareness of these rights have been made in the various frameworks, policies, and action plans. The NCF-2005 observed that schools of primary education functioning poorly for teaching by untrained teachers. These realities tend to reinforce to undermine the constitutional values of equality of opportunity and social justice for the personal growth and development of the learner. It also finds that distortion of constitutional values leading to indiscipline, violence, lack of responsibility, lack of respect, etc. Thus our efforts towards the education of constitutional values must be rooted in the context of the issues and challenges facing teachers and pupils in the schools. On the path of preparing teachers, the NCFTE-2009 suggests training teachers through the way of spreading these rights. It recommended training for teachers of Right to Education Act 2009, constitutional values of equality, justice, freedom, liberty, fraternity, secularism, multiculturalism, sustainable development; Ability to work with others in a cooperative way, sensitivity towards human rights, rights of women, ethnic minorities; Respect for national symbols, events, days, heritage and resources; Appreciation and respect for cultural diversity and unity in the midst of diversity - language, religion, norms, cultural traditions; Preservation of resources; Austerity in consumption of resources; Valuing sustainable development. Through education, the constitutional goals of social justice are to be achieved (NCTE, 2009, p. 13). The NCFTE-2009 follows constitutional provisions for instance reservation and the right to education. It guides to train teacher for overcoming discrimination in the classroom by generating a more significant commitment to constitutional values (NCTE, 2009, p. 65).

4.1.2.2 Educational values

Our aims of education development of personality, the pursuit of knowledge, preservation of culture and training of character are no more than statements of our value preferences. Towards realising them, we design a curriculum, a planned collection of required knowledge, skills, attitudes and values that we want to transfer to the younger generation without violating the freedom and autonomy (Seshadri, 2005, p. 10). The NCFTE-2009 emphasises understanding children's questions, their observations of natural and social phenomenon, enquiring into children's thinking, and learning to listen to children with attention and empathy because these are necessary pre-requisites for teacher training to develop an understanding of sensitivity (NCTE, 2009, p. 28). In other words, conceptual inputs in teacher education need to be articulated in such a manner that they can describe and explain educational phenomena actions, tasks, efforts, processes, concepts, events and so on (NCTE, 2009, p. 53). It advocacies of providing vantages for trainees for consideration and sovereignty of study without any package so that a teacher can be able to understand the structure, usability and opportunities of the curriculum and textbooks for critically examine (NCTE, 2009, p. 76).

4.1.2.3 Social values

The NCFTE-2009 provide an idea to engage with theory along with self-experiences for assisting trainees understanding the knowledge as the product of creativity that is actively constructed during learning in a formal, informal and non-formal environment (p. 76). It suggests understanding the child as a creator of knowledge and preparing teachers for encouraging the capacity of the child to experience the different milieu and continuously evolving the process of reflective learning.

4.1.2.4 Spiritual values

The NCFTE-2009 considers that it is easy to prove blame on teachers with their moral commitments. But it can only be for appearances or personal malice. Therefore, change taking place equally and to find the impact on the ground level, continuous involvement and support of resource agencies and school administration require (NCTE, 2009, p. 72). There are also many structural issues for why training of teachers is not carried into the classroom. Nevertheless, training, workshops, seminars, short term, and long term skill development programmes need to be conceived in goal-oriented ways. Teachers need to be supported on the ground level as well as monitored to have an impact (NCTE, 2009, p. 72).

4.1.2.5 Indian values

Education in India has always been considering as work of worship. Swami Vivekananda characterised the education in his words that it is not the packet of information that we put into the brain and where conflict runs whole life and remains undigested. We must have life-building, man-making, character-forming assimilation of ideas. If you have assimilated some ideas to make your life and character, then you have more education than the person who has got a whole library. "If education is identical with information, the libraries are the greatest sages of the world and encyclopaedias are the greatest Rishis" (Thakur & Thakur, 1996, pp. 32-33). It will also face difficulties when not appropriately evaluated. The roots of knowledge are in the depths of our Indian culture. Only need to recognise and to assimilate. To prepare and to implement many curriculum problems are faced by the policymaker, teacher educators, teachers and learners due to absence or lack of teaching and learning resources. Therefore, it is needed to invest in a curriculum to face challenges and to make strategies for glibness education. Friedrich Wilhelm Nietzsche (2007), the

famous German philosopher wrote that dancing in all its forms could not be excluded from the curriculum of all noble education. A person should be able to dance with the pen by which he wants to learn to write (p.47).

If we want to make a global curriculum, we need to diversify the teaching approaches by making colleague-colleague interaction, by multilingual communication in the classroom, by teacher-teacher interaction, by teacher administration interaction. A teacher can make effective teaching through demonstration, experimental exercises, giving projects in groups, preparing learners for self-discipline, group discussions and taking help to arrange assistive devices carefully in self-presence. In the word of Sri Aurobindo, the Indians must have the firm faith that India will rise again and be great. The dawn would be soon, and the sun will appear over the horizon. The destiny of India would rise again to shine all India and overflow the world. Therefore, today it is time to give the message of Vedas and Vedangas for giving the right direction to the human civilisation.

4.2 Conclusion

The NCFTE-2009 recommends that a teacher educator – (i) can engage with the larger socio-political context in which learners are situated; (ii) can engage with real context of children through making connection between theories and content applicable in daily life; (iii) can help to prepare humans to reflect upon their positions in society as gender, caste, class, poverty, linguistic and regional variation, community, equity and justice; (iv) can help to understand knowledge not only for understanding but also for enabling them constructing knowledge (pp. 76-77).

4.3 Approaches

First, our thinking about teacher education is integrative and eclectic. It is free from the hold of schools of philosophy and psychology (NCTE, 2009, p. 19). In many

countries, the traditional curriculum consists of a set of content items, the most common knowledge and information, which is prescribed by a central authority (IBE-UNESCO, 2017, p. 4). This model has been challenged with increasing intensity over recent decades. There are four focal reasons:

- (i) The expeditious rise in the extent and understanding of human knowledge, and the subsequent challenge of selecting moments of knowledge to prepare and renovate a curriculum.
- (ii) The understanding and realisation of the focal aim of the curriculum should be to prepare competent and capable people.
- (iii) To make people competent in foundation skills pursuing their self-interest by making learning relevant and enjoyable.
- (iv) The curriculum should be connected to the previous knowledge or schooling of the learner so that he can be able to familiar with it.

The NCFTE-2009 consists of behavioural approach, managerial approach, systematic planning for academic evaluation, humanistic approach and conceptualistic approach. These all approaches help to prepare a curriculum whose are discussed below.

4.3.1 Behavioural

Behaviourism is principally associated with classical conditioning of Pavlov and connectionism of Thorndike, behaviourism of Watson and particularly operant conditioning of Skinner (Catania & Laties, 1999; Baum, 2017). The behaviouristic approach to curriculum is based on that blueprint where goals and objectives are specified previously; contents and activities are arranged to meet with defined learning objectives; and the learning outcomes are assessed in terms of goals and

objectives (Ellis *et al.*, n.d.). Behaviourists have diverse and different views about what science is and what behaviour is, but every behaviourist approves that there can be a science of behaviour (Baum, 2017). The NCFTE-2009 focuses on activities, discovery and exploration in a child-friendly and child-centred manner (p. 3) which is related to the behaviourist approach. Teacher education should work as opportunity-provider to student-teachers for reflection and independent study without packing the training schedule with teacher-directed activities (p. 20). The NCFTE-2009 draws attention to the need for training teachers in fostering learning through activity, discovery, observation and understanding (p. 7). A sustained contact through internship helps teachers to choose, design, organise and conduct meaningful classroom activities (p. 42). The NCFTE-2009 warns that children are not a passive receiver of knowledge. Therefore teachers have to amplify the natural propensity of the children to construct meaning by discouraging rote-learning by making learning a joyful, participatory and meaningful activity (p. 23). A critical examination of and engagement with teaching methods such as concept formation, inquiry-based teaching, problem-solving, discovery and activity-based learning and related terms can go a long way in making a reflective teacher (NCTE, 2009, p. 37). This framework recommends student teachers need to be given opportunities to be with children of diverse contexts such as first generation learners and street children, interact with them, organise creative activities for them to learn to communicate and relate with them (NCTE, 2009, p. 29). Teacher education programmes are concerned with adult learners, and adult learners are autonomous and self-directed. They have an immense expanse of life experiences and knowledge. They are pragmatic and goal-directed and respond better to problem-solving and task-oriented learning. The focus of NCFTE-2009 is on developing professional knowledge and capacities through a

variety of self-directed tasks including case studies, projects, seminars and research activity (p. 53).

4.3.2 Managerial

Gewirtz and Ball (2000) researched that policies are stuffed towards new managerialism with its customer-oriented ethos, concern for efficiency, cost-effectiveness and competition, and emphasis on personal relations (p. 252). There exists a wide variation in the status of teachers and the need for teachers at different levels of school education across the country (NCTE, 2009, p. 6). The makers of NCFTE-2009 were aware that a subject being as the interdisciplinary requires integration and cross-curriculum planning with other subjects and the curricular regions (NCTE, 2009, p. 17).

The primary orientation of the initial training of elementary teachers should be transformed towards front-line national concerns like access, drop out, participation, achievement, gender, teaching under challenging contexts (NCTE, 2009, p. 82). Halliday & Hogan (1994) have verified the compulsory responsibilities regarding the managerial approach of teacher education. These are planning of classroom activities, implementation of the policy into programmes and projects, preparing factual budgets with monitoring expenses, deciding acceptable standards of administration, ensuring regular and timely payment of salary and other allowances as per given scale, appointments delegates to officers and promoting staff (NCTE, 2009, p. 6). The NCFTE-2009 includes internship for pre-service teachers and skill development training programmes for in-service teachers; training of hands-on practice for preparing teaching aids; training of maintaining various records. It suggests preparing practical schedules of teacher training on themes of classroom management, material

development and block teaching in schools (NCTE, 2009, p. 38). In the NCFTE-2009 training of short research projects is included to develop skills of observation, documentation, analysis and interpretation for teacher trainees (p. 57). It recommends that all training content and approaches should be based on the classroom needs of the teachers, may it be content enrichment, need for skills and strategies in classroom organisation and management, understanding student's learning strategies, error analysis and learners' assessment (NCTE, 2009, p. 73).

4.3.3 Systems

The rapid growth of technology and management in the decades of 1950s and 1960s led to the formulation of a system approach to education (Clegg, 1973, p. 307). The system approach completely depends upon the PPB approach (means planning, programming, budgeting) and PERT approach (means programme evaluation review technique). Today, ICT (Information Communication Technology) is the foundational part of the system approach of teacher education which is the technical and managerial asset included in the NCFTE-2009. The system approach is that which impels correlation of components of an organisation or system. Beauchamp (1961) divided components of the curriculum into three main parts in which first is curriculum design has two facets (i) subject matter taught and, (ii) way of subject matter organised; second is curriculum engineering consists of planning, implementation and evaluation of curriculum; and third is curriculum theory consists of activities of the definitions, classifications, generalization of knowledge, prediction of research and development of models or methods for the course (quoted in Mullen, 1975). After independence, it was realised that any planned educational system is better than none at all (GoI, 1948; GoI, 1952; GoI, 1964; GoI, 1968; GoI, 1986; GoI, 1993). The National Policy on Education-1992 gave the focus on the need for quality

enhancement through the transformation of the Indian education system (Ranganathan, 2007). The NCFTE-2009 is prepared for the teacher education which is following the system approach shown in figure (4.1).

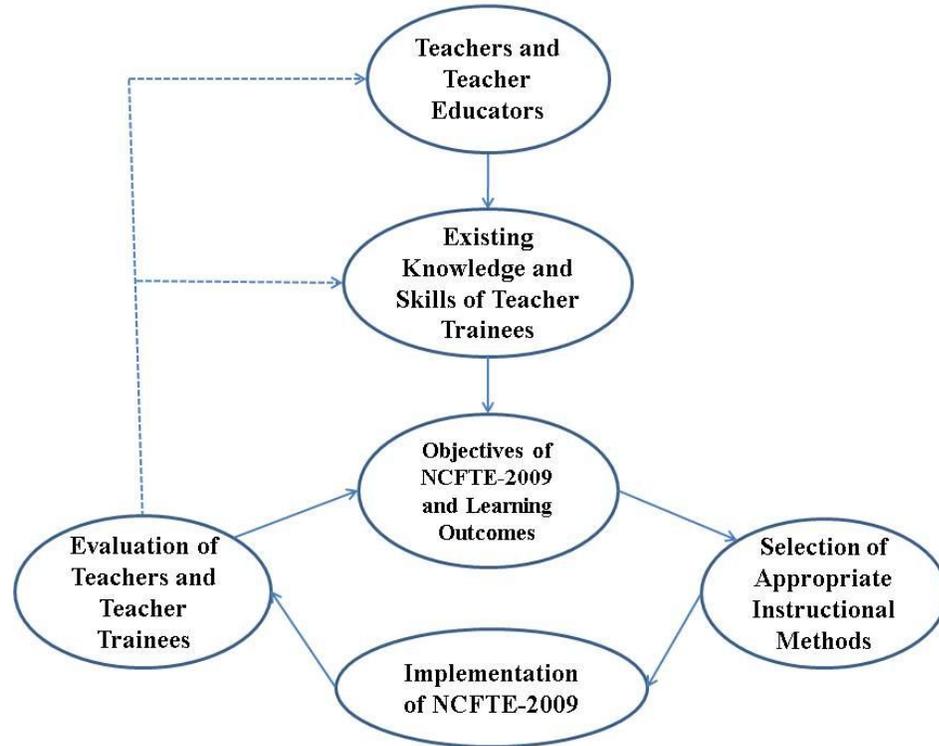


Figure 4.1 (System Approach to NCFTE-2009)

4.3.4 Academic

The curriculum is a compulsory conscientious discipline of study ensuring educational standards of an organisation. Yes, it may be modifying according to individual needs to be flexible. Constructivists believe that the learner not only learns but also can construct knowledge. Experiences in various situations in daily life or academic life prepare him to use his insight. The academic approach favours that it is the responsibility of the teacher to develop a relationship with learners and assist with their needs. A curriculum clues that teachers share their experiences in classrooms for preparing a productive learning environment. The academic approach consists of the assumption of self-representation, initiative, collaboration, innovation, organisation,

critical thinking, ethical decision making, productivity and leadership to prepare teachers. According to the NCFTE-2009 teachers need to re-conceptualise education in terms of human rights and critical pedagogy. It emphasis environment protection, suggests for living in harmony within oneself and with the natural and social environment, motivates for searching common ways living of life (NCTE, 2009, p. 21). To strong the academic approach of the teacher education, the NCTE has shaken hands with the NAAC (National Assessment and Accreditation Council) for maintaining standards to assure quality education, with the DEC (Distance Education Council) for integrated development of teachers and with the RCI (Rehabilitation Council of India) for inclusion (NCTE, 2009, p. 6). It is opined in the NCFTE-2009 that pedagogical knowledge has to continually undergo adaptation to meet with needs of teachers on their practices. Therefore, the NCFTE-2009 is a recommended policy document for preparing teachers for ethical decision making, productivity and leadership.

4.3.5 Humanistic

According to Margaret Anderson, there are five fundamental approaches of humanistic education – (i) Needs of the learner; (ii) The goal of education; (iii) Self-evaluation; (iv) Joining cognitive and affective domains; and (v) Environment of teaching and learning. The humanistic approach is embedded in the liberal philosophy and child centred efforts. It reflects the formal or intended curriculum and the informal or concealed curriculum. This approach follows principles of gestaltism by prime considering the whole child and believing in the total development of the individual. According to this approach, the curriculum revolves around the child. The NCFTE-2009 is designed to determine the necessary activities for child-centred based approaches like cognitive development, psychomotor development and artistic

development (p. 81). It provides a guideline for evaluation of teachers through annual or terminal tests being proficient in cognitive learning skills (NCTE, 2009, p. 59). The NCFTE-2009 have suggested that assessment should cover an - understanding of the process of development, understanding of the social perspective of education as well as children, understanding of the nature of thought process of the learner, understanding of the philosophical and sociological frameworks and understanding of the school as a system and as a society (NCTE, 2009, p. 59).

4.3.6 Re - conceptualistic approach (in the sense of global society and humanity as religion)

As Jacques Delors's fourth pillar of education "learning to live together" is the synonym of "*Vasudhaiv Kutumbakam*" (Mahopnishad, Chapter-4, Shloka-71) of Indian knowledge tradition. The NCFTE-2009 is prepared for preparing teachers to serve in a diverse global society in the fragrance of the Indian context. The re-conceptualistic approach is a way of learning to live intelligently in a diverse world. The perspective of the NCFTE-2009 is to promote equitable and sustainable development (p. 13), values of peace, democratic way of life, equality, justice, liberty, fraternity, secularism and zeal for social reconstruction (p. 23). To get success in its' aims, it suggests effective pedagogy for developing the self through drama, craft, music, self-development workshops along with a critical engagement with theoretical constructs of identity development and the individual-social interface (NCTE, 2009, p. 49).

4.4 Nature and function of the NCFTE-2009

The NCFTE-2009 is a policy document prepared by NCTE for guiding, assuring quality and deciding standards of teacher education in India. It is the step

towards making professional and humane teacher not only for India but also for a global society. The core focus of the NCFTE-2009 is a humanisation of teacher education. The NCFTE-2009 is mainly dealt with under foundations of education, curriculum and pedagogy and school internship (NCTE, 2009, p. iv). The foundations of the NCFTE-2009 include learner studies, contemporary studies and educational studies (NCTE, 2009, p. iv). In the NCFTE-2009 curriculum and pedagogy deal with curriculum studies, pedagogic studies and assessment and evaluation studies (NCTE, 2009, p. iv). In this framework, the school internship is visualised by situating the practice of teaching in the broader context of vision and the role of teacher and sustained engagement with learners and schools (NCTE, 2009, p. iv).

4.5 Components and phases of development of NCFTE-2009

The concern about teacher education was raised in the NPE-1986 that the status of the teacher reflects the socio-cultural ethos of the society; it is said that no people can rise above the level of its teachers (Mohanty, 2007, p. 79; NCTE, 2009, p. iii). On the other side, many theories of learning like, connectionism by Thorndike, classical conditioning by Pavlov, operant conditioning by Skinner, field theory by Lewin, drive reduction theory by Hull and insight learning by Kohler have been discussed before for knowing how learning takes place and how can teachers be trained to teach learners in the way of maximum giving.

In the beginning, the first curriculum framework for quality teacher education (CFQTE) was developed by the NCTE in the year 1998. After that in the year 2006, a discussion paper on teacher education curriculum was prepared by in a combination of NCTE and NCERT. Finally, in August 2009, a pre-draft for discussion on NCFTE was developed by the NCTE and resultant the NCFTE-2009 was emerged. A broad vision for making the NCFTE-2009 is guided by the NCF-2005 (National Curriculum

Framework-2005), the Right of Children to Free and Compulsory Education Act-2009 (RTE-2009) and the fundamental principles enshrined in the Indian Constitution. The NCFTE-2009 consists of six chapters that are – *chapter-1*-context, concerns and vision of teacher education; *chapter-2*-curricular areas of initial teacher preparation; *chapter-3*-transacting the curriculum and evaluating the developing teacher; *chapter-4*-continuing professional development and support for the in-service teacher; *chapter-5*-preparing teacher educators; *chapter-6*-implementation strategies.

4.5.1 Selection of contents

Teacher quality is the result of several factors like teachers' status, remuneration, conditions of work and their qualification. The teacher education system is expected to prepare professional and global competent teachers through its teacher education courses. Elementary teacher courses, as well as newly developed teacher education courses, have a big part to play in the making of a teacher. These courses mark collective potentialities to imbue the would-be teacher with the aspirations, knowledge-base, the repertoire of pedagogic capacities and humane attitudes (NCTE, 2009, p. 2). In teacher education, pre-service and in-service both are inseparable parts. Teachers are needed to nourish for playing the role of transmitters, inspirers and promoters of man's eternal quest for knowledge. Therefore, the momentous focus should be given on continuing professional and humane making strategies in teacher education. Such expectations are truly guided for the selection of contents for the training of teachers. Though verily a professional, the teacher's personality, in being humane to the learners, is the core foundational issue on which NCFTE-2009 is based so that it has a bearing on transmuting the dynamics of teacher education per se (NCTE, 2009, p. iii). Contents in the NCFTE-2009 have been selected on the basis of – (i) learning goals of teacher education; (ii) prominence in

the discipline; (iii) grounded research; (iv) demand of student concerns and interests; (v) applicability of past experiences or knowledge; (vi) learning diversities; (vii) stimulate to ask questions and search for its answer; (viii) developing attitudes; (ix) interrelating concepts, contents and discipline to each other; (x) linking theory with practical work and ground realities; (xi) examine their own biases and beliefs: and, (xii) reflecting on their self-experiences as part of classroom discourse and enquiry.

4.5.2 Organisation of contents

The curriculum of teacher education comprehensively deals with foundations of education, curriculum and pedagogy, the practice of teaching and school internship. The foundations of education include learner studies, contemporary studies and educational studies. Curriculum and pedagogy deal with curriculum studies, pedagogic studies and assessment and evaluation studies. The school internship is visualised by situating the practice of teaching in the broader context of vision and the role of teacher and sustained engagement with learners and schools. From the existing approaches, teacher education institutions are not giving a chance for individual reflection to the teacher (MHRD, 2015). In the NCFTE-2009, the organisation of contents has been done based on child-centred, activity-based and participatory learning experiences like play, project, discussion, dialogue, observation, visits and learns which will help to reflect on their practice (NCTE, 2009, p. 23).

4.5.3 Evaluation process and techniques

Before implementation of the NCFTE-2009, it was being observed that an apparent weakness of existing teacher education practices is the limited scope of the evaluation of teacher trainees, and being excessive quantitative (NCTE, 2009, p. 59), while, measurement of cognitive learning, professional skills and capacities, attitudes

and values remain outside the range of evaluation. The NCFTE-2009 suggests that assessment in teacher education needs to be objective which gives importance to the personal understanding of the developing teacher. It also needs to be comprehensive to cover the entire tone of conceptual, pedagogical dimensions as well as attitudes, dispositions, habits and capacities in a teacher incorporating both the quantitative and qualitative aspects of growth (NCTE, 2009, p. 59). An appropriate focus on the continuous and comprehensive evaluation of developing teachers may be given through an evaluation protocol. The NCFTE-2009 has guided to evaluate qualities of a teacher trainee by – (i) observing learners for a specified duration in specific situations; (ii) observing records maintained by the teacher trainee on a set of criteria relevant to the task and report writing; (iii) evaluating school contact practicum to relate and communicate with learner; (iv) planning for the school contact; (v) observing post-contact discussions, report writing and group presentations; (vi) evaluating psychological and professional development of the teacher; (vii) assessing a repertoire of skills; (viii) assessing teacher as researcher; (ix) observing internship activities on which students may be assessed; (x) observing schemes for Continuous and Comprehensive Evaluation.

4.5.4 Implementation strategies for NCFTE-2009

The initial step towards the implementation of the NCFTE-2009 consists of broader dissemination of the document among those educational institutions which are supporting each other, for instance, schools and teacher education institutions, society and teacher education institutions etc. Associative process of this type is helping prepare the climate of awareness and initiation of relevant discourse (NCTE, 2009, p. 89). The NCFTE-2009 includes seeds of those ideas which have the potential of germinating during the journey and may be useful for the ground of teacher

education. These are so vital for nurturing and sustaining the quality of school education also (NCTE, 2009, p. 89). It can be the way those teacher education institutions could be organised on right lines (NCTE, 2009, p. v) so that achieving the intended objectives on the implementation which could bring some discernible change in the process of teacher education (NCTE, 2009, p. 89). Some strategies for implementation of the NCFTE-2009 were suggested by the NCTE – (i) to upload it on the website of the NCTE (www.ncte-india.org) for giving the benefit at large; (ii) to distribute it to the universities and other bodies associated to teacher education; (iii) to organise five consultative meetings for reforming the existing teacher education programmes in the light of the NCFTE-2009; (iv) to organise workshops by the NCTE and SIERTs for the revision of the existing teacher education courses; (v) to initiate a national dialogue for rejuvenating teacher education; (vi) to initiate a thoughtful national discourse on the operational traits of teacher education to find out the strengths, weaknesses, opportunities and threats to encourage innovative models of academic support; (vii) to start four year integrated programmes in teacher education as a scheme of 10+2+4.

4.6 Objective (2). To study the perception of stakeholders in regard of NCFTE-2009

H₀1: Stakeholders of teacher education / B.Ed colleges under various universities of Rajasthan will not differ significantly in their perception towards the NCFTE-2009.

The one way ANOVA was performed using *SPSS (Ver. 25)* to compare the means scores of stakeholders of teacher education / B.Ed colleges under various universities of Rajasthan obtained on SPS (Stakeholders' Perception Scale regarding

NCFTE-2009) toward the perception of NCFTE-2009. The result is presented in the following tables -

Table 4.1
Test of Homogeneity of Variances of Scores on SPS

Test of Homogeneity		Levene Statistic	df1	df2	Sig.
Perception of Stakeholders	Based on Mean	13.247	5	148	0.001

Table 4.2
One Way ANOVA for Comparing Mean Score on SPS

Source of Variance	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	63235.394	5	12647.079	26.373	0.001
Within Groups	70972.762	148	479.546		
Total	134208.156	153			

Table 4.3
Post Hoc Analysis of Scores on SPS (by Tukey Test)

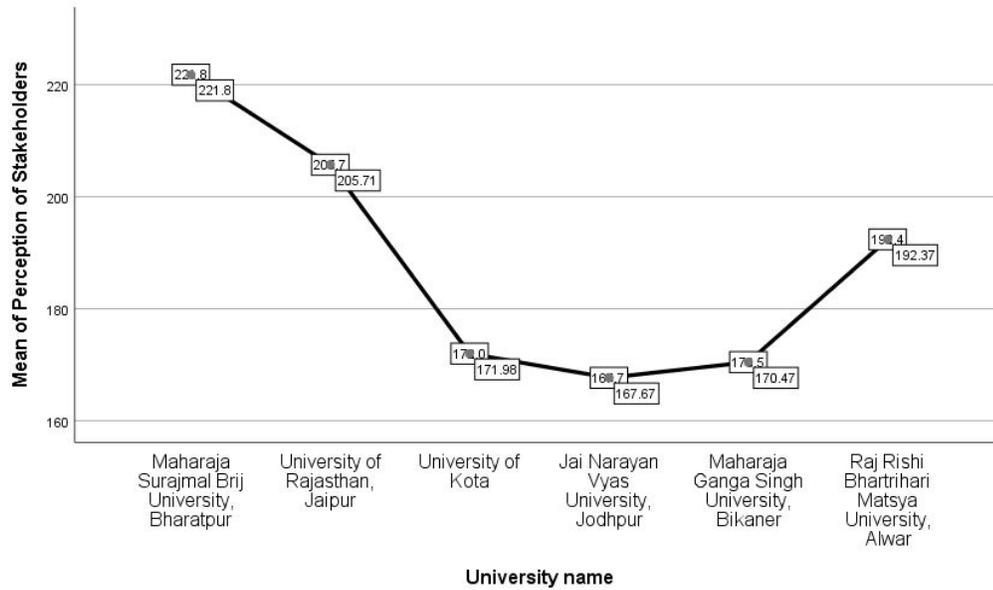
Tukey HSD^{a,b}

University name	N	Subset for alpha = 0.05		
		1	2	3
Jai Narayan Vyas University, Jodhpur	12	167.67		
Maharaja Ganga Singh University, Bikaner	15	170.47		
University of Kota, Kota	49	171.98		
Raj Rishi Bhartrihari Matsya University, Alwar	27		192.37	
University of Rajasthan, Jaipur	21		205.71	205.71
Maharaja Surajmal Brij University, Bharatpur	30			221.80
Sig.		0.988	0.367	0.174

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 20.805.

b. The group sizes are unequal. The harmonic mean of the group sizes is used.



Graph – 4.1 (Overall Perception of Stakeholders of B.Ed Colleges of Rajasthan)

The one way ANOVA to check the difference in perception of stakeholders of the following six universities shows $p=0.001$ which is less than $.05$ that is $p<0.05$ (see Table 4.1) means scores are homogenous in nature. Further, the result of (Table 4.2) revealed that $F(5, 148) = 26.37$, on $df = 151$, $p=0.001$; hence $p<0.05$ means the variances between six universities are statistically significantly different which clears that there were a statistically significantly differences in perceptions of stakeholders of B.Ed colleges under these six universities of Rajasthan regarding NCFTE-2009. Therefore, due to significant value $p=0.001$ (see Table 4.2) which is less than 0.05 ($p<0.05$). Therefore, we reject the null hypothesis - H_0 1 - Stakeholders of teacher education / B.Ed colleges under various universities of Rajasthan will not differ significantly in their perception towards the NCFTE-2009.

It is also opined in through the post hoc analysis by Tukey test (see Table 4.3) that stakeholders of education / B.Ed colleges of Jai Narayan Vyas University, Jodhpur, Maharaja Ganga Singh University, Bikaner and University of Kota, Kota

were found to have the same perception that is subset $p=0.988$ and stakeholders of Raj Rishi Bhartrihari Matsya University, Alwar and University of Rajasthan, Jaipur ($p=0.367$) were found having equal perception regarding NCFTE-2009 While stakeholders of Maharaja Surajmal Brij University, Bharatpur were found to have a completely different perception regarding NCFTE-2009. The *Graph-4.1* represents that University of Kota, Kota, Jai Narayan Vyas University, Jodhpur and Maharaja Ganga Singh University, Bikaner having almost equal contents in their curricula.

H₀2: Stakeholders of B.Ed colleges under Maharaja Surajmal Brij University, Bharatpur and the University of Rajasthan, Jaipur will not differ significantly in their perception towards the NCFTE-2009.

The analysis for comparing the mean scores of stakeholders of B.Ed colleges under Maharaja Surajmal Brij University, Bharatpur and University of Rajasthan, Jaipur on SPS was done in SPSS (Ver. 25). The result is displayed in the following table -

Table 4.4
t-Test for Comparing Mean Scores of Stakeholders of B.Ed colleges under Maharaja Surajmal Brij University, Bharatpur and University of Rajasthan, Jaipur on SPS

Group	N	Mean	SD	Std. Error Mean	df	t	Sig. (2-tailed)
Maharaja Surajmal Brij University, Bharatpur	30	227.38	15.481	4.359	49	4.970	0.001
University of Rajasthan, Jaipur	21	205.71	9.242				

*. The mean difference is significant at the 0.05 level.

Above Table 4.4 exposed that obtained $t(30, 21) = 4.970$, on $df = 49$, is significant for two-tailed that is $p=0.001$; hence $p<0.05$ means the variances between Maharaja Surajmal Brij University, Bharatpur and University of Rajasthan, Jaipur are

statistically significantly different which clears that there were a statistically significant differences in perceptions of stakeholders of B.Ed colleges of both universities regarding NCFTE-2009. Therefore, we reject the null hypothesis - H_02 - Stakeholders of B.Ed colleges under Maharaja Surajmal Brij University, Bharatpur and the University of Rajasthan, Jaipur will not differ significantly in their perception towards the NCFTE-2009. Stakeholders of Maharaja Surajmal Brij University, Bharatpur tended to have higher mean (227.38) perception towards the NCFTE-2009, while stakeholders of University of Rajasthan, Jaipur tended to have lower mean (205.71) perception towards the NCFTE-2009 than their counterpart. The virtue of the importance of the t-value, the mean value cannot be neglected. It entails that stakeholders of Maharaja Surajmal Brij University, Bharatpur are having better perception towards NCFTE-2009 than stakeholders of the University of Rajasthan, Jaipur.

H₀₃. Stakeholders of B.Ed colleges under Maharaja Surajmal Brij University, Bharatpur and the University of Kota, Kota will not differ significantly in their perception towards the NCFTE-2009.

Table 4.5
t-Test for Comparing Mean Scores of Stakeholders of B.Ed colleges under Maharaja Surajmal Brij University, Bharatpur and University of Kota, Kota on SPS

Group	N	Mean	SD	Std. Error Mean	df	t	Sig. (2-tailed)
Maharaja Surajmal Brij University, Bharatpur	30	221.80	16.577	4.404	77	7.584	0.001
University of Kota, Kota	49	188.40	27.669				

*. The mean difference is significant at the 0.05 level.

It is revealed in the above Table 4.5 that obtained value of $t(30, 49) = 7.584$, on $df = 77$, is significant at 0.05 level for two-tailed that is $p=0.001$; hence

$p < 0.05$ means the variances between Maharaja Surajmal Brij University, Bharatpur and University of Kota, Kota are statistically significantly different which clears that there were a statistically significant differences in perceptions of stakeholders of B.Ed colleges of both universities regarding NCFTE-2009. Therefore, we reject the null hypothesis - H_03 -Stakeholders of B.Ed colleges under Maharaja Surajmal Brij University, Bharatpur and the University of Kota, Kota will not differ significantly in their perception towards the NCFTE-2009. Stakeholders of Maharaja Surajmal Brij University, Bharatpur tended to have higher mean (221.80) perception towards the NCFTE-2009, while stakeholders of University of Kota, Kota tended to have lower mean (188.40) perception towards the NCFTE-2009 than their counterpart. The virtue of the importance of the *t-value*, the mean value cannot be neglected. It entails that stakeholders of Maharaja Surajmal Brij University, Bharatpur are having good perception towards NCFTE-2009 than stakeholders of the University of Kota, Kota.

H₀₄. Stakeholders of B.Ed colleges under Maharaja Surajmal Brij University, Bharatpur and Jai Narayan Vyas University, Jodhpur will not differ significantly in their perception towards the NCFTE-2009.

Table 4.6
t - Test for Comparing Mean Scores of Stakeholders of B.Ed colleges
under Maharaja Surajmal Brij University, Bharatpur and Jai Narayan
Vyas University, Jodhpur on SPS

Group	N	Mean	SD	Std. Error Mean	df	t	Sig. (2-tailed)
Maharaja Surajmal Brij University, Bharatpur	30	228.75	19.075	8.590	40	7.111	0.001
Jai Narayan Vyas University, Jodhpur	12	167.67	15.506				

*. The mean difference is significant at the 0.05 level.

It is revealed in the above Table 4.6 that obtained value of $t(30, 12) = 7.111$, on $df = 40$, is significant at 0.05 level for two-tailed that is $p=0.001$; hence $p<0.05$ means the variances between Maharaja Surajmal Brij University, Bharatpur and Jai Narayan Vyas University, Jodhpur are statistically significantly different which clears that there were a statistically significantly differences in perceptions of stakeholders of B.Ed colleges of both universities regarding NCFTE-2009. Therefore, we reject the null hypothesis - H_04 -Stakeholders of B.Ed colleges under Maharaja Surajmal Brij University, Bharatpur and Jai Narayan Vyas University, Jodhpur will not differ significantly in their perception towards the NCFTE-2009. Stakeholders of Maharaja Surajmal Brij University, Bharatpur tended to have higher mean (228.75) perception towards the NCFTE-2009, while stakeholders of Jai Narayan Vyas University, Jodhpur tended to have lower mean (167.67) perception towards the NCFTE-2009 than their counterpart. The virtue of the importance of the *t-value*, the mean value cannot be neglected. It entails that stakeholders of Maharaja Surajmal Brij University, Bharatpur are having much better perception towards NCFTE-2009 than stakeholders of Jai Narayan Vyas University, Jodhpur.

H₀₅. Stakeholders of B.Ed colleges under Maharaja Surajmal Brij University, Bharatpur and Maharaja Ganga Singh University, Bikaner will not differ significantly in their perception towards the NCFTE-2009.

Table 4.7
t-Test for Comparing Mean Scores of Stakeholders of B.Ed colleges under Maharaja Surajmal Brij University, Bharatpur and Maharaja Ganga Singh University, Bikaner on SPS

Group	N	Mean	SD	Std. Error Mean	df	t	Sig. (2-tailed)
Maharaja Surajmal Brij University, Bharatpur	30	230.07	17.364	4.443	43	13.414	0.001

Maharaja Ganga Singh University, Bikaner	15	170.47	16.230				
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*. The mean difference is significant at the 0.05 level.

It is revealed in the above Table 4.7 that obtained value of $t(30, 15) = 13.414$, on $df = 43$, is significant at 0.05 level for two-tailed that is $p=0.001$; hence $p<0.05$ means the variances between Maharaja Surajmal Brij University, Bharatpur and Maharaja Ganga Singh University, Bikaner are statistically significantly different which clears that there were a statistically significant differences in perceptions of stakeholders of B.Ed colleges of both universities regarding NCFTE-2009. Therefore, we reject the null hypothesis - H_05 - Stakeholders of B.Ed colleges under Maharaja Surajmal Brij University, Bharatpur and Maharaja Ganga Singh University, Bikaner will not differ significantly in their perception towards the NCFTE-2009. Stakeholders of Maharaja Surajmal Brij University, Bharatpur tended to have higher mean (230.07) perception towards the NCFTE-2009, while stakeholders of Maharaja Ganga Singh University, Bikaner tended to have lower mean (170.47) perception towards the NCFTE-2009 than their counterpart. The virtue of the importance of the t -value, the mean value cannot be neglected. It entails that stakeholders of Maharaja Surajmal Brij University, Bharatpur are having much better perception towards NCFTE-2009 than stakeholders of Maharaja Ganga Singh University, Bikaner.

H₀₆. Stakeholders of B.Ed colleges under Maharaja Surajmal Brij University, Bharatpur and Raj Rishi Bhartrihari Matsya University, Alwar will not differ significantly in their perception towards the NCFTE-2009.

Table 4.8
t-Test for Comparing Mean Scores of Stakeholders of B.Ed colleges
under Maharaja Surajmal Brij University, Bharatpur and Raj Rishi
Bhartrihari Matsya University, Alwar on SPS

Group	N	Mean	SD	Std. Error Mean	df	t	Sig. (2-tailed)
Maharaja Surajmal Brij University, Bharatpur	30	224.52	15.029	3.714	55	8.656	0.001
Raj Rishi Bhartrihari Matsya University, Alwar	27	192.37	15.875				

*. The mean difference is significant at the 0.05 level.

It is revealed in the above Table 4.8 that obtained value of $t(30, 27) = 8.656$, on $df = 55$, is significant at 0.05 level for two-tailed that is $p=0.001$; hence $p<0.05$ means the variances between Maharaja Surajmal Brij University, Bharatpur and Raj Rishi Bhartrihari Matsya University, Alwar are statistically significantly different which clears that there was a statistically significantly differences in perceptions of stakeholders of B.Ed colleges of both universities regarding NCFTE-2009. Therefore, we reject the null hypothesis - H_06 - Stakeholders of B.Ed colleges under Maharaja Surajmal Brij University, Bharatpur and Raj Rishi Bhartrihari Matsya University, Alwar will not differ significantly in their perception towards the NCFTE-2009. Stakeholders of Maharaja Surajmal Brij University, Bharatpur tended to have higher mean (224.52) perception towards the NCFTE-2009, while stakeholders of Raj Rishi Bhartrihari Matsya University, Alwar tended to have lower mean (192.37) perception towards the NCFTE-2009 than their counterpart. The virtue of the importance of the *t-value*, the mean value cannot be neglected. It entails that stakeholders of Maharaja Surajmal Brij University, Bharatpur are having superior perception towards NCFTE-2009 than stakeholders of Raj Rishi Bhartrihari Matsya University, Alwar.

H₀₇. Stakeholders of B.Ed colleges under the University of Rajasthan, Jaipur and Jai Narayan Vyas University, Jodhpur will not differ significantly in their perception towards the NCFTE-2009.

Table 4.9

t-Test for Comparing Mean Scores of Stakeholders of B.Ed colleges under University of Rajasthan, Jaipur and Jai Narayan Vyas University, Jodhpur on SPS

Group	N	Mean	SD	Std. Error Mean	df	t	Sig. (2-tailed)
University of Rajasthan, Jaipur	21	208.08	7.465	4.087	31	9.889	0.001
Jai Narayan Vyas University, Jodhpur	12	167.67	15.506				

*. *The mean difference is significant at the 0.05 level.*

It is discussed in the above Table 4.9 that obtained value of $t(21, 12) = 9.889$, on $df = 31$, is significant at 0.05 level for two-tailed that is $p=0.001$; hence $p<0.05$ means the variances between the University of Rajasthan, Jaipur and Jai Narayan Vyas University, Jodhpur are statistically significantly different which shows that there were a statistically significantly differences in perceptions of stakeholders of B.Ed colleges of both universities regarding NCFTE-2009. Therefore, we reject the null hypothesis - H_07 - Stakeholders of B.Ed colleges under the University of Rajasthan, Jaipur and Jai Narayan Vyas University, Jodhpur will not differ significantly in their perception towards the NCFTE-2009. Stakeholders of the University of Rajasthan, Jaipur tended to have higher mean (208.08) perception towards the NCFTE-2009, while stakeholders of Jai Narayan Vyas University, Jodhpur tended to have lower mean (167.67) perception towards the NCFTE-2009 than their counterpart. The virtue of the importance of the *t-value*, the mean value cannot be neglected. It entails that stakeholders of the University of Rajasthan, Jaipur are having better perception towards NCFTE-2009 than stakeholders of Jai Narayan Vyas University, Jodhpur.

H₀₈. Stakeholders of B.Ed colleges under University of Rajasthan, Jaipur and Maharaja Ganga Singh University, Bikaner will not differ significantly in their perception towards the NCFTE-2009.

Table 4.10
t-Test for Comparing Mean Scores of Stakeholders of B.Ed colleges under
University of Rajasthan, Jaipur and Maharaja Ganga Singh University,
Bikaner on SPS

Group	N	Mean	SD	Std. Error Mean	df	t	Sig. (2-tailed)
University of Rajasthan, Jaipur	21	205.67	8.989	5.014	34	7.021	0.001
Maharaja Ganga Singh University, Bikaner	15	170.47	16.230				

*. The mean difference is significant at the 0.05 level.

It is opined in the above Table 4.10 that obtained value of $t(21, 15) = 7.021$, on $df = 34$, is significant at 0.05 level for two-tailed that is $p=0.001$; hence $p<0.05$ means the variances between the University of Rajasthan, Jaipur and Maharaja Ganga Singh University, Bikaner are statistically significantly different which shows that there were a statistically significant differences in perceptions of stakeholders of B.Ed colleges of both universities regarding NCFTE-2009. Therefore, we reject the null hypothesis - H₀₈ - Stakeholders of B.Ed colleges under University of Rajasthan, Jaipur and Maharaja Ganga Singh University, Bikaner will not differ significantly in their perception towards the NCFTE-2009. Stakeholders of the University of Rajasthan, Jaipur tended to have higher mean (205.67) perception towards the NCFTE-2009, while stakeholders of Maharaja Ganga Singh University, Bikaner tended to have lower mean (170.47) perception towards the NCFTE-2009 than their counterpart. The virtue of the importance of the *t-value*, the mean value cannot be neglected. It entails that stakeholders of the University of Rajasthan, Jaipur are having better perception

towards NCFTE-2009 than stakeholders of Maharaja Ganga Singh University, Bikaner.

H₀₉. Stakeholders of B.Ed colleges under the University of Rajasthan, Jaipur and Raj Rishi Bhartrihari Matsya University, Alwar will not differ significantly in their perception towards the NCFTE-2009.

Table 4.11
t-Test for Comparing Mean Scores of Stakeholders of B.Ed colleges under University of Rajasthan, Jaipur and Raj Rishi Bhartrihari Matsya University, Alwar on SPS

Group	N	Mean	SD	Std. Error Mean	df	t	Sig. (2-tailed)
University of Rajasthan, Jaipur	21	205.71	9.242	3.926	46	3.481	0.002
Raj Rishi Bhartrihari Matsya University, Alwar	27	192.05	14.671				

*. The mean difference is significant at the 0.05 level.

It is opined in the above Table 4.11 that obtained value of $t(21, 27) = 3.481$, on $df = 46$, is significant at 0.05 level for two-tailed that is $p = .002$; hence $p < 0.05$ means the variances between the University of Rajasthan, Jaipur and Raj Rishi Bhartrihari Matsya University, Alwar are statistically significantly different which shows that there were a statistically significant differences in perceptions of stakeholders of B.Ed colleges of both universities regarding NCFTE-2009. Therefore, we reject the null hypothesis - H₀₉ - Stakeholders of B.Ed colleges under the University of Rajasthan, Jaipur and Raj Rishi Bhartrihari Matsya University, Alwar will not differ significantly in their perception towards the NCFTE-2009. Stakeholders of the University of Rajasthan, Jaipur tended to have higher mean (205.71) perception towards the NCFTE-2009, while stakeholders of Raj Rishi Bhartrihari Matsya University, Alwar tended to have lower mean (192.05) perception towards the NCFTE-2009 than their counterpart. The virtue of the importance of the t -

value, the mean value cannot be neglected. It entails that stakeholders of the University of Rajasthan, Jaipur are having better perception towards NCFTE-2009 than stakeholders of Raj Rishi Bhartrihari Matsya University, Alwar.

H₀10. Stakeholders of B.Ed colleges under the University of Kota, Kota and Jai Narayan Vyas University, Jodhpur will not differ significantly in their perception towards the NCFTE-2009.

Table 4.12
t-Test for Comparing Mean Scores of Stakeholders of B.Ed colleges under University of Kota, Kota and Jai Narayan Vyas University, Jodhpur on SPS

Group	N	Mean	SD	Std. Error Mean	df	t	Sig. (2-tailed)
University of Kota, Kota	49	215.83	9.861	6.281	59	7.669	0.001
Jai Narayan Vyas University, Jodhpur	12	167.67	15.506				

*. The mean difference is significant at the 0.05 level.

It is opined in the above Table 4.12 that obtained value of $t(49, 12) = 7.669$, on $df = 46$, is significant at 0.05 level for two-tailed that is $p=0.001$; hence $p<0.05$ means the variances between the University of Kota, Kota and Jai Narayan Vyas University, Jodhpur are statistically significantly different which shows that there were a statistically significant differences in perceptions of stakeholders of B.Ed colleges of both universities regarding NCFTE-2009. Therefore, we reject the null hypothesis - H₀10 - Stakeholders of B.Ed colleges under University of Kota, Kota and Jai Narayan Vyas University, Jodhpur will not differ significantly in their perception towards the NCFTE-2009. Stakeholders of University of Kota, Kota tended to have higher mean (215.83) perception towards the NCFTE-2009, while stakeholders of Jai Narayan Vyas University, Jodhpur tended to have lower mean (167.67) perception towards the NCFTE-2009 than their counterpart. The virtue of the importance of the *t-value*, the mean value cannot be neglected. It entails that stakeholders of the

University of Kota, Kota are having better perception towards NCFTE-2009 than stakeholders of Jai Narayan Vyas University, Jodhpur.

H₀11. Stakeholders of B.Ed colleges under University of Kota, Kota and Maharaja Ganga Singh University, Bikaner will not differ significantly in their perception towards the NCFTE-2009.

Table 4.13
t-Test for Comparing Mean Scores of Stakeholders of B.Ed colleges under University of Kota, Kota and Maharaja Ganga Singh University, Bikaner on SPS

Group	N	Mean	SD	Std. Error Mean	Df	t	Sig. (2-tailed)
University of Kota, Kota	49	213.07	10.579	4.027	62	10.578	0.001
Maharaja Ganga Singh University, Bikaner	15	170.47	16.230				

*. The mean difference is significant at the 0.05 level.

Table 4.13 revealed that obtained value of $t(49, 15) = 10.578$, on $df = 62$, is significant at 0.05 level for two-tailed that is $p=0.001$; hence $p<0.05$ means the variances between the University of Kota, Kota and Maharaja Ganga Singh University, Bikaner are statistically significantly different which shows that there were a statistically significantly differences in perceptions of stakeholders of B.Ed colleges of both universities regarding NCFTE-2009. Therefore, we reject the null hypothesis - H₀11. Stakeholders of B.Ed colleges under University of Kota, Kota and Maharaja Ganga Singh University, Bikaner will not differ significantly in their perception towards the NCFTE-2009. Stakeholders of the University of Kota, Kota tended to have higher mean (213.07) perception towards the NCFTE-2009, while stakeholders of Maharaja Ganga Singh University, Bikaner tended to have lower mean (170.47) perception towards the NCFTE-2009 than their counterpart. The

virtue of the importance of the *t-value*, the mean value cannot be neglected. It entails that stakeholders of the University of Kota, Kota are having better perception towards NCFTE-2009 than stakeholders of Maharaja Ganga Singh University, Bikaner.

H₀12. Stakeholders of B.Ed colleges under Jai Narayan Vyas University, Jodhpur and Raj Rishi Bhartrihari Matsya University, Alwar will not differ significantly in their perception towards the NCFTE-2009.

Table 4.14
t-Test for Comparing Mean Scores of Stakeholders of B.Ed colleges under Jai Narayan Vyas University, Jodhpur and Raj Rishi Bhartrihari Matsya University, Alwar on SPS

Group	N	Mean	SD	Std. Error Mean	df	t	Sig. (2-tailed)
Jai Narayan Vyas University, Jodhpur	12	167.67	15.506	6.965	37	4.283	0.001
Raj Rishi Bhartrihari Matsya University, Alwar	27	197.50	10.690				

*. The mean difference is significant at the 0.05 level.

It is expressed in Table 4.14 that obtained value of $t(12, 27) = 4.283$, on $df = 37$, is significant at 0.05 level for two-tailed that is $p=0.001$; hence $p<0.05$ means the variances between Jai Narayan Vyas University, Jodhpur and Raj Rishi Bhartrihari Matsya University, Alwar are statistically significantly different which indicates that there were a statistically significantly differences in perceptions of stakeholders of B.Ed colleges of both universities regarding NCFTE-2009. Therefore, we reject the null hypothesis - H₀12 - Stakeholders of B.Ed colleges under Jai Narayan Vyas University, Jodhpur and Raj Rishi Bhartrihari Matsya University, Alwar will not differ significantly in their perception towards the NCFTE-2009. Stakeholders of Jai Narayan Vyas University, Jodhpur tended to have lower (167.67) perception towards the NCFTE-2009 while stakeholders of Raj Rishi Bhartrihari Matsya University,

Alwar tended to have higher mean (197.50) perception towards the NCFTE-2009 than their counterpart. But, owing to the importance of the *t-value*, the mean value cannot be neglected. Therefore, it is declared that stakeholders of Jai Narayan Vyas University, Jodhpur are having smaller perception towards NCFTE-2009 than stakeholders of Raj Rishi Bhartrihari Matsya University, Alwar.

H₀13. Stakeholders of B.Ed colleges under Maharaja Ganga Singh University, Bikaner and Raj Rishi Bhartrihari Matsya University, Alwar will not differ significantly in their perception towards the NCFTE-2009.

Table 4.15
t-Test for Comparing Mean Scores of Stakeholders of B.Ed colleges under Maharaja Ganga Singh University, Bikaner and Raj Rishi Bhartrihari Matsya University, Alwar on SPS

Group	N	Mean	SD	Std. Error Mean	df	t	Sig. (2-tailed)
Maharaja Ganga Singh University, Bikaner	15	170.47	16.230	2.567	40	10.907	0.001
Raj Rishi Bhartrihari Matsya University, Alwar	27	198.47	9.906				

*. *The mean difference is significant at the 0.05 level.*

It is expressed in Table 4.15 that obtained value of $t(15, 27) = 10.907$, on $df = 40$, is significant at 0.05 level for two-tailed that is $p=0.001$; hence $p<0.05$ means the variances between Maharaja Ganga Singh University, Bikaner and Raj Rishi Bhartrihari Matsya University, Alwar are statistically significantly different which indicates that there were a statistically significantly differences in perceptions of stakeholders of B.Ed colleges of both universities regarding NCFTE-2009. Therefore, we reject the null hypothesis - H₀13 - Stakeholders of B.Ed colleges under Maharaja Ganga Singh University, Bikaner and Raj Rishi Bhartrihari Matsya University, Alwar will not differ significantly in their perception towards the NCFTE-2009.

Stakeholders of Maharaja Ganga Singh University, Bikaner tended to have lower (170.47) perception towards the NCFTE-2009 while stakeholders of Raj Rishi Bhartrihari Matsya University, Alwar tended to have higher mean (198.47) perception towards the NCFTE-2009 than their counterpart. But, owing the importance of the *t-value*, the mean value cannot be left aside. Therefore, it is declared that stakeholders of Maharaja Ganga Singh University, Bikaner are having smaller perception towards NCFTE-2009 than stakeholders of Raj Rishi Bhartrihari Matsya University, Alwar.

H₀14: Teacher trainees of B.Ed colleges under various universities of Rajasthan will not differ significantly in their perception towards the NCFTE-2009.

The one way ANOVA was performed using *SPSS (Ver. 25)* to compare the means scores of teacher trainees of B.Ed colleges under various universities of Rajasthan obtained on PSTT (Perception Scale for Teacher Trainees regarding NCFTE-2009) toward the perception of NCFTE-2009. The result is presented in the following tables –

Table 4.16
Test of Homogeneity of Variances of Scores on PSTT

Test of Homogeneity		Levene Statistic	df1	df2	Sig.
Overall Perception of Trainees	Based on Mean	49.219	5	397	0.001

Table 4.17
One Way ANOVA for Comparing Mean Score on PSTT

Source of Variance	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	109093.502	5	21818.700	26.257	0.001
Within Groups	329892.940	397	830.965		
Total	438986.442	402			

Table 4.18
Post Hoc Analysis of Scores on PSTT (by Tukey Test)

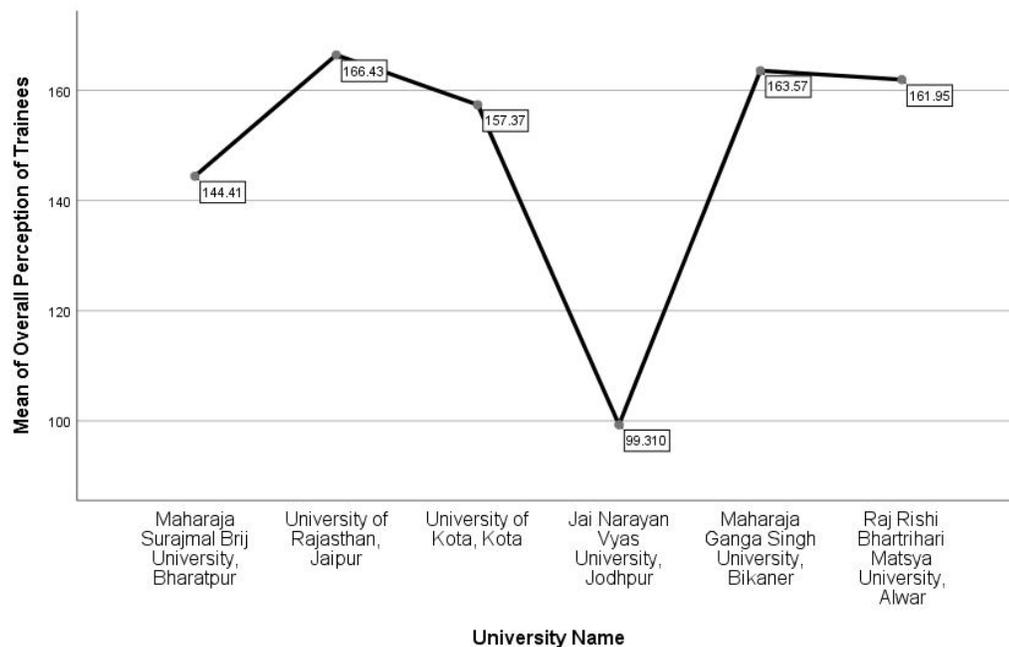
Tukey HSD^{a,b}

University Name	N	Subset for alpha = 0.05		
		1	2	3
Jai Narayan Vyas University, Jodhpur	29	99.31		
Maharaja Surajmal Brij University, Bharatpur	100		144.41	
University of Kota, Kota	148		157.37	157.37
Raj Rishi Bhartrihari Matsya University, Alwar	56		161.95	161.95
Maharaja Ganga Singh University, Bikaner	21			163.57
University of Rajasthan, Jaipur	49			166.43
Significance		1.000	0.053	0.684

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 43.756.

b. The group sizes are unequal. The harmonic mean of the group sizes is used.



Graph – 4.2 (Overall Perception of Teacher Trainees of B.Ed Colleges of Rajasthan)

The result of one-way Analysis of Variance (ANOVA) to check the difference in perception of teacher trainees of B.Ed colleges under six universities of Rajasthan shows $p=0.001$ which is less than 0.05 that is $p<0.05$ (see Table 4.16) indicates homogeneity nature of scores obtained by the teacher trainees on PSTT. Further the result in (Table 4.17) revealed that $F(5, 397) = 26.257$, on $df = 402$, $p=0.001$; hence

$p < 0.05$ means the variances between scores of teacher trainees of all six universities are statistically significantly different which exposes that there were a statistically significant differences in perceptions of teacher trainees of B.Ed colleges under these six universities of Rajasthan regarding NCFTE-2009. Therefore, due to significant value $p = 0.001$ (see Table 4.17) which is less than 0.05 (as $p < 0.05$). Therefore, we reject the null hypothesis - H_014 – teacher trainees of B.Ed colleges under various universities of Rajasthan will not differ significantly in their perception towards the NCFTE-2009.

It is also declared by the post hoc analysis by Tukey test (see Table 4.18) that teacher trainees of Maharaja Surajmal Brij University, Bharatpur, University of Kota, Kota and Raj Rishi Bhartrihari Matsya University, Alwar ($p = 0.053 \approx \alpha = 0.05$) were found having a significant difference in their perception regarding NCFTE-2009. While the value of $p = 1.000$ and $p = 0.684$ shows that teacher trainees of Jai Narayan Vyas University, Jodhpur, Maharaja Ganga Singh University, Bikaner and the University of Rajasthan, Jaipur found to have not significant differences in perception regarding NCFTE-2009. The *Graph-4.2* represents that Maharaja Ganga Singh University, Bikaner, University of Kota, Kota and Raj Rishi Bhartrihari Matsya University, Alwar having equal contents in their curricula.

H₀₁₅: Teacher trainees of B.Ed colleges under Maharaja Surajmal Brij University, Bharatpur and the University of Rajasthan, Jaipur will not differ significantly in their perception towards the NCFTE-2009.

The analysis for comparing the mean scores of teacher trainees of B.Ed colleges under Maharaja Surajmal Brij University, Bharatpur and University of

Rajasthan, Jaipur on PSTT (Perception Scale for Teacher Trainees regarding NCFTE-2009) was done in SPSS (Ver. 25). The result is displayed in the following table -

Table 4.19
t-Test for Comparing Mean Scores of Teacher Trainees of B.Ed colleges under Maharaja Surajmal Brij University, Bharatpur and University of Rajasthan, Jaipur on PSTT

Group	N	Mean	SD	Std. Error Mean	df	t	Sig. (2-tailed)
Maharaja Surajmal Brij University, Bharatpur	100	155.12	19.537	3.948	147	2.864	0.006
University of Rajasthan, Jaipur	49	166.43	17.023				

*. The mean difference is significant at the 0.05 level.

Above Table 4.19 exposed that obtained $t(100, 49) = 2.864$, on $df = 147$, is significant for two-tailed that is $p=0.006$; hence $p<0.05$ means the variances between Maharaja Surajmal Brij University, Bharatpur and University of Rajasthan, Jaipur are statistically significantly different which clears that there was a statistically significantly differences in perceptions of teacher trainees of B.Ed colleges of both universities regarding NCFTE-2009. Therefore, we reject the null hypothesis - H_0 15 – Teacher trainees of B.Ed colleges under Maharaja Surajmal Brij University, Bharatpur and the University of Rajasthan, Jaipur will not differ significantly in their perception towards the NCFTE-2009. Teacher trainees of Maharaja Surajmal Brij University, Bharatpur tended to have lower mean (155.12) perception towards the NCFTE-2009, while stakeholders of University of Rajasthan, Jaipur tended to have higher mean (166.43) perception towards the NCFTE-2009 than their counterpart. The virtue of the importance of the t-value, the mean value cannot be neglected. It entails that teacher trainees of Maharaja Surajmal Brij University, Bharatpur are having inferior perception towards NCFTE-2009 than teacher trainees of University of Rajasthan, Jaipur.

H₀16. Teacher trainees of B.Ed colleges under Maharaja Surajmal Brij University, Bharatpur and the University of Kota, Kota will not differ significantly in their perception towards the NCFTE-2009.

Table 4.20
t-Test for Comparing Mean Scores of Teacher trainees of B.Ed colleges under Maharaja Surajmal Brij University, Bharatpur and University of Kota, Kota on PSTT

Group	N	Mean	SD	Std. Error Mean	df	t	Sig. (2-tailed)
Maharaja Surajmal Brij University, Bharatpur	100	144.41	19.649	2.907	246	3.914	0.001
University of Kota, Kota	148	155.79	25.733				

*. *The mean difference is significant at the 0.05 level.*

It is revealed in the above Table 4.20 that obtained value of $t(100, 148) = 3.914$, on $df = 246$, is significant at 0.05 level for two-tailed that is $p=0.001$; hence $p<0.05$ means the variances between Maharaja Surajmal Brij University, Bharatpur and University of Kota, Kota are statistically significantly different which entails that there were a statistically significantly differences in perceptions of teacher trainees of B.Ed colleges of both universities regarding NCFTE-2009. Therefore, we reject the null hypothesis - H₀16 –Teacher trainees of B.Ed colleges under Maharaja Surajmal Brij University, Bharatpur and the University of Kota, Kota will not differ significantly in their perception towards the NCFTE-2009. Teacher trainees of Maharaja Surajmal Brij University, Bharatpur tended to have lower mean (144.41) perception towards the NCFTE-2009, while teacher trainees of University of Kota, Kota tended to have higher mean (155.79) perception towards the NCFTE-2009 than their counterpart. The virtue of the importance of the *t-value*, the mean value cannot be neglected. It entails that teacher trainees of the University of Kota, Kota are having

good perception towards NCFTE-2009 than teacher trainees of Maharaja Surajmal Brij University, Bharatpur.

H₀17. Teacher trainees of B.Ed colleges under Maharaja Surajmal Brij University, Bharatpur and Jai Narayan Vyas University, Jodhpur will not differ significantly in their perception towards the NCFTE-2009.

Table 4.21
t-Test for Comparing Mean Scores of Teacher trainees of B.Ed colleges under Maharaja Surajmal Brij University, Bharatpur and Jai Narayan Vyas University, Jodhpur on PSTT

Group	N	Mean	SD	Std. Error Mean	df	t	Sig. (2-tailed)
Maharaja Surajmal Brij University, Bharatpur	100	157.79	20.689	6.443	127	9.072	0.001
Jai Narayan Vyas University, Jodhpur	29	99.31	20.494				

*. The mean difference is significant at the 0.05 level.

It is revealed through the above Table 4.21 that obtained value of $t(100, 29) = 9.072$, on $df = 127$, is significant at 0.05 level for two tailed that is $p=0.001$; hence $p<0.05$ means the variances between Maharaja Surajmal Brij University, Bharatpur and Jai Narayan Vyas University, Jodhpur are statistically significantly different which clears that there was a statistically significantly differences in perceptions of teacher trainees of B.Ed colleges of both universities regarding NCFTE-2009. Therefore, we reject the null hypothesis - H₀17 –Teacher trainees of B.Ed colleges under Maharaja Surajmal Brij University, Bharatpur and Jai Narayan Vyas University, Jodhpur will not differ significantly in their perception towards the NCFTE-2009. Teacher trainees of Maharaja Surajmal Brij University, Bharatpur tended to have higher mean (157.79) perception towards the NCFTE-2009, while teacher trainees of Jai Narayan Vyas University, Jodhpur tended to have lower mean

(99.31) perception towards the NCFTE-2009 than their counterpart. Virtue of the importance of the *t-value*, the mean value cannot be neglected. It entails that teacher trainees of Maharaja Surajmal Brij University, Bharatpur are having much better perception towards NCFTE-2009 than teacher trainees of Jai Narayan Vyas University, Jodhpur.

H₀18. Teacher trainees of B.Ed colleges under University of Rajasthan, Jaipur and Jai Narayan Vyas University, Jodhpur will not differ significantly in their perception towards the NCFTE-2009.

Table 4.22
t - Test for Comparing Mean Scores of Teacher trainees of B.Ed colleges under University of Rajasthan, Jaipur and Jai Narayan Vyas University, Jodhpur on PSTT

Group	N	Mean	SD	Std. Error Mean	df	t	Sig. (2-tailed)
University of Rajasthan, Jaipur	49	162.32	17.313	5.008	76	12.641	0.001
Jai Narayan Vyas University, Jodhpur	29	99.31	20.494				

*. The mean difference is significant at the 0.05 level.

It is discussed in the above Table 4.22 that obtained value of $t(49, 29) = 12.641$, on $df = 76$, is significant at 0.05 level for two tailed that is $p=0.001$; hence $p<0.05$ means the variances between University of Rajasthan, Jaipur and Jai Narayan Vyas University, Jodhpur are statistically significantly different which shows that there was a statistically significantly differences in perceptions of teacher trainees of B.Ed colleges of both universities regarding NCFTE-2009. Therefore, we reject the null hypothesis - H₀18 - Teacher trainees of B.Ed colleges under University of Rajasthan, Jaipur and Jai Narayan Vyas University, Jodhpur will not differ significantly in their perception towards the NCFTE-2009. Teacher trainees of

University of Rajasthan, Jaipur tended to have higher mean (162.32) perception towards the NCFTE-2009, while teacher trainees of Jai Narayan Vyas University, Jodhpur tended to have lower mean (99.31) perception towards the NCFTE-2009 than their counterpart. Virtue of the importance of the *t-value*, the mean value cannot be neglected. It entails that teacher trainees of University of Rajasthan, Jaipur are having better perception towards NCFTE-2009 than teacher trainees of Jai Narayan Vyas University, Jodhpur.

H₀19. Teacher trainees of B.Ed colleges under University of Kota, Kota and Jai Narayan Vyas University, Jodhpur will not differ significantly in their perception towards the NCFTE-2009.

Table 4.23
t - Test for Comparing Mean Scores of Teacher trainees of B.Ed colleges under University of Kota, Kota and Jai Narayan Vyas University, Jodhpur on PSTT

Group	N	Mean	SD	Std. Error Mean	df	t	Sig. (2-tailed)
University of Kota, Kota	148	167.52	28.364	6.501	175	10.492	0.001
Jai Narayan Vyas University, Jodhpur	29	99.31	20.494				

*. The mean difference is significant at the 0.05 level.

It is opined in the above Table 4.23 that obtained value of $t (148, 29) = 10.492$, on $df = 175$, is significant at 0.05 level for two tailed that is $p=0.001$; hence $p<0.05$ means the variances between University of Kota, Kota and Jai Narayan Vyas University, Jodhpur are statistically significantly different which shows that there was a statistically significantly differences in perceptions of teacher trainees of B.Ed colleges of both universities regarding NCFTE-2009. Therefore, we reject the null hypothesis - H₀19 - Teacher trainees of B.Ed colleges under University of Kota,

Kota and Jai Narayan Vyas University, Jodhpur will not differ significantly in their perception towards the NCFTE-2009. Teacher trainees of University of Kota, Kota tended to have higher mean (167.52) perception towards the NCFTE-2009, while teacher trainees of Jai Narayan Vyas University, Jodhpur tended to have lower mean (99.31) perception towards the NCFTE-2009 than their counterpart. Virtue of the importance of the *t-value*, the mean value cannot be neglected. It entails that teacher trainees of University of Kota, Kota are having better perception towards NCFTE-2009 than teacher trainees of Jai Narayan Vyas University, Jodhpur.

H₀20. Teacher trainees of B.Ed colleges under Jai Narayan Vyas University, Jodhpur and Maharaja Ganga Singh University, Bikaner will not differ significantly in their perception towards the NCFTE-2009.

Table 4.24
t - Test for Comparing Mean Scores of Teacher trainees of B.Ed colleges under Jai Narayan Vyas University, Jodhpur and Maharaja Ganga Singh University, Bikaner on PSTT

Group	N	Mean	SD	Std. Error Mean	df	t	Sig. (2-tailed)
Jai Narayan Vyas University, Jodhpur	29	93.86	18.464	6.401	48	10.891	0.001
Maharaja Ganga Singh University, Bikaner	21	163.57	18.313				

*. The mean difference is significant at the 0.05 level.

Table 4.24 revealed that obtained value of $t(29, 21) = 10.891$, on $df = 48$, is significant at 0.05 level for two tailed that is $p=0.001$; hence $p<0.05$ means the variances between Jai Narayan Vyas University, Jodhpur and Maharaja Ganga Singh University, Bikaner are statistically significantly different which indicates that there was a statistically significantly differences in perceptions of teacher trainees of B.Ed colleges of both universities regarding NCFTE-2009. Therefore, we reject the null

hypothesis - H₀20 - Teacher trainees of B.Ed colleges under Jai Narayan Vyas University, Jodhpur and Maharaja Ganga Singh University, Bikaner will not differ significantly in their perception towards the NCFTE-2009. Teacher trainees of Jai Narayan Vyas University, Jodhpur and Maharaja Ganga Singh University, Bikaner tended to have lower mean (93.86) perception towards the NCFTE-2009, while teacher trainees of Maharaja Ganga Singh University, Bikaner tended to have higher mean (163.57) perception towards the NCFTE-2009. But by virtue of the importance of the *t-value*, the mean value cannot be neglected. Therefore, it entails that teacher trainees of Jai Narayan Vyas University, Jodhpur are having inferior perception towards NCFTE-2009 as teacher trainees of Maharaja Ganga Singh University, Bikaner.

H₀21. Teacher trainees of B.Ed colleges under Jai Narayan Vyas University, Jodhpur and Raj Rishi Bhartrihari Matsya University, Alwar will not differ significantly in their perception towards the NCFTE-2009.

Table 4.25
t - Test for Comparing Mean Scores of Teacher trainees of B.Ed colleges under Jai Narayan Vyas University, Jodhpur and Raj Rishi Bhartrihari Matsya University, Alwar on PSTT

Group	N	Mean	SD	Std. Error Mean	df	t	Sig. (2-tailed)
Jai Narayan Vyas University, Jodhpur	29	99.31	20.494	6.381	83	16.676	0.001
Raj Rishi Bhartrihari Matsya University, Alwar	56	205.72	19.621				

*. The mean difference is significant at the 0.05 level.

It is expressed in the Table 4.25 that obtained value of $t(29, 56) = 16.676$, on $df = 83$, is significant at 0.05 level for two tailed that is $p=0.001$; hence $p<0.05$ means the variances between Jai Narayan Vyas University, Jodhpur and Raj Rishi

Bhartrihari Matsya University, Alwar are statistically significantly different which indicates that there was a statistically significantly differences in perceptions of teacher trainees of B.Ed colleges of both universities regarding NCFTE-2009. Therefore, we reject the null hypothesis - H_0 21 - Teacher trainees of B.Ed colleges under Jai Narayan Vyas University, Jodhpur and Raj Rishi Bhartrihari Matsya University, Alwar will not differ significantly in their perception towards the NCFTE-2009. Teacher trainees of Jai Narayan Vyas University, Jodhpur tended to have lower (99.31) perception towards the NCFTE-2009 while teacher trainees of Raj Rishi Bhartrihari Matsya University, Alwar tended to have higher mean (205.72) perception towards the NCFTE-2009 than their counterpart. But, owing the importance of the *t-value*, the mean value cannot be neglected. Therefore, it is declared that teacher trainees of Jai Narayan Vyas University, Jodhpur are having poor perception towards NCFTE-2009 than teacher trainees of Raj Rishi Bhartrihari Matsya University, Alwar.

H₀22. Teacher trainees of B.Ed colleges under Maharaja Ganga Singh University, Bikaner and Raj Rishi Bhartrihari Matsya University, Alwar will not differ significantly in their perception towards the NCFTE-2009.

Table 4.26
t - Test for Comparing Mean Scores of Teacher trainees of B.Ed colleges under Maharaja Ganga Singh University, Bikaner and Raj Rishi Bhartrihari Matsya University, Alwar on PSTT

Group	N	Mean	SD	Std. Error Mean	df	T	Sig. (2-tailed)
Maharaja Ganga Singh University, Bikaner	21	163.57	18.313	4.275	75	10.750	0.001
Raj Rishi Bhartrihari Matsya University, Alwar	56	209.52	12.052				

*. The mean difference is significant at the 0.05 level.

It is expressed in the Table 4.26 that obtained value of $t(21, 56) = 10.750$, on $df = 75$, is significant at 0.05 level for two tailed that is $p=0.001$; hence $p<0.05$ means the variances between Maharaja Ganga Singh University, Bikaner and Raj Rishi Bhartrihari Matsya University, Alwar are statistically significantly different which indicates that there was a statistically significantly differences in perceptions of teacher trainees of B.Ed colleges of both universities regarding NCFTE-2009. Therefore, we reject the null hypothesis - H_{022} - Teacher trainees of B.Ed colleges under Maharaja Ganga Singh University, Bikaner and Raj Rishi Bhartrihari Matsya University, Alwar will not differ significantly in their perception towards the NCFTE-2009. Teacher trainees of Maharaja Ganga Singh University, Bikaner tended to have lower (163.57) perception towards the NCFTE-2009 while teacher trainees of Raj Rishi Bhartrihari Matsya University, Alwar tended to have higher mean (209.52) perception towards the NCFTE-2009 than their counterpart. But, owing the importance of the *t-value*, the mean value cannot be left aside. Therefore, it is declared that teacher trainees of Maharaja Ganga Singh University, Bikaner are having smaller perception towards NCFTE-2009 than teacher trainees of Raj Rishi Bhartrihari Matsya University, Alwar.

4.7 Discussion on findings

On the application of Analysis of Variance (ANOVA), it was perceived that stakeholders and teacher trainees of B.Ed colleges of different universities of Rajasthan are differed significantly in their perception towards NCFTE-2009. Factors influencing their perception regarding NCFTE-2009 for being different are discussed here:

Since, the teacher is the critical agent for doing modifications into their classroom the teacher himself should be the prime centre of analysis and birthplace of

evidence (Leung, 2008, p. 76) to suppose changes in a curriculum. The National Council decides the curriculum of B.Ed course under various universities of Rajasthan for Teacher Education based on curriculum frameworks for teacher educations being prepared from time to time. Since the year 2010, the curriculum of the B.Ed course is following under the NCFTE-2009. Monitoring and appraisal the progress of change through suggesting appropriate strategies are prerequisite for enhancement in the curriculum of teacher education. Therefore, the five dimensions after review of related literature were extracted by the researcher to know the perception of stakeholders and teacher trainees. The CDC (2001) suggested on the interim evaluation of the current curriculum reform that “the review is expected to be evidence-based informed by other relevant projects and sources” (p. 120). The CDC found that the teacher trainees want that teacher might apply various styles for integrated learning such as task-oriented approaches to help their students strengthening their knowledge of the world. They also claimed that “the critical factors for the successful working system include teacher’s competencies in teaching, further professional development of teachers, enhancement of teacher’s capacity in curriculum planning, and finally, collegial team working (Leung, 2004; 2006; 2008)”. This thing got more weightage when Lovat and Smith (2003) researched that a learner’s achievement can only be enhanced when the nature of the pedagogy required is targeted precisely and implemented rigorously assessing outcomes that are fit to the entire process of planning and preparing for student learning (p. 74). Almost differences were found in perceptions of stakeholders and teacher trainees for planning and preparing for student learning which may be due to differences of classroom setup, techniques and strategies of classroom-instructional and management, variations in co-curricular activities, participation in faculty

development training programmes, seminars and workshops, and sharing their personal experiences with their teacher trainees. It was observed that due to full interfere of college management into academic setup, application of instructional material and proper attention on co-curricular activities is not possible. It has been discussed in NCFTE-2009 that teaching and instructions “could achieve a breakthrough for vitalising teacher education. In so far understanding, the learning is a function where a learner responds to the environment while instructions are prepense manipulations of the learning environment which are used to make to get comfortable and appropriate responses (Wang & Lindvall, 1984, p. 161). It was found that perception of stakeholders and teacher trainees regarding ‘teaching and instructions’ were differed which may be due to change in reflective practices, use of information communication technologies and media techniques, encouragement for experiments in classrooms, skill enhancement strategies in their counterparts. Zatorre *et al.* (2012) concluded that “the act of learning a skill improves white matter connectivity between brain areas related to the task. It seems reasonable that the assessment of the preexisting connectivity should predict the rate of improvement”. The teaching and instructions are the main part of the curriculum of teacher education which is promoted using project learning (CDC, 2001, p. 26). It is promoted also by providing “opportunities for play and playfulness in outdoor and indoor environments” (Makovichuk *et al.*, 2014, p. 19) which is helpful in increasing confidence in communication and literacies providing opportunities to express ideas with others multiples interactions (Makovichuk *et al.*, 2014, p. 19). The significant difference was seen in the process of examination and analysis of teaching and learning due to continuous and comprehensive evaluation by welcoming inclusion and remembering individual differences. Since the NCFTE-2009 recommends and guides for the

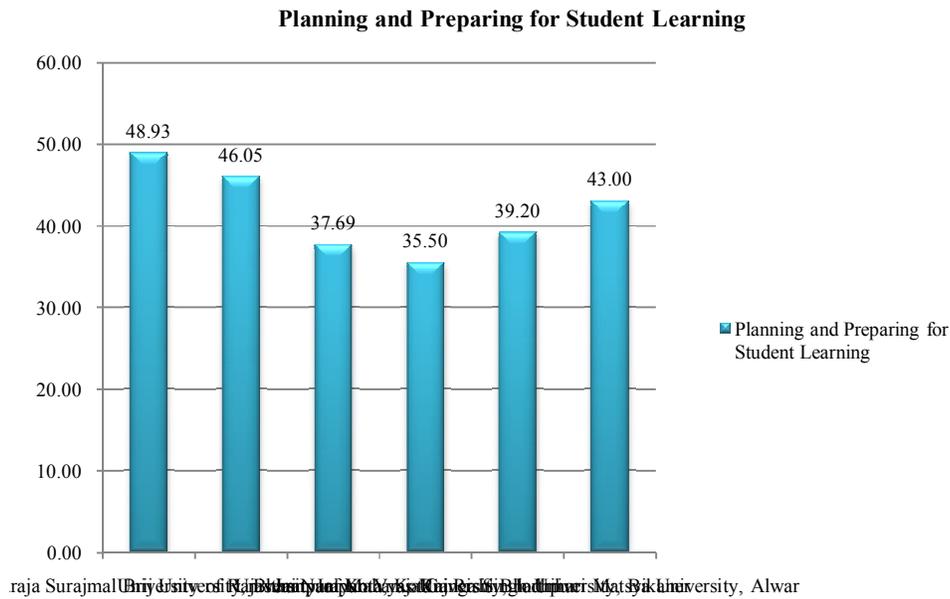
professional development of stakeholders and teacher trainees of B.Ed colleges. Therefore, the perception regarding professional responsibilities was found to be different due to the ability of academic leadership, mentorship, punctuality, awareness regarding affiliation, norms and standards for B.Ed colleges, appreciation for Right to Education, child rights and rights of persons with disability. Teachers must instil the student's ancient cultural spirit of tolerance of different opinions and viewpoints, and acquaint them with the collective wisdom. It is not enough only for a teacher to be aware of social justice issues. He also should be discussed on these issues of timely domestic and international topics including the unequal distribution of wealth and power, marginalised populations, gender and social inequality, the environment, and social services with teacher trainees (Sihem, 2012, p. 9). The teacher trainees were found more aware to social responsibilities in maintaining collaboration with colleagues, sharing personal experiences and being humane while stakeholders were found socially responsible in the sense of making classroom interaction and demonstrating appropriate professional conduct. Berman (1990) revealed that Community building and developing an understanding of social responsibility demand necessary social skills such as communication, cooperation, conflict management, and perspective taking (p. 77). As educators, we must inspire young people to hold a positive vision of the future to believe that we can do better, live better, be kinder, and be fairer (p. 80). Teacher trainees were found to complain of behaviour of stakeholders of interfering in their daily life. Although, stakeholders were found to be soft-hearted but lacking friendliness in their conducts.

4.8 Qualitative analysis of perceptions of stakeholders regarding NCFTE-2009

The OCED felt the need of refining comparative data, especially performance indicators, as current outcomes reflect biases as to the goals and objectives of lifelong

learning (p. 69). Therefore, a qualitative data analyser asserts that each of us experiences a different reality from our point of view. The researcher gathered data from stakeholders and teacher trainees of B.Ed colleges of Rajasthan through open ended response and presented in the form of Graph.

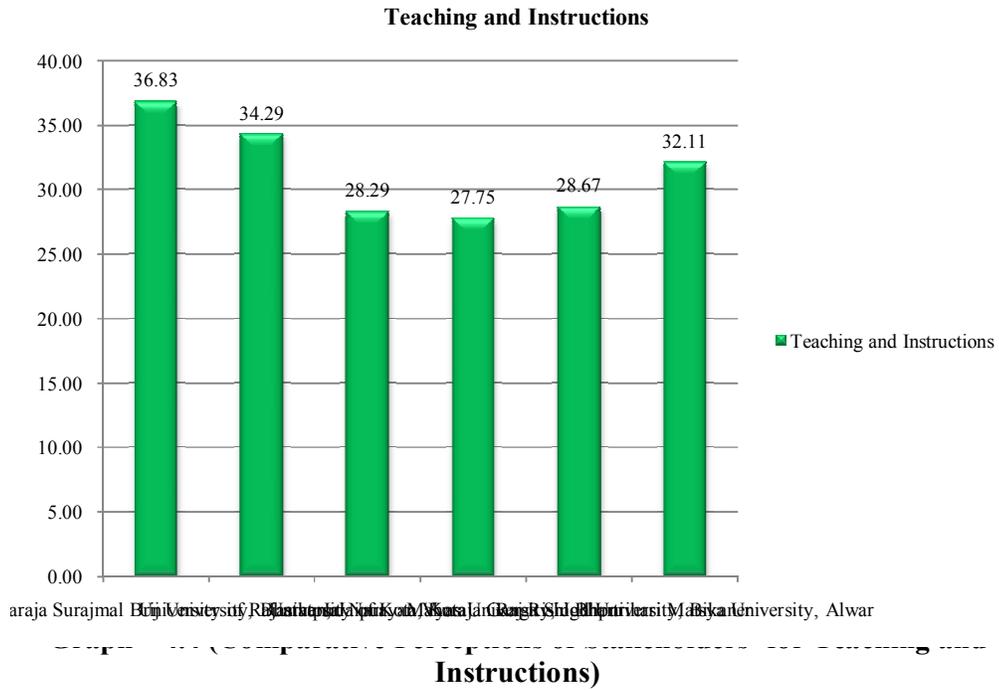
4.8.1 Dimension (1) Planning and Preparation for Student Learning



Graph – 4.3 (Comparative Perceptions of Stakeholders’ for Planning and Preparation for Student Learning)

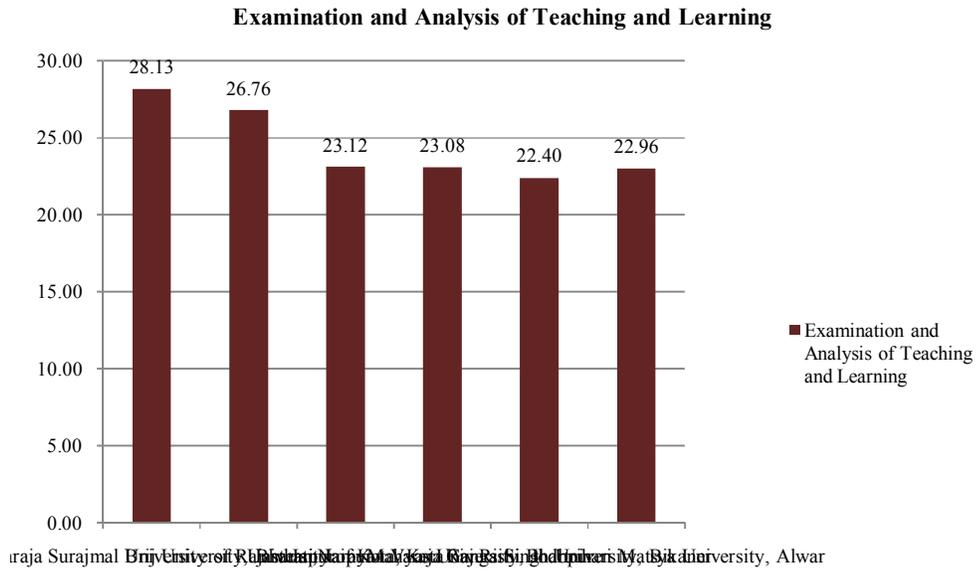
The following Graph-4.3 shows that stakeholders of Maharaja Surajmal Brij University, Bharatpur were found to have highest mean (48.93) perception, while stakeholders of Jai Narayan Vyas University were found to have lowest mean (35.50) perception regarding *planning and preparation for student learning* of NCFTE-2009.

4.8.2 Dimension (2) Teaching and Instructions



The following Graph-4.4 shows that stakeholders of Maharaja Surajmal Brij University, Bharatpur were found to have highest mean (36.83) perception, while stakeholders of Jai Narayan Vyas University were found to have lowest mean (27.75) perception regarding *teaching and instructions* of NCFTE-2009.

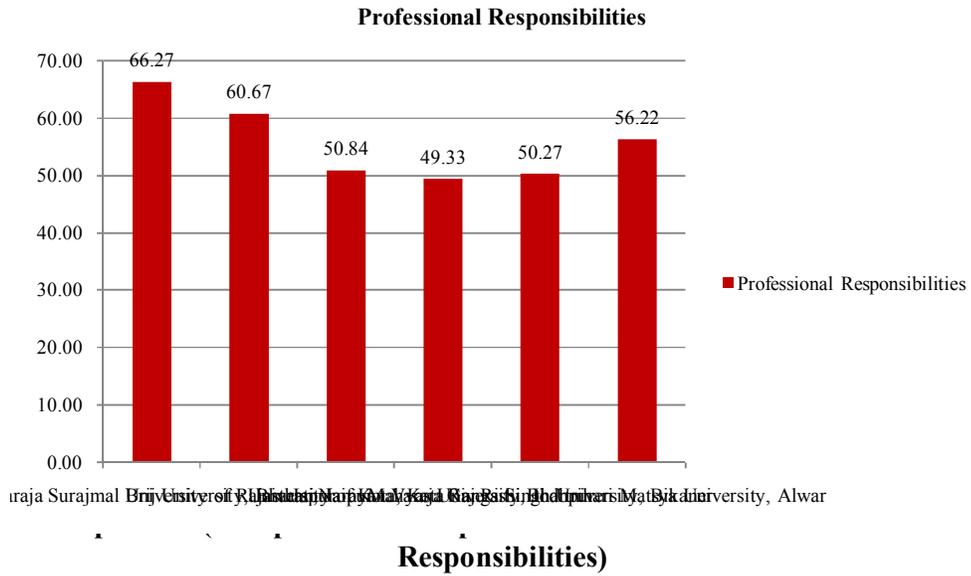
4.8.3 Dimension (3) Examination and Analysis of Teaching and Learning



Analysis of Teaching and Learning)

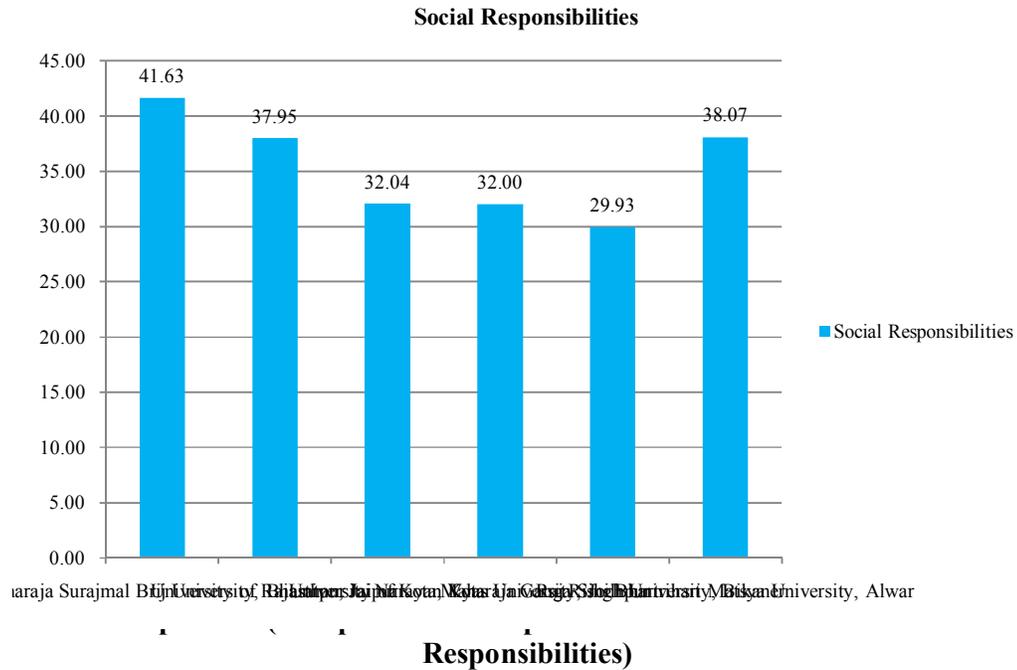
The following Graph-4.5 shows that stakeholders of Maharaja Surajmal Brij University, Bharatpur were found to have highest mean (28.13) perception, while stakeholders of University of Kota, Kota, Jai Narayan Vyas University, Jodhpur, Maharaja Ganga Singh University, Bikaner and Raj Rishi Bhartrihari Matsya University, Alwar were found to have almost equal mean (as in sequence 23.12≈23.08≈22.40≈22.96) perception regarding *examination and analysis of teaching and learning* of NCFTE-2009.

4.8.4 Dimension (4) Examination and Analysis of Professional Responsibilities



The following Graph-4.6 shows that stakeholders of Maharaja Surajmal Brij University, Bharatpur were found to have highest mean (28.13) perception, while stakeholders of University of Kota, Kota, Jai Narayan Vyas University, Jodhpur and Maharaja Ganga Singh University, Bikaner were found to have almost equal mean (as in sequence $50.84 \approx 49.33 \approx 50.27$) perception regarding *professional responsibility* of NCFTE-2009.

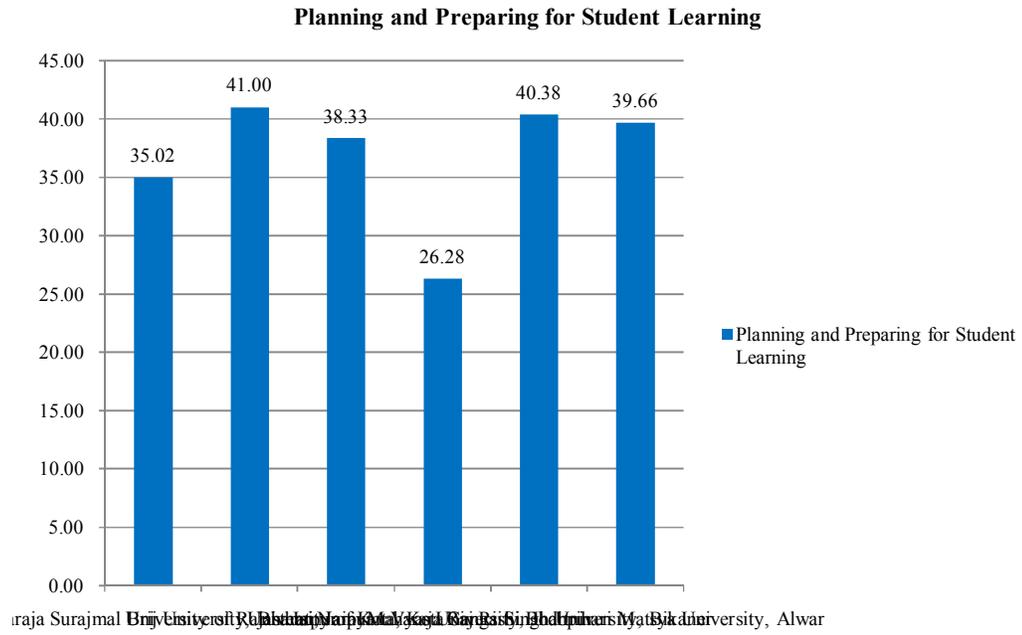
4.8.5 Dimension (5) Examination and Analysis of Social Responsibilities



The following Graph-4.7 shows that stakeholders of Maharaja Surajmal Brij University, Bharatpur were found to have highest mean (41.63) perception, while stakeholders of Maharaja Ganga Singh University, Bikaner were found to have lower mean (29.93) perception regarding *social responsibility* of NCFTE-2009. Stakeholders of University of Kota, Kota and Jai Narayan Vyas University, Jodhpur were found to have equal mean (as in sequence 32.04≈32.00) perception regarding *social responsibility* of NCFTE-2009.

4.9 Qualitative analysis of perceptions of teacher trainees regarding NCFTE–2009

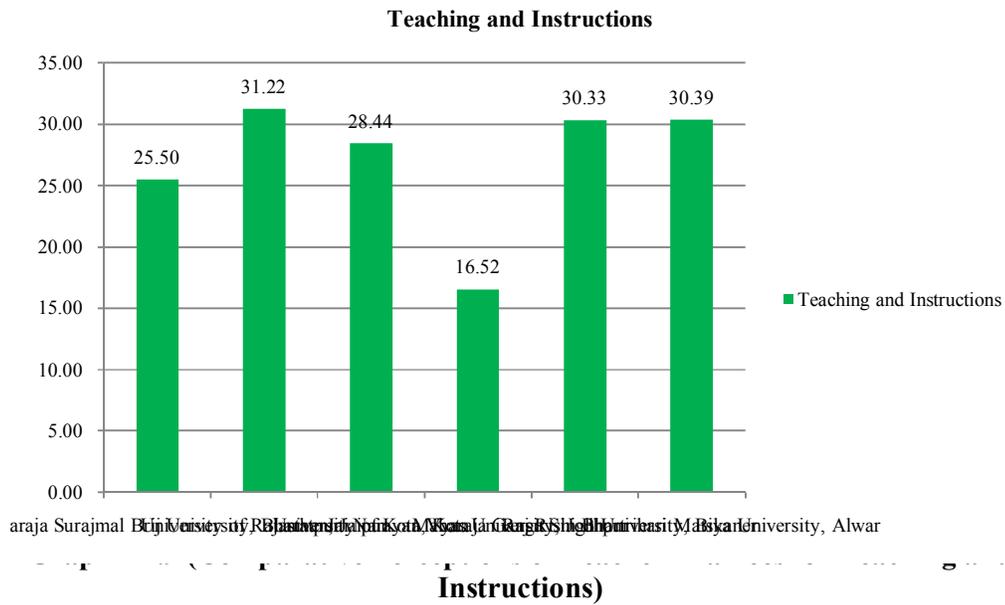
4.9.1 Dimension (1) Planning and Preparation for Student Learning



Preparation for Student Learning)

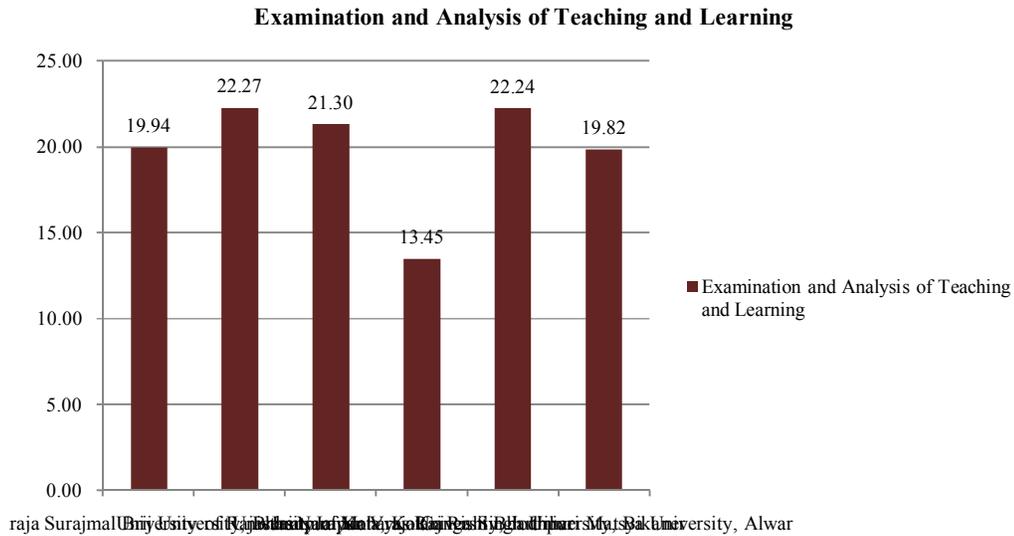
The following Graph-4.8 shows that teacher trainees of B.Ed colleges under University of Rajasthan, Jaipur were found to have highest mean (41.00) perception, while teacher trainees of B.Ed colleges under Jai Narayan Vyas University, Jodhpur were found to have lower mean (26.28) perception regarding *planning and preparation for student learning* of NCFTE-2009.

4.9.2 Dimension (2) Teaching and Instructions



The following Graph-4.9 shows that teacher trainees of B.Ed colleges under University of Rajasthan, Jaipur were found to have highest mean (31.22) perception, while teacher trainees of B.Ed colleges under Jai Narayan Vyas University, Jodhpur were found to have lower mean (16.52) perception regarding *training and instructions* of NCFTE-2009. Teacher trainees of B.Ed colleges under Maharaja Ganga Singh University, Bikaner and Raj Rishi Bhartrihari Matsys University, Alwar were found to have equal mean (as in sequence 30.33≈30.39) perception regarding *training and instructions* of NCFTE-2009.

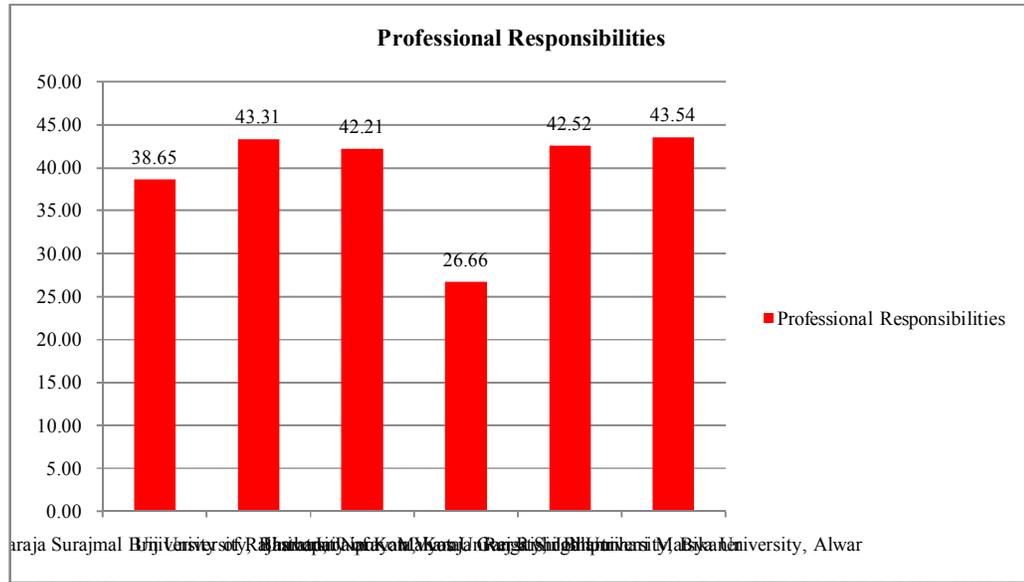
4.9.3 Dimension (3) Examination and Analysis of Teaching and Learning



and Analysis of Teaching and Learning)

The following Graph-4.10 shows that teacher trainees of B.Ed colleges under University of Rajasthan, Jaipur and Maharaja Ganga Singh University, Bikaner were found to have highest equal mean (as sequentially 22.27~22.24) perception, while teacher trainees of B.Ed colleges under Jai Narayan Vyas University, Jodhpur were found to have lowest mean (13.45) perception regarding *examination and analysis of teaching and learning* of NCFTE-2009. Teacher trainees of B.Ed colleges under Maharaja Surajmal Brij University, Bharatpur and Raj Rishi Bhartrihari Matsya University, Alwar were found to have equal mean (sequentially 19.94~19.82) perception regarding *examination and analysis of teaching and learning* of NCFTE-2009.

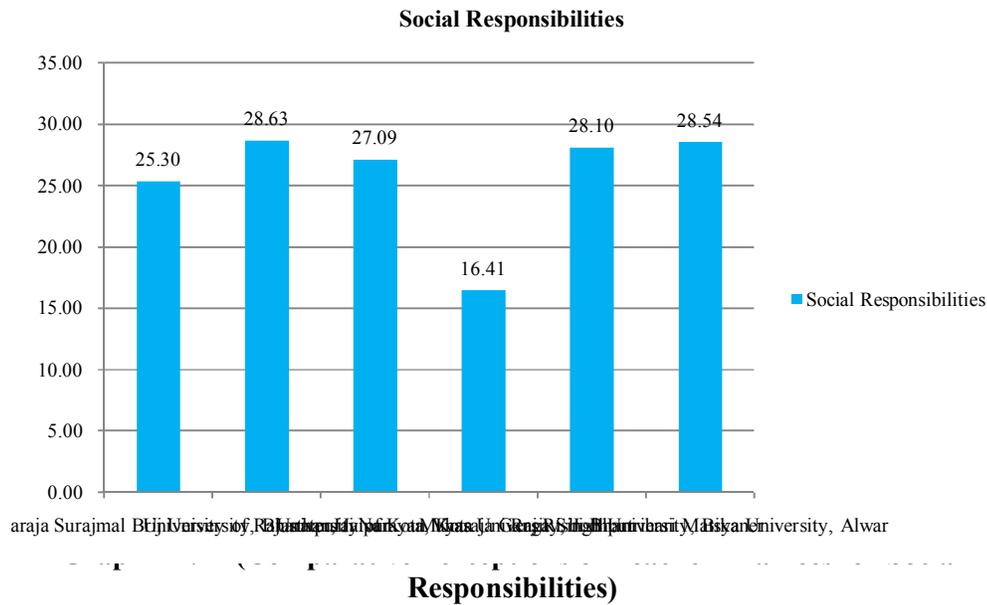
4.9.4 Dimension (4) Examination and Analysis of Professional Responsibilities



Graph-4.11 (Comparative Perception of Teacher Trainees for Professional Responsibilities)

The following Graph-4.11 shows that teacher trainees of B.Ed colleges under University of Rajasthan, Jaipur and Raj Rishi Bhartrihari Matsys University, Alwar were found to have highest equal mean (sequentially 43.31≈43.54) perception, while teacher trainees of B.Ed colleges under Jai Narayan Vyas University, Jodhpur were found to have lowest mean (26.66) perception regarding *professional responsibility* of NCFTE-2009. Teacher trainees of B.Ed colleges under University of Kota, Kota and Maharaja Ganga Singh University, Bikaner were found to have equal mean (sequentially 42.21≈42.52) perception regarding *professional responsibility* of NCFTE-2009.

4.9.5 Dimension (5) Examination and Analysis of Social Responsibilities



The following Graph-4.12 shows that teacher trainees of B.Ed colleges under University of Rajasthan, Jaipur, Maharaja Ganga Singh University, Bikaner and Raj Rishi Bhartrihari Matsys University, Alwar were found to have highest equal mean (sequentially 28.63≈28.10≈28.54) perception, while teacher trainees of B.Ed colleges under Jai Narayan Vyas University, Jodhpur were found to have lowest mean (16.41) perception regarding *social responsibility* of NCFTE-2009.

4.10 Discussion on findings

Open-ended responses were obtained from the 155 stakeholders on SPS and 403 teacher trainees on PSTT of BEd colleges under various universities of Rajasthan for knowing the perception regarding NCFTE-2009. The responses were analysed for each dimension of both tools. Major findings in the shape of graphs are presented and discussed as follows-

There is a hot debate over the most excellent approach of preparing teachers for improving outcomes for the learners they teach. Some contender says that enabling definite and easy entry into teacher training is necessary to fascinate strong

candidates (DoE, United States, 2002). Some others claim that investing in preparing professional and humane teacher will serve to develop our nation's educational ground (NCFTE, 2009). Since planning and preparation for student learning are a critical component of effective teaching, otherwise of its lack thereof will lead to failure. The enlightened class of society understands that good teachers are almost to be in a constant state of preparation and planning forever. But this does not always happen. Meador (2018) argued that preparing and planning definitely increase the usability of time and capacity of working. But most of the teacher trainees and stakeholders were found to agree on that, however, that we have no more robust research-basis for understanding how to prepare teachers to meet the challenges of rural schools (Cochran-Smith & Zeichner, 2005; Wilson et al., 2001). Some researchers suggest that teacher-characteristics measured by examination, and analysis of regular teaching are related to student learning and helps to gain knowledge (Wayne & Young, 2003). Stakeholders believe that teaching is not something you can do effectively on anyone without providing instructions. It involves a strong blend of knowledge of content, instructional strategies and classroom management tactics (Meador, 2018). It was the perception of both stakeholders and teacher trainees that student is not an empty vessel as it was understood 'Bland Slate' or 'Tabula Rasa' under the Aristotelian and Lockian theorems (Britannica Encyclopaedia, 2016), into which knowledge can be poured anyhow. Students can already have the knowledge or something misconceptions about the subject which influence the way of interpreting and being able to understand new knowledge. Therefore, teachers play a crucial role in helping students construct new knowledge upon whatever foundation that already exists (Fairbanks, 2011). It follows that in order to inspire their understanding; you have to know about prior knowledge

and ideas to help to change their misconceptions. This type of approach helps students understanding and explaining concepts and theories in their own meanings for discussing conflicts and paradoxes present in the subject. It also helps to point out the characteristics of subjects and linking subjects to each other on the basis of relevant contents with its application into everyday life. Per se, when students are engaged in constructing knowledge themselves, then they are taking an active role in their learning. In order to properly fulfil the responsibility of the children, a teacher needs to attain the qualities of professionalism. How professionalism can be achieved should be a focal effort about preparing teachers. The researcher found that stakeholders were more professionally responsible than the teacher trainees of BEd colleges under various universities of Rajasthan. Whatsoever the acceptance or belief concerning to professionalism and the main characteristic of an educational professional, the fact is that professionalism and the acquisition of professional dispositions are believed to be valuable by twenty-two different Specialised Professional Associations (SPAs); almost all of which have at least one standard addressing professionalism (Creasy, 2015). Therefore, professional responsibilities for a teacher include demonstrating accountability to the profession, the student, the school and the community. Examples of professional responsibility would consist of becoming an active member of one's professional association, volunteering for school or community functions and attending school events (Creasy, 2015). Silcock (1981) believes that the scopes of teachers' functions are specific and limited. She considers detachment, rationality, intentionality, impartiality and low intensity to characterise the teacher's professional responsibility. In the other aspect of responsibility, the researcher found that teacher trainees have better social responsibility than the stakeholders. Conclusively it may be an effect of the nature of work, the pressure of work, conditions of the working

environment, remuneration and salary problem, and other personal problems. Human interactions and communications processes are very complex (Fleer & Oers, 2018). Therefore, a teacher should encourage the recognition of opposing conservative ideology, respect for supported positions, sensitivity to cultural similarities and differences, answerability and a commitment to social responsibility (National Council for the Social Studies, 2002).

4.11 Objective (3). To study the policy document of NCFTE-2009 in the context of its implementation in Rajasthan at B.Edlevel

For analysing the discrepancy between goals of educational policy and outcomes from its implementation, Psacharopoulos (1989) argued about the reason why reforms fail is that firstly, policies are being prepared on goodwill instead of a research-proven cause-effect relationship and; secondly, the intended policy is neither implemented nor prepared on time (p.179). Psacharopoulos (1989) has raised a question the validity and reliability of international comparisons of education policies, standards and academic achievement. It is the same as denying the universal grammar of Noam Chomsky (Everett, 2012). He has said pragmatic approaches can help in examining the changing nature of comparative education (Zajda, 2005, p. xxiv) because it is a behaviourist approach that helps understand the changing dimensions of behaviour. A critical problem about a curriculum plan is that why has it is planned, how it will be implemented and, what are the teacher's concerns for the future of it. The answer to all these questions lies in the fact that in describing or measuring curriculum implementation (Leung, 2008), the teachers themselves should focus on the source of problem as well as source of evidence also (Gross et al., 1971; Doyle & Ponder, 1977; Fullan, 1982). The NCFTE-2009 is a nationalised document of the primary source to implement content into B.Ed courses. In this study, syllabuses of all

ten state government universities, which are University of Rajasthan at Jaipur, University of Kota at Kota, Vardhman Mahaveer Open University at Kota, Maharaja Ganga Singh University at Bikaner, Raj Rishi Bhartrihari Matsya University at Alwar, Maharaja Surajmal Brij University at Bharatpur, Pandit Deendayal Upadhyay University at Sikar, Mohan Lal Sukhadia University at Udaipur, Maharishi Dayanand Saraswati University at Ajmer and Jai Narayan Vyas University at Jodhpur, were analysed to check the implementation of the NCFTE-2009 (see the Table 4.27). The researcher found that all universities included adequate content of language development (NCTE, 2009, p. 81), pedagogical training (NCTE, 2009, pp. 15, 19, 21, 38), and to develop skills of classroom management (NCTE, 2009, pp. 38, 57). It is worded in the NCFTE-2009 that “opportunity is to be made in the design of the teacher education programme structure and within each area of study in a manner that allows an easy flow of movement from experience to theory and theory to field experiences” (p. 53). Syllabuses of all universities were found to be flexible with content remembering the future perspective as visioned and recommended by the NCTE, but syllabuses of Vardhman Mahaveer Open University and Mohan Lal Sukhadia University were found with ease of need of the learner. The NCFTE-2009 recommends that through short research projects, teacher trainees and teacher practitioners can be able to develop skills of observation (p. 57), and reflection on observations in the classroom by group discussion (p. 60). It was observed that all universities insist on peer observation through feedback on teaching during practice teaching observation and supervised lesson planning. All universities are planning of community services, fairs, festivals to prepare teacher trainees for culture promotion (NCTE, 2009, p. 31). These are also applying information communication technology, games, seminars, workshops and peer group projects so that holistic

development of the learner can be done. All universities believe that the leading role and responsibility of the teacher is to understand the learner and “the classroom as a social context where the social context greatly influences learning” (NCTE, 2009, p. 31). Since, implementation is an iterative process in which ideas, expressed as policy, are transformed into behaviour, expressed as social action” (Paudel, 2009). The NCFTE-2009 advocates that “all teacher education programmes must focus on and accord high priority to the development of student teacher’s language competence and communication skills”. Therefore the development of communication skills of a teacher was found of favouring by all universities through behavioural applications. The social action transformed from the policy is typically aimed at social betterment and most frequently manifests as programmes, procedures, regulations, or practices.

As we know that the implementation process includes action on the part of the policy, forasmuch expected outcomes refer to the real effect on the problem for which the plan has been prepared. Policy implementation is considered as the process of carrying out a decision by the government(s) (Paudel, 2009). Many scholars have found that previous experiences, researches and proper decision-making are useful making the conceptual distinction between the policy implementation process and policy outcomes, even though these are entirely interactive in practice (James et al., 1987). The NCFTE-2009 proposes training of teacher trainees through hands-on experience and learning materials, designing appropriate activities for children of different age groups (p. 38)” which was being adopted in syllabuses of all universities of Rajasthan.

Being involved in a successful pedagogue-relationship can help you to make wise and appropriate decisions about personal teaching career (McKimm, 2003;

Jollie, 2007), while Educational experts highlight only strengths of teaching and, their performance encouraging them to reflect on their challenges (Esia-Donkoh & Ofosu-Dwamena, 2014). The researcher found that inadequate counselling and supervision (NCTE, 2009, p. 40), insufficient field supervision of educational activities (NCTE, 2009, p. 78) and unplanned training of leadership (NCTE, 2009, p. 72) were being taught, while syllabuses of all universities involved the quantitative analysis of the content to be taught in teacher training courses. The notion that supervision and evaluating teachers might lead to their professional development has traditionally made sense; certainly, the emphasis on teacher evaluation suggest so (Greene, 1992). Therefore, one mechanism for applying an associative approach to professional development can be through a planned system of observing methods, techniques and styles of teachers (Greene, 1992). Modern demand of teaching requires teachers to be enabled for lifelong learning. For teachers' continuous development, a lot of effective professional activities either individually, or in groups, through professional development strategies including study groups, peer coaching, action research, mentoring, teaching portfolios, team teaching, and in-service training are need of toady (Hismanoglu and Hismanoglu, 2010). All universities were found to evaluate theoretical as well as practical knowledge of the trainees about pedagogy and their teaching-learning skills through internal and external examination. The NCFTE-2009 advises understanding that “true education is a process of developing the human personality in all its dimensions intellectual, physical, emotional, social, moral and spiritual” (p. 32). It was observed that all universities had been forcibly directed for personality development of teacher trainees as well as teacher educators in their syllabus through reversible social transformation and developing physical and mental abilities to the fullest extent. Making it helps in evaluating intellectual isolation,

promoting health, physical and yoga education with preparing them for commitment to justice and zeal for social reconstruction. The focal aim of NCFTE-2009 is to prepare humane teacher who welcomes multi-cultural education and diversity in the classroom; cares children; shows flexibility according to changing contexts; can links formal school knowledge with community knowledge; understands the perspective of equitable and sustainable development; and promotes positive competition between learners.

The NCTE Act has been applied by the council to strive for attaining quality and maintain qualitative development of teacher education. The quality of teacher education does not depend only on the professional development for a particular curriculum, but also on the ways by which the curriculum is implemented in teacher education institutions (Siddiqui, n.d.). The NCFTE-2009 favours holistic development of children through enabling the teacher for empathetic treatment, tactful observance, and to be sensitive to contemporary issues and problems (like issues related to gender, caste and religion). Concerning these facts, the researcher found that all universities have prepared their syllabus through fulfilling the necessary conditions for preparing humane and professional teacher. The syllabuses of all universities were found having contents which are demanded and expected for preparing professional teacher as commitment and conformity with the values enshrined in the Constitution. They have managed contents of course for action-based learning in a child-friendly, child-centred manner, burden-less education. It was also found in the syllabuses of all universities that they have included the content of conceptual understanding of attitudes, dispositions, habits and interests through reflecting on self-experiences. Remembering the current perspective and need of the society, all universities have established ICT laboratories for technological knowledge development of teachers

through developing values for peace. From the beginning, the NCTE has adopted a two-pronged strategy to ensure quality in teacher education, in which one involves the development of guidelines for curriculum through nationwide consultations and consensus and, the other one is to get permission and support of the state governments through its universities to renew the curriculum of teacher education (Siddiqui, n.d.). In its strategy, Government of Rajasthan has started some schemes and projects in the area of education like fixing the 25% quota in private schools to get admission under Right to Education-2005 for the economically and socially marginal groups of Rajasthan, inclusion of differently-abled children in normal school, merging of primary, middle and secondary school into senior secondary schools to maintain the quality of education, opening of Swami Vivekananda English Medium Schools, opening Adarsh school at every Gram Panchayat etc.

- **School integration:** Primary or upper primary schools located in close proximity of secondary or senior secondary schools have been integrated for better supervision and optimum utilisation of resources. Out of the total 13380 schools under the secondary education department, 12272 schools are merged.

Result:

Class	Increase in
I-V	~19% increase in enrolment
VI-VII	~18% increase in enrolment
IX-X	~12% increase in enrolment
XI-XII	~19% increase in enrolment
Source: http://vasundhararaje.in/rajasthan-reforms/school-education	

- **Adarsh Schools:** As per the declared budget of 2015-16, it was announced that one school (preferably form class I to X/XII) in every Gram Panchayat would be developed as Adarsh School in first phases. The school will be from which are working as mentor schools and resource centres for the other

schools located in the Gram Panchayat. Till now 9895 government schools have been developed as Adarsh School (School Education, n.d.).

- **Swami Vivekananda Government Model Schools (SVGMS):** These are the CBSE affiliated, English medium schools opened for providing quality education to the talented rural children of Educationally Backward Blocks (EBBs). Today more than a hundred SVGMS are working sincerely (School Education, n.d.).
- **Sharde Girls' Hostels:** The state government of Rajasthan has opened Sharde Girls' Hostel in each Educationally Backward Block to provide residential facilities for girls studying in IX to XII classes. Till now, more than 150 hostels are providing safe, clean, hygienic and balanced accommodation with educational prestige of more than 7500 girls (School Education, n.d.). Due to these efforts enrollment of girls is increases and Gender Parity Index also improved.
- **Information and Communication Technology Interventions:** The National Policy of Education (NPE-1986) and the Programme of Action (PoA-1992) recognised that teachers should be provided freedom to innovate, to devise appropriate methods of communication and activities relevant to the needs of and capabilities of and the concerns of the community.” The policy further states that “teacher education is a continuous process, and its pre-service and in-service components are inseparable. As the first step, the system of teacher education will be overhauled. The government of Rajasthan has done the following works for applying innovations in teacher education directly or through school education.

- a) **Shaala Darpan:** It is an e-Governance platform for all government schools in the Rajasthan which is prepared to improve quality of learning, the efficiency of school administration, governance of schools and service delivery to key stakeholders namely, students, parents, teachers, community and schools. It is a real-time Management Information System (MIS) (Shaala Darpan. n.d.).
- b) **Rajasthan Education Portal:** It is a web portal which is developed and being enriched with regular update. It offers e-content in the form of chapters, videos, worksheets etc. for all classes I to XII in consonance with the syllabus (Rajasthan Education Portal, n.d.).
- c) **Digital Literacy under PM's Digital India Campaign:** It is the programme under which ICT labs in more than 7000 secondary and senior secondary schools are established and more than 3700 Non-IT literate teacher trained (Digital India Programme, 2018).
- d) **Satellite Classes:** About 2000 schools of Rajasthan are getting help through it, focusing on difficulty areas with quality and improved learning.
- e) **Regular Video Conferencing:** The ICT department of Rajasthan is doing well for preparing video content for the schools by video conferencing. Till now, more than 13380 schools have discussed their ideas.

- **Transport Voucher Scheme:** For ensuring ease of access of schooling for girls, the government of Rajasthan provides bicycles and transport voucher of Rupees 20/- per day for girls of class IX to XII coming from more than 5 kilometres. More than 12000 girls have been benefitted in this project. Girls more than 7388 of class VI to VIII who are studying in SVGMS, benefitted also. Due to this project, transition rate, enrollment and retention of girls have improved considerably.
- **State Initiative for Quality Education (SIQE):** This project was started for improving level of learning of students of class I to V. Under this project for intensive care of children, fast and furious training is being given to teachers with five day orientation on Child Centred Pedagogy (CCP), Activity Based Learning (ABL) and, Continuous & Comprehensive Evaluation (CCE) committably.
- **Vocational Education:** It has been started as additional for students of class IX to XII in selective schools to develop employability skills in students and reduce dropout. In this project, more than 16000 students have been benefitted by developing skills of automobile, wellness, healthcare, beauty and information technology.
- **Inclusion of Differently Abled:** The government of Rajasthan has taken the initiative of welcoming differently-abled into the mainstream of education by giving admission to traditional schools. Therefore, in schools of more than 249 blocks of Rajasthan, Environment Building Programme has been initiated for ensuring the inclusion and retention of differently abled.

- **Staff Rationalisation:** The government of Rajasthan is following the Right to Education Act - 2009 under which the student-teacher ratio of 1:40 is being followed in rural areas to ensure the optimal use of strength.

Table 4.27

Comparison of B.Ed course syllabus of Universities in Rajasthan

University/ Components of the Curriculum	UoR Jaipur	UoK Kota	VMOU Kota	MGSU Bikaner	RRBMU Alwar	MSBU Bharatpur	PDUSU Sikar	MLSU Udaipur	MDSU Ajmer	JNVU Jodhpur
1	2	3	4	5	6	7	8	9	10	11
Language development and adequacy	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Pedagogical training	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Skill development for classroom management	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Mindful of learner's needs	×	×	✓	×	×	×	×	✓	×	×
Flexible according to future perspectives	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Peer observation	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Feedback on teaching	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Supervised lesson planning	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Preparing for culture promotion	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Preparing for social participation	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Information and Communication Technology	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Strategies and Approaches for Development of Learner	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Understanding the Learner	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Roles and responsibilities of a Teacher	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Communication Skill	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Behavioural applications	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Preparing teaching aids	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Monitoring and leadership	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Evaluation and assessment	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

Personality development	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Questioning skill development	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Promoting positive competition between learners	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Empathetic treatment	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Tactful observance	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Professional development of teacher	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Preparation of humane teacher	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Supportive to universalisation of elementary education	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Suitable to the different demands and expectations of teacher education	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Determining quality and extent of learner's achievement	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Commitment to the profession	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Social Transformation	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Sensitivity to contemporary issues and problems (like issues related to gender, caste and religion)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
All round development of child	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Conformity with the values enshrined in the Constitution	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Development of physical and mental abilities to the fullest extent	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Learning through activities, discovery and exploration in a	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

child-friendly and child-centred manner											
Commensurate of coordinated development of teacher education	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Ancillary for learning without burden	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Helpful in evaluating intellectual isolation	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Professional training in pedagogy	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Helpful in examine own biases and beliefs	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Reflecting on self-experiences	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Conceptual understanding of attitudes, dispositions, habits and interests	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Perspectives for equitable and sustainable development	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Perspectives of gender equity	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Perspectives that develop values for peace, respect the rights of all	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Linking formal school knowledge with community knowledge	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Professional development of Information and Communication Technology and e-learning	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Research and innovation	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Promotion of health, physical education and yoga	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Constructive teaching and	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

training										
Integrative and eclectic	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Flexible according to changing contexts	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Multi-cultural education and teaching for diversity	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Diversity of learning spaces and curriculum sites	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Commitment to justice and zeal for social reconstruction	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Commitment to care of children	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

4.12 Objective (4). To give suggestions for the better management of teacher education institutions in regard of NCFTE-2009

Based on the qualitative and quantitative analysis, it was found that quality in teaching and learning of student are closely interrelated. In India through the pursuit of reorganising and restructuring the teacher education, in the blue flame of reports of previous policies as Kothari Commission-1964, Acharya Ramamurti Committee-1990, National Curriculum Framework-2005, National Knowledge Commission-2005, regulations of NCTE-2009 & 2014, Right to Education Act-2009, National Curriculum Framework for Teacher Education (NCFTE)-2009, etc., the curriculum for teacher education have perceived shift in paradigm in recently gone years. After all of it, some problems remain as it is, like timely updating of the curriculum of teacher education, the standard duration of internship for maintaining quality, proper skill development programmes for in-service teachers, lack of application of practical aspects, curriculum content for teacher education through distance mode. The present curriculum framework for teacher education, namely NCFTE-2009 refers to three dimensions to suggest on teacher education foundations on education, curriculum and pedagogy, and school internship. The suggestions are based on the following dimensions.

4.12.1 Timely Updation of curriculum

It is pointed in NCFTE-2009 that a teacher updates oneself about one's academic discipline or other areas of the school curriculum (p. 64), Therefore, to satisfy the foundations of education, the teacher education curriculum needs to be modified according to current perspectives of society, technology, profession and global world.

4.12.2 Regular monitoring of B.Ed colleges

The NCFTE-2009 suggests for the supervision of field functions as training of teachers, field supervision of educational activities, research and development of curriculum and teaching-learning materials, advocacy and developmental work with teachers and communities (p. 78). But it does not give any specific guideline for procedures of supervision. While National Knowledge Commission has suggested for the teacher training to be put under the harsh control of this regulatory body for the selection of teacher, students and provisions of good infrastructure etc.. It also has suggested for regular monitoring of B.Ed colleges through examining time to time with taking action. It was observed during data collection that today it seems that mal-practising is on the peak in the B.Ed colleges at large. Teacher trainees are staying non-attending by paying a specific amount to the college administration, and their attendances are being filled fearlessly. Thus degree distribution institutions in the form of shop or factory are growing to spoil the whole education system. Therefore, it is forcedly requirement to be banned these types of institutions for becoming degree selling factories. It was found through qualitative analysis that the National Council for Teacher Education examines the college only once in many years. On the other hand, the university to which with the college is affiliated, reviews the documents of the college once a year and decides it as a final inspection. But the regular and actual investigation is never there. In this way, these colleges do their arbitrariness.

4.12.3 Training to relief from tensions

Problems of education existed worldwide, and agencies of education are trying to resolve these problems. The report of *Jacques Delors* entitled '*Learning: the treasure within*' envisages that if education is to succeed in its tasks, curriculum as its core should be restructured or repacked around the four pillars of learning. These four

pillars learning to know, learning to do, learning to live together and learning to be can help to overcome on (7) seven tensions as (i) tension between global and local; (ii) tension between universal and individual; (iii) tension between tradition and modernity; (iv) tension between long term and short term consideration; (v) tension between competition and equality of opportunity; (vi) tension between immense knowledge and the limited capacity of human being to engulf; and (vii) tension between spiritual and material. Thus the curriculum for teacher education should be reformed according to these four pillars to overcome concerns of teacher education.

4.12.4 Training of value education

In ancient India, during the *Rigvedic* period, societies were *matriarchal*. Different traditions were part of families. Communities promote various cultures. Therefore, the education system, too, became multicultural. The draft of NPE-2016 also advocates education with Indian values. It is well known that India has suffered a severe problem of terrorism and fundamentalism. The report of *University Education Commission 1948-49* opined that there are some essential prerequisites to reform the education are to transform it, to endeavour, to relate it to the life, needs and aspirations of the people, so that, it can be the dominant instrument of social, economic and cultural transformation necessary for the realisation of the national goals. This reports suggested that education should be developed as a tool for increasing productivity, achieving the goal of social acceptance and national integration. It should be tone up the process of modernisation for cultivating social, moral and spiritual values (Kumar, 1976, pp.153-154.). Today it is needed to prepare civilians for contributing peace, harmony and mutual-trust to build a civilised cultural society. Today, to retain and to spread Indian values of culture, socialism, professionalism, democracy and secularism, the draft of NPE-2016 recommends that

“science and technology in ancient and medieval India covered all the major branches of human knowledge and activities” (Report of NPE-2016, pp.1-2). The NPE-2016 follows the Indian ethics of “*Swadeshe pujiyate raja, vidwan sarvatra pujiyate*” (Report of NPE-2016, p.1). Every invention comes with other new hidden challenges. Thus, the curriculum of teacher education may be modified with a compulsory need to prepare teachers for insightful and multi-facet strategies of teaching and training. The curriculum of today should be for sustaining teachers to face the problem of social isolation and parental pressure.

4.12.5 Development of critical and diverse thinking

The basic aim of the education is fostering the ability of critical thinking in the children to find out the reason behind the things or happenings and using judgement effectively in decision-making (McMillan, 1987). While diverse-thinking is to understand that everyone is unique by its nature and may recognise the individual difference between us (Summer Diversity, 1999). In such, a teacher can help to improve critical and diverse thinking by giving opportunity to ask questions, helping in making basic assumptions, awaking of the cognitive biases and personal prejudices of learners, enabling the learner for reversing things, enabling for evaluating the existing evidences and enabling the learner for believing that no one can think critically and diversely hundred per cent.

4.12.6 Development and Continuous evaluation of life skills

The NCFTE-2009 has been prepared, remembering the perspective of equitable and sustainable development (p. iii). But it does not have any place for the responsibility for development nor continuous evaluation of life skills. Since education is believed as the process of continuous development, therefore, the

curriculum of teacher education should be prepared for enabling the teacher for developing life skills in his students with its' evaluation. Life skills are the skills which help to apply experiences in daily life. These also enable an individual to deal with difficulties and concerns in life. Life skills include self-awareness, self-actualisation, problem-solving, thinking skills, creative thinking, diverse thinking, critical thinking, decision making, interpersonal and intrapersonal relationship, communication skills, sympathy and empathy, emotion understanding skills etc.

4.12.7 Developing competencies among teachers

The NCFTE-2009 have given the high priority to the development of student-teacher's language competence (p. 36) and competencies related to teaching-learning, professional attitudes and values (p. 52). Selvi (2010) researched and found that development of competencies in a teacher is a valuable activity to conduct their profession (p. 169) and to collaborate with colleagues and other specialists or people who are interested in curriculum studies and education (p. 170). She also found that teaching competencies can help to carry out their teaching role more effectively through developing the ability of learning and skills of using the means or tools of learning to improve the knowledge throughout the life (p. 171). She advised to know students' willingness and to create a positive feeling for the learning-teaching process, to help to provide freedom to students, to enable the learner for listening, observing, speaking, questioning, analysing and evaluating through producing, manipulating, storing, communicating and disseminating information. Shkedi (1998) redefined that professional competencies of the teacher should include the curriculum competencies since the curriculum competencies are core competencies of teachers' professional developments. Teachers' curriculum development competencies are not clear, not well defined or neglected; teachers have problems concerning the curriculum

development and implementation of the curriculum in their fields. Understanding of curriculum philosophy, curriculum theory and curriculum development models, curriculum development studies, learning and teaching approaches and models are the most neglected aspects related to teachers' curriculum competencies. Teachers' curriculum competencies are related to micro and macro level curriculum design, development and implementation. Teachers' curriculum competencies are necessary for partnerships between teachers and the curriculum development team during the curriculum studies. The curriculum development team and the teachers have unique roles in the curriculum development process.

4.12.8 Encouragement teachers for research and quality

There is a need to increase research documents on educational practices reflectively and analytically to innovate with different models of teacher education (NCTE, 2009, pp. 15-16). Borgia and Schuler (1996) revealed that teacher investigates their practice in new ways. Therefore, teachers should be viewed as equal partners in deciding what works best and what needs improvement in their classrooms.

4.12.9 Maintaining academic uniformity

It is the main requirement of B.Ed colleges of Rajasthan to maintain ideal educator and pupil ratio of 1:14, which is decided by the NCTE. Finn (2003) concluded that the students became occupied in the small class size, both academically and socially. Therefore, their active engagement caused academic achievement improvement.

4.12.10 Maintain quality in internship for B.Ed course

The internship of appropriate duration is a must activity in teacher education, and it should be objective, reliable and valid and of proper time. Chakrabarty (2016) concluded that globally, teacher education is being made Work-Based Learning (WBL) programmes which will help to encourage and practice worldwide offering students' practical experience in their chosen field of study (p. 475). Therefore, an internship is a supervised discipline-related work experience which controls experiential learning through receiving academic credit while employed by an organisation in a chosen area of interest. It is also a quality work experience which is guided and managed by an experienced supervisor in a position with duties that the student has not previously performed, which can be beneficial for the future career of the trainee. An internship is a formal arrangement designed to provide opportunities for students to study and experience professional career interests in the community (Stretch & Harp, 1991, p. 67).

Chapter-5

Summary, Findings, Conclusions and Suggestions

5.1 Introduction

On the rise of various complicated civilisations at the bank of different rivers of the world knowledge was very complicated to transfer person to person and from generation to generation. There was no mechanism to transfer and preserve the same. Of the earliest grassroots, drilling and memorisation of facts, sentences and vocabulary were the most approved methods of learning until children understand. It was the time when John Amos Comenius shows interest in the nature of a child and the actual perception of things. He favoured and revolutionised the teaching of Latin language.

At that time most of the followers of ‘Stoicism’ and ‘Peripatetic’ (School of philosophy was originated from the ideology of Aristotle) and later Locke suggest that mind like a ‘blank slate’ (Tabula Rasa) from birth and knowledge is God-given. Locke believed that knowledge depends on the exercise of faculties on raw senses from the external world. When mind receives senses than its faculty’s work of discrimination, sifting with sorting till knowledge appears.

At the starting of the eighteenth century, Rousseau appears as a naturalistic teacher and also as an educator who visualised the nurturing of the body and the senses in place of the intellect. He forces on the exercise of mind. The predecessor or followers of Rousseau tries to create schools with the natural environment and according to the needs of children with controlled environment guided by the

teachers. At that time most of the education reformists of the world like Pestalozzi, Herbart, Frobel, James and Wundt were doing efforts to reform the teacher education through their efforts.

In India, before independence, many efforts were made by the people, committees of Indian society as well as British society. After independence, various commission and committees practised reforming education and teacher education of India. With the establishment of NCTE (National Council for Teacher Education), teacher education got graceful progress. In the improvement of National Curriculum Framework for Teacher Education (NCFTE), NCTE received precious participation from NGOs and various experts of various areas of education; and also had the help of evaluating workout done relatively.

First Curriculum Framework for Quality Teacher Education (CFQTE) was prepared in 1998 by afterwards NCTE. The NCTE finalised a discussion draft of NCFTE in August 2009, and resultant NCFTE-2009 was shaped. The NCFTE-2009 materialises to accept the fact that unwell and inadequately designed and executed teacher education curriculum cannot produce critical and rational teachers who can teach in those ways which are contemplated in our educational policies and also in NCF-2005. The NCFTE-2009 emphasises the need for careful, rigorous, and continuous support to teachers, through pre-service and in-service teacher education, so that they can become autonomous, reflective, and caring professionals equipped with an appropriate knowledge-base, disposition, values, abilities, and experiences of working and dealing with children. The teacher is envisioned as an empowered and self-learning intellectual who nourishes and enhances the idea of democracy and prepares our young generations for the same. They are autonomous professionals who

are responsible for running the education system with accountability to the immediate community and larger society (see NCFTE-2009, pp. 19-21 and 64-67). All the findings, conclusions and suggestions are given on the basis of results obtained from the tools used in this research.

5.2 Need of the Study

Good teachers are always sought to prepare. But it was also a need for what should be efforts to prepare good teachers. After independence, there were many commission and committees developed time to time for starting and reforming the teacher education systematically. Gardner (1973) in his document Versatility and Innovation opined that “of course, our schools cannot be wholly preoccupied with educating for innovation; they are concerned with continuity as well as change. There are continuities in the human condition, continuities in our tradition and lessons to be learned from the past”. Therefore, preparing teachers to play multi-role in classroom or school steps of-

- Inspiring, supporting and making humanitarian helper in teaching and learning situations which empower learners to realise their capacities, to appreciate their physical and intellectual potentialities, to grow the personality and necessary societal and human ethics to play the role of responsible citizens.
- Being an energetic supporter of the group of individuals who make sensible efforts to contribute towards the process of renovation of school education and teacher education curriculum to retain its significance for shifting the societal needs and individual needs of learners, in the light of emergent goals and educational primacies. The

various researches show that teacher education forever becomes a vital preference of society. Every country has made so many efforts to systematically reform teacher education and India is also not an exception of this. But after of all, there is a lack of globalised teacher education curriculum due to some uncertainties. For examples individual differences, gender inequality, regionalism, environmental factors etc.

After the development of technologies, the question, how good learners are prepared, is before us today too. The teachers are trying to lessen the burden of the learner by reducing pressure, by making the classroom more interactive and collaborative, by using technology in teaching. Some useful strategies for teaching and learning are earmarking as follows-

- Steadiness of power – for the empowerment of learner.
- Content – according to the needs of learners.
- The responsibility of teacher being as guide, supervisor, supporter and inspector.
- Accountability for learning decided by the environment of learning and willing for learning.
- Objectives and procedure of evaluation of self-assessment and problem-solving.

In India, various committees and commissions gave some recommendations to start and reform teacher education. For examples University Education Commission (1948-49), Secondary Education Commission (1952-53), National Education Commission (1964-66), Chattopadhyay Committee Report (1983-85), Yashpal

Committee (1993). After the study of recommendations of these commissions and committees and findings of various researches, it is experienced that there were some deficiencies in the curriculum of teacher education made earlier. Therefore, the need of study to analyses NCFTE-2009. Rajasthan is a big state where a range of teacher education colleges present while the status of teacher education is going to decreasing day by day. So in the view of the researcher, there is a need to study the factual situation of teacher education in Rajasthan.

5.3 Statement of the Problem

“An Analytical Study of National Curriculum Framework for Teacher Education”

5.4 Variables of the Study

5.4.1 Independent Variable

In the following study, National Curriculum Framework for Teacher Education – 2009 is treated as independent variable.

5.4.2 Dependent Variables

In the following research, Teacher Education is dependent variable.

5.5 Operational Definitions of the Technical Words Used in Title

5.5.1 National Curriculum Framework for Teacher Education-2009

Framework for teacher education which was prepared in 2009 by the National Council for Teacher Education to decide that what is to be taught to prepare the teacher and to make them skilful.

5.6 Research Questions

The research questions of this research are as follows-

1. What are the theoretical concepts and objectives of NCFTE-2009?
2. What is the perception of stakeholders about NCFTE-2009?
3. What is the status of implementation of the policy document of NCFTE-2009 in Rajasthan at B.Ed.level?
4. What could be done for better management of teacher education institutions in Rajasthan state in regard of NCFTE-2009?

5.7 Objectives of the Study

The objectives of this study are as follows-

1. To analyse the theoretical concept and objectives of NCFTE-2009.
2. To study the perception of stakeholders in regard of NCFTE-2009.
3. To study the policy document of NCFTE-2009 in the context of its implementation in Rajasthan at B.Ed. level.
4. To give suggestions for the better management of teacher education institutions in regard of NCFTE-2009.

5.8 Hypothesis

In this research following null hypothesises were prepared to compare the means.

H₀1: Stakeholders of teacher education / B.Ed. colleges under various universities of Rajasthan will not differ significantly in their perception towards the NCFTE-2009.

H₀2: Stakeholders of B.Ed. colleges under Maharaja Surajmal Brij University, Bharatpur and the University of Rajasthan, Jaipur will not differ significantly in their perception towards the NCFTE-2009.

H₀3. Stakeholders of B.Ed. colleges under Maharaja Surajmal Brij University, Bharatpur and the University of Kota, Kota will not differ significantly in their perception towards the NCFTE-2009.

H₀4. Stakeholders of B.Ed. colleges under Maharaja Surajmal Brij University, Bharatpur and Jai Narayan Vyas University, Jodhpur will not differ significantly in their perception towards the NCFTE-2009.

H₀5. Stakeholders of B.Ed. colleges under Maharaja Surajmal Brij University, Bharatpur and Maharaja Ganga Singh University, Bikaner will not differ significantly in their perception towards the NCFTE-2009.

H₀6. Stakeholders of B.Ed. colleges under Maharaja Surajmal Brij University, Bharatpur and Raj Rishi Bhartrihari Matsya University, Alwar will not differ significantly in their perception towards the NCFTE-2009.

H₀7. Stakeholders of B.Ed. colleges under the University of Rajasthan, Jaipur and Jai Narayan Vyas University, Jodhpur will not differ significantly in their perception towards the NCFTE-2009.

H₀8. Stakeholders of B.Ed. colleges under University of Rajasthan, Jaipur and Maharaja Ganga Singh University, Bikaner will not differ significantly in their perception towards the NCFTE-2009.

H₀9. Stakeholders of B.Ed. colleges under the University of Rajasthan, Jaipur and Raj Rishi Bhartrihari Matsya University, Alwar will not differ significantly in their perception towards the NCFTE-2009.

H₀10. Stakeholders of B.Ed. colleges under the University of Kota, Kota and Jai Narayan Vyas University, Jodhpur will not differ significantly in their perception towards the NCFTE-2009.

H₀11. Stakeholders of B.Ed. colleges under University of Kota, Kota and Maharaja Ganga Singh University, Bikaner will not differ significantly in their perception towards the NCFTE-2009.

H₀12. Stakeholders of B.Ed. colleges under Jai Narayan Vyas University, Jodhpur and Raj Rishi Bhartrihari Matsya University, Alwar will not differ significantly in their perception towards the NCFTE-2009.

H₀13. Stakeholders of B.Ed. colleges under Maharaja Ganga Singh University, Bikaner and Raj Rishi Bhartrihari Matsya University, Alwar will not differ significantly in their perception towards the NCFTE-2009.

H₀14: Teacher trainees of B.Ed. colleges under various universities of Rajasthan will not differ significantly in their perception towards the NCFTE-2009.

H₀15: Teacher trainees of B.Ed. colleges under Maharaja Surajmal Brij University, Bharatpur and the University of Rajasthan, Jaipur will not differ significantly in their perception towards the NCFTE-2009.

H₀16. Teacher trainees of B.Ed. colleges under Maharaja Surajmal Brij University, Bharatpur and the University of Kota, Kota will not differ significantly in their perception towards the NCFTE-2009.

H₀17. Teacher trainees of B.Ed. colleges under Maharaja Surajmal Brij University, Bharatpur and Jai Narayan Vyas University, Jodhpur will not differ significantly in their perception towards the NCFTE-2009.

H₀18. Teacher trainees of B.Ed. colleges under the University of Rajasthan, Jaipur and Jai Narayan Vyas University, Jodhpur will not differ significantly in their perception towards the NCFTE-2009.

H₀19. Teacher trainees of B.Ed. colleges under the University of Kota, Kota and Jai Narayan Vyas University, Jodhpur will not differ significantly in their perception towards the NCFTE-2009.

H₀20. Teacher trainees of B.Ed. colleges under Jai Narayan Vyas University, Jodhpur and Maharaja Ganga Singh University, Bikaner will not differ significantly in their perception towards the NCFTE-2009.

H₀21. Teacher trainees of B.Ed. colleges under Jai Narayan Vyas University, Jodhpur and Raj Rishi Bhartrihari Matsya University, Alwar will not differ significantly in their perception towards the NCFTE-2009.

H₀22. Teacher trainees of B.Ed. colleges under Maharaja Ganga Singh University, Bikaner and Raj Rishi Bhartrihari Matsya University, Alwar will not differ significantly in their perception towards the NCFTE-2009.

5.9 Delimitations of the Study

The study is limited to the teacher trainees and teacher educators of Rajasthan state's only.

5.10 Limitations of the Study

The study is limited to methodological limitations and limitations of the tools. Therefore, the results, findings and conclusions were dependent on methodological limitations and limitations of the tools used in this research for collecting data.

5.11 Population

Population mentions to the aggregate or totality of those conforming to a set of specifications (Polit & Beck, 2008, p. 50). It is an intact set of elements (persons or objects) that possess some common characteristic defined by the sampling criteria established by the researcher. The population of this particular study consists of teacher trainees and faculties of B.Ed. colleges of Rajasthan.

5.12 Sample and Sampling

In this research Random sampling technique has been employed for drawing samples from the population. In statistics, the term random has a much more specific meaning than the common usage of the term. It does not mean haphazard. In statistical jargon random means that every member of a population has an equal chance of being selected into a sample. The main benefit of random sampling is that any differences between the sample and the population will not be systematic (Urdan, 2011, p. 3).

In this phase, two criteria were decided to select sample districts – (1) districts were selected having more than ten teacher education colleges running regularly from ten years. In which twenty-one districts were notified; (2) districts were selected according to the density of population mentioned in Census of India 2011 with the following criteria.

- (iv) Districts were having a density between 1-200 people/square kilometre (three districts as Bikaner-78; Jodhpur-161; Baran-175) were selected randomly in this criteria.
- (v) Districts were having a density between 201-400 people/square kilometre (two districts as Jhalawar-227; Kota-374) were selected randomly in this criteria.
- (vi) Districts were having a density between 401-600 people/square kilometre (three districts as Jaipur-595; Bharatpur-503; Alwar-438) were selected randomly in this criteria.

These eight (08) districts as Alwar, Baran, Bharatpur, Jaipur, Jhalawar, Jodhpur, Kota and Bikaner were selected randomly through a fish-bowl technique for collecting data to know the perception of teacher trainees and stakeholders regarding NCFTE-2009. The data of the research was collected using two rating scales, one of which was *'Stakeholders' Perception Scale regarding NCFTE-2009'* and other one *'Perception Scale of Teacher Trainees regarding NCFTE-2009'*, from 150 teacher educators and 300 teacher trainees of the B.Ed. colleges of these eight districts of Rajasthan.



Figure (5.1) Sampling

5.13 Research Tools Used in the Study

In this research following tools were used for collecting data:

5.13.1 Stakeholders' Perception Scale regarding NCFTE-2009

In this research for estimating the reliability of 'Stakeholders' Perception Scale regarding NCFTE-2009', Cronbach-alpha coefficient was calculated. Cronbach-alpha Coefficient indicates inter-item correlation or inter-item consistency within the dimension. Values of Cronbach-alpha Coefficient obtained for each dimension is given in the following table –

Dimension	Cronbach-Alpha Coefficient
Planning and Preparing for Student Learning	0.843
Teaching and Instructions	0.822
Examination and Analysis of Teaching and Learning	0.784
Professional Responsibilities	0.798
Social Responsibilities	0.849

Test-retest reliability

In this research, the test-retest reliability of the entire rating scale was established. The value of the reliability coefficient as the Spearman-Brown coefficient was obtained to be 0.877. The high value of the reliability coefficient confirmed the high reliability of the tool.

Validity

The validity of the tool insists on the stability of it to measure the trait or characteristic for which it is prepared. The tool, 'Stakeholders' Perception Scale regarding NCFTE-2009' was validated using content validity or face validity since there was no other suitable test available.

5.13.2 Perception Scale of Teacher Trainees regarding NCFTE-2009

In this research for estimating the reliability of ‘Perception Scale of Teacher Trainees regarding NCFTE-2009’, Cronbach-alpha coefficient was calculated. Cronbach-alpha Coefficient indicates inter-item correlation or inter-item consistency within the dimension. Values of Cronbach-alpha Coefficient obtained for each dimension is given in the following table –

Dimension	Cronbach-Alpha Coefficient
Planning and Preparing for Student Learning	0.835
Teaching and Instructions	0.791
Examination and Analysis of Teaching and Learning	0.826
Professional Responsibilities	0.805
Social Responsibilities	0.833

Test-retest reliability

In this research, the test-retest reliability of the entire rating scale was established. The value of the Spearman-Brown coefficient was obtained to be 0.824. High-value Spearman-Brown coefficient confirmed the reliability of the entire scale/tool.

Validity

Developed tool, ‘Perception Scale of Teacher Trainees regarding NCFTE-2009’ was validated by means of face validity or content validity. Since there was no other test available. For that purpose three judges working in the field of education and curriculum researches were identified and the tool was given to them. Thus, the validity of the scale was ensured.

5.14 Data Analysis

Marshall and Rossman (1999) define data analysis as the process of bringing order, structure and meaning to the mass of collected data (p. 150). In broad terms, data analysis does not proceed linearly. It is the activity of making sense of

interpreting and theorising data that implies a search for general statements among various categories of data (Schwandt, 2007, p. 6). Therefore everyone could understand that data analysis involves some kind or form of logic applied to the research. In that matter, Best and Kahn (2006) openly condescend that the analysis and interpretation of data illustrate the application of deductive and inductive logic to the research (p. 354). Very often the researcher relies on their experience of particular settings for being able to analyse the information obtained from subjects involved in the study. This thesis includes the mixed methodology for analysis which is a combination of qualitative and quantitative methods. The mixed-method of the research focuses on the adoption of a pragmatic position and uses a phenomenological approach in research. In this study, content analysis was done for analysing the theoretical aspects of the NCFTE-2009. For arriving at meaningful conclusions to objectives of this study Analysis of Variance (ANOVA) and t-test were used to compare mean scores obtained on ‘Stakeholders’ Perception Scale regarding NCFTE-2009’ (SPS) and ‘Perception Scale of Teacher Trainees regarding NCFTE-2009’ (PSTT).

5.15 Findings of the Study

In this section, summarisation of findings after analysing and interpreting of data has done. Objective wise the key findings of this study are presented as follows -

5.15.1 Objective (1). To study the theoretical concept and objectives of NCFTE-2009

Findings

Findings of theoretical concept and objectives of the NCFTE-2009 shows that education policy should be prepared and reformed with the remembering strategic

challenges within the framework of economic, political and cultural hybrids of globalisation. This NCFTE-2009 –

- is prepared with the vision of preparing a *humane and professional teacher*.
- elaborates the context, concerns and vision of teacher education and school education having a symbiotic relationship that mutually reinforce the concerns necessary for the growth of both.
- explains issues and perspectives related to inclusive education, equitable and sustainable development, gender equalisation, the role of community and its knowledge in education and Information and Communication Technology in schooling, as well as e-learning, become the centre stage in the Framework.
- highlights new applicable theories of teacher education and dealt with curriculum and pedagogical aspects, basics of education and school practicum or internship.
- suggests for establishing TLCs (Teaching Learning Centres) to deed as laboratories for the practice of teacher training has been emphasised on process-based models for practising teachers to adopt/adapt.
- advocates the teacher education institutions to work as active centres of research as well as experiments directed for the improvement of educational methodology and curriculum.
- supports to maintain self-identity, understanding diversity of classroom through equality of education, gender and social.
- advocates inculcating ideas of educationists, peace education, and value education in the core curriculum.

- suggests physical health, child rights and human rights as necessary things for developing the self.
- suggests that the proposed process will demand a training schedule that enables student teachers to participate as regular teachers for a sustained length of time, with the advantage of the institutes' support to analyse their experiences as a teacher.
- suggests preparing teacher being a facilitator of children's learning in a manner that helps children to construct knowledge and meaning and, equipped with an adequate understanding of curriculum, subject content and pedagogy with an understanding to make a deep connection with the community, school and management.
- recommends that education is not a mechanical activity of information transmission and teachers are not information dispensers. Therefore, teachers need to be looked at as crucial mediating agents through whom curriculum is transacted and knowledge is co-constructed along with learners.
- recommended training of teachers for application and implementation of Right to Education Act 2009 imparting constitutional values of equality, justice, freedom, liberty, fraternity, multiculturalism, secularism and sustainable development;
- stressed on training of teachers for ability to work with others in a cooperative way, sensitivity towards human rights, rights of women, ethnic minorities.
- stressed training for respect for national symbols, events, days, heritage and resources through appreciation and respect for cultural diversity

and unity in the midst of diversity of language, religion, norms and cultural traditions.

- has taken side for preservation of resources, austerity in consumption of resources and valuing sustainable development.
- emphasises on understanding children's questions, their observations of natural and social phenomena, enquiring into children's thinking and learning, and learning to listen to children with attention and empathy which are necessary pre-requisites to develop teachers who are learner sensitive.
- suggests understanding the child as the creator of knowledge and preparing teachers for encouraging the capacity of the child to experience the different milieu and continuously evolving the process of reflective learning.
- favours the fourth pillar of education of Jacques Delors that is "*learning to live together*" which supports for "*Vasudhaiv Kutumbakam*" (Mahopnishad, Chapter-4, Shloka-71).
- suggests that evaluation in teacher education needs to be objective while giving value to the subjective understanding of the developing teacher. It also needs to be comprehensive so as to cover the entire scope of conceptual, pedagogical dimensions as well as attitudes, dispositions, habits and capacities in a teacher incorporating both the quantitative and qualitative dimensions of growth.
- has guided to evaluate qualities of a teacher trainee by – (i) observing learners for a specified duration in specific situations; (ii) observing records maintained by the teacher trainee on a set of criteria relevant to

the task and report writing; (iii) evaluating school contact practicum to relate and communicate with learner; (iv) planning for the school contact; (v) observing post-contact discussions, report writing and group presentations; (vi) evaluating psychological and professional development of the teacher; (vii) assessing a repertoire of skills; (viii) assessing teacher as researcher; (ix) observing internship activities on which students may be assessed; (x) observing schemes for *Continuous and Comprehensive Evaluation*.

Conclusion

After the content analysis of the NCFTE-2009, it was concluded that this document is a comprehensive document and it tries to include almost all essential component which may be required in preparing professional and humane teacher. Some components like curriculum preparation and reforming, school experience programmes, pedagogical knowledge, professionalism with humanistic approach, selection and organisation of content and evaluation process, etc.

5.15.2 Objective (2). To study the perception of stakeholders in regard of NCFTE-2009

5.15.2.1 Findings of Quantitative Analysis

H₀1: Stakeholders of teacher education / B.Ed. colleges under various universities of Rajasthan will not differ significantly in their perception towards the NCFTE-2009.

Findings of H₀1

The hypothesis was rejected and after the post hoc analysis, it was found that stakeholders of education / B.Ed. colleges of Jai Narayan Vyas University, Jodhpur,

Maharaja Ganga Singh University, Bikaner and University of Kota, Kota were found to have the same perception that is subset $p=0.988$ and stakeholders of Raj Rishi Bhartrihari Matsya University, Alwar and University of Rajasthan, Jaipur ($p=0.367$) were found having equal perception regarding NCFTE-2009 While stakeholders of Maharaja Surajmal Brij University, Bharatpur were found to have a completely different perception regarding NCFTE-2009. The *Graph-4.1* represents that University of Kota, Kota, Jai Narayan Vyas University, Jodhpur and Maharaja Ganga Singh University, Bikaner having almost equal contents in their curricula.

H₀₂: Stakeholders of B.Ed. colleges under Maharaja Surajmal Brij University, Bharatpur and the University of Rajasthan, Jaipur will not differ significantly in their perception towards the NCFTE-2009.

Findings of H₀₂

The hypothesis was rejected and it was found that stakeholders of Maharaja Surajmal Brij University, Bharatpur tended to have higher mean (227.38) perception towards the NCFTE-2009, while stakeholders of University of Rajasthan, Jaipur tended to have lower mean (205.71) perception towards the NCFTE-2009 than their counterpart. The virtue of the importance of the t-value, the mean value cannot be neglected. It entails that stakeholders of Maharaja Surajmal Brij University, Bharatpur are having better perception towards NCFTE-2009 than stakeholders of the University of Rajasthan, Jaipur.

H₀₃. Stakeholders of B.Ed. colleges under Maharaja Surajmal Brij University, Bharatpur and the University of Kota, Kota will not differ significantly in their perception towards the NCFTE-2009.

Findings of H₀₃

The hypothesis was rejected and it was found that takeholders of Maharaja Surajmal Brij University, Bharatpur tended to have higher mean (221.80) perception towards the NCFTE-2009, while stakeholders of University of Kota, Kota tended to have lower mean (188.40) perception towards the NCFTE-2009 than their counterpart. The virtue of the importance of the *t-value*, the mean value cannot be neglected. It entails that stakeholders of Maharaja Surajmal Brij University, Bharatpur are having good perception towards NCFTE-2009 than stakeholders of the University of Kota, Kota.

H₀₄. Stakeholders of B.Ed. colleges under Maharaja Surajmal Brij University, Bharatpur and Jai Narayan Vyas University, Jodhpur will not differ significantly in their perception towards the NCFTE-2009.

Findings of H₀₄

The hypothesis was rejected and it was found that stakeholders of Maharaja Surajmal Brij University, Bharatpur tended to have higher mean (228.75) perception towards the NCFTE-2009, while stakeholders of Jai Narayan Vyas University, Jodhpur tended to have lower mean (167.67) perception towards the NCFTE-2009 than their counterpart. The virtue of the importance of the *t-value*, the mean value cannot be neglected. It entails that stakeholders of Maharaja Surajmal Brij University, Bharatpur are having much better perception towards NCFTE-2009 than stakeholders of Jai Narayan Vyas University, Jodhpur.

H₀₅. Stakeholders of B.Ed. colleges under Maharaja Surajmal Brij University, Bharatpur and Maharaja Ganga Singh University, Bikaner will not differ significantly in their perception towards the NCFTE-2009.

Findings of H₀₅

The hypothesis was rejected and it was found that stakeholders of Maharaja Surajmal Brij University, Bharatpur tended to have higher mean (230.07) perception towards the NCFTE-2009, while stakeholders of Maharaja Ganga Singh University, Bikaner tended to have lower mean (170.47) perception towards the NCFTE-2009 than their counterpart. The virtue of the importance of the *t-value*, the mean value cannot be neglected. It entails that stakeholders of Maharaja Surajmal Brij University, Bharatpur are having much better perception towards NCFTE-2009 than stakeholders of Maharaja Ganga Singh University, Bikaner.

H₀₆. Stakeholders of B.Ed. colleges under Maharaja Surajmal Brij University, Bharatpur and Raj Rishi Bhartrihari Matsya University, Alwar will not differ significantly in their perception towards the NCFTE-2009.

Findings of H₀₆

The hypothesis was rejected and it was found that stakeholders of Maharaja Surajmal Brij University, Bharatpur tended to have higher mean (224.52) perception towards the NCFTE-2009, while stakeholders of Raj Rishi Bhartrihari Matsya University, Alwar tended to have lower mean (192.37) perception towards the NCFTE-2009 than their counterpart. The virtue of the importance of the *t-value*, the mean value cannot be neglected. It entails that stakeholders of Maharaja Surajmal Brij University, Bharatpur are having superior perception towards NCFTE-2009 than stakeholders of Raj Rishi Bhartrihari Matsya University, Alwar.

H₀₇. Stakeholders of B.Ed. colleges under the University of Rajasthan, Jaipur and Jai Narayan Vyas University, Jodhpur will not differ significantly in their perception towards the NCFTE-2009.

Findings of H₀₇

The hypothesis was rejected and it was found that stakeholders of the University of Rajasthan, Jaipur tended to have higher mean (208.08) perception towards the NCFTE-2009, while stakeholders of Jai Narayan Vyas University, Jodhpur tended to have lower mean (167.67) perception towards the NCFTE-2009 than their counterpart. The virtue of the importance of the *t-value*, the mean value cannot be neglected. It entails that stakeholders of the University of Rajasthan, Jaipur are having better perception towards NCFTE-2009 than stakeholders of Jai Narayan Vyas University, Jodhpur.

H₀₈. Stakeholders of B.Ed. colleges under University of Rajasthan, Jaipur and Maharaja Ganga Singh University, Bikaner will not differ significantly in their perception towards the NCFTE-2009.

Findings of H₀₈

The hypothesis was rejected and it was found that stakeholders of the University of Rajasthan, Jaipur tended to have higher mean (205.67) perception towards the NCFTE-2009, while stakeholders of Maharaja Ganga Singh University, Bikaner tended to have lower mean (170.47) perception towards the NCFTE-2009 than their counterpart. The virtue of the importance of the *t-value*, the mean value cannot be neglected. It entails that stakeholders of the University of Rajasthan, Jaipur are having better perception towards NCFTE-2009 than stakeholders of Maharaja Ganga Singh University, Bikaner.

H₀₉. Stakeholders of B.Ed. colleges under the University of Rajasthan, Jaipur and Raj Rishi Bhartrihari Matsya University, Alwar will not differ significantly in their perception towards the NCFTE-2009.

Findings of H₀₉

The hypothesis was rejected and it was found that stakeholders of the University of Rajasthan, Jaipur tended to have higher mean (205.71) perception towards the NCFTE-2009, while stakeholders of Raj Rishi Bhartrihari Matsya University, Alwar tended to have lower mean (192.05) perception towards the NCFTE-2009 than their counterpart. The virtue of the importance of the *t-value*, the mean value cannot be neglected. It entails that stakeholders of the University of Rajasthan, Jaipur are having better perception towards NCFTE-2009 than stakeholders of Raj Rishi Bhartrihari Matsya University, Alwar.

H₀10. Stakeholders of B.Ed. colleges under the University of Kota, Kota and Jai Narayan Vyas University, Jodhpur will not differ significantly in their perception towards the NCFTE-2009.

Findings of H₀10

The hypothesis was rejected and it was found that stakeholders of University of Kota, Kota tended to have higher mean (215.83) perception towards the NCFTE-2009, while stakeholders of Jai Narayan Vyas University, Jodhpur tended to have lower mean (167.67) perception towards the NCFTE-2009 than their counterpart. The virtue of the importance of the *t-value*, the mean value cannot be neglected. It entails that stakeholders of the University of Kota, Kota are having better perception towards NCFTE-2009 than stakeholders of Jai Narayan Vyas University, Jodhpur.

H₀11. Stakeholders of B.Ed. colleges under University of Kota, Kota and Maharaja Ganga Singh University, Bikaner will not differ significantly in their perception towards the NCFTE-2009.

Findings of H₀11

The hypothesis was rejected and it was found that stakeholders of the University of Kota, Kota tended to have higher mean (213.07) perception towards the NCFTE-2009, while stakeholders of Maharaja Ganga Singh University, Bikaner tended to have lower mean (170.47) perception towards the NCFTE-2009 than their counterpart. The virtue of the importance of the *t-value*, the mean value cannot be neglected. It entails that stakeholders of the University of Kota, Kota are having better perception towards NCFTE-2009 than stakeholders of Maharaja Ganga Singh University, Bikaner.

H₀12. Stakeholders of B.Ed. colleges under Jai Narayan Vyas University, Jodhpur and Raj Rishi Bhartrihari Matsya University, Alwar will not differ significantly in their perception towards the NCFTE-2009.

Findings of H₀12

The hypothesis was rejected and it was found that stakeholders of Jai Narayan Vyas University, Jodhpur tended to have lower (167.67) perception towards the NCFTE-2009 while stakeholders of Raj Rishi Bhartrihari Matsya University, Alwar tended to have higher mean (197.50) perception towards the NCFTE-2009 than their counterpart. But, owing to the importance of the *t-value*, the mean value cannot be neglected. Therefore, it is declared that stakeholders of Jai Narayan Vyas University, Jodhpur are having smaller perception towards NCFTE-2009 than stakeholders of Raj Rishi Bhartrihari Matsya University, Alwar.

H₀13. Stakeholders of B.Ed. colleges under Maharaja Ganga Singh University, Bikaner and Raj Rishi Bhartrihari Matsya University, Alwar will not differ significantly in their perception towards the NCFTE-2009.

Findings of H₀13

The hypothesis was rejected and it was found that stakeholders of Maharaja Ganga Singh University, Bikaner tended to have lower (170.47) perception towards the NCFTE-2009 while stakeholders of Raj Rishi Bhartrihari Matsya University, Alwar tended to have higher mean (198.47) perception towards the NCFTE-2009 than their counterpart. But, owing the importance of the *t-value*, the mean value cannot be left aside. Therefore, it is declared that stakeholders of Maharaja Ganga Singh University, Bikaner are having smaller perception towards NCFTE-2009 than stakeholders of Raj Rishi Bhartrihari Matsya University, Alwar.

H₀14: Teacher trainees of B.Ed. colleges under various universities of Rajasthan will not differ significantly in their perception towards the NCFTE-2009.

Findings of H₀14

The hypothesis was rejected and after the post hoc analysis, it was found that teacher trainees of Maharaja Surajmal Brij University, Bharatpur, University of Kota, Kota and Raj Rishi Bhartrihari Matsya University, Alwar ($p=0.053 \approx \alpha=0.05$) were found having a significant difference in their perception regarding NCFTE-2009. While the value of $p=1.000$ and $p=0.684$ shows that teacher trainees of Jai Narayan Vyas University, Jodhpur, Maharaja Ganga Singh University, Bikaner and the University of Rajasthan, Jaipur found to have not significant differences in perception regarding NCFTE-2009. The *Graph-4.2* represents that Maharaja Ganga Singh University, Bikaner, University of Kota, Kota and Raj Rishi Bhartrihari Matsya University, Alwar having equal contents in their curricula.

H₀15: Teacher trainees of B.Ed. colleges under Maharaja Surajmal Brij University, Bharatpur and the University of Rajasthan, Jaipur will not differ significantly in their perception towards the NCFTE-2009.

Findings of H₀15

The hypothesis was rejected and it was found that teacher trainees of Maharaja Surajmal Brij University, Bharatpur tended to have lower mean (155.12) perception towards the NCFTE-2009, while stakeholders of University of Rajasthan, Jaipur tended to have higher mean (166.43) perception towards the NCFTE-2009 than their counterpart. The virtue of the importance of the *t*-value, the mean value cannot be neglected. It entails that teacher trainees of Maharaja Surajmal Brij University, Bharatpur are having inferior perception towards NCFTE-2009 than teacher trainees of University of Rajasthan, Jaipur.

H₀16. Teacher trainees of B.Ed. colleges under Maharaja Surajmal Brij University, Bharatpur and the University of Kota, Kota will not differ significantly in their perception towards the NCFTE-2009.

Findings of H₀16

The hypothesis was rejected and it was found that teacher trainees of Maharaja Surajmal Brij University, Bharatpur tended to have lower mean (144.41) perception towards the NCFTE-2009, while teacher trainees of University of Kota, Kota tended to have higher mean (155.79) perception towards the NCFTE-2009 than their counterpart. The virtue of the importance of the *t*-value, the mean value cannot be neglected. It entails that teacher trainees of the University of Kota, Kota are having good perception towards NCFTE-2009 than teacher trainees of Maharaja Surajmal Brij University, Bharatpur.

H₀17. Teacher trainees of B.Ed. colleges under Maharaja Surajmal Brij University, Bharatpur and Jai Narayan Vyas University, Jodhpur will not differ significantly in their perception towards the NCFTE-2009.

Findings of H₀17

The hypothesis was rejected and it was found that teacher trainees of Maharaja Surajmal Brij University, Bharatpur tended to have higher mean (157.79) perception towards the NCFTE-2009, while teacher trainees of Jai Narayan Vyas University, Jodhpur tended to have lower mean (99.31) perception towards the NCFTE-2009 than their counterpart. Virtue of the importance of the *t-value*, the mean value cannot be neglected. It entails that teacher trainees of Maharaja Surajmal Brij University, Bharatpur are having much better perception towards NCFTE-2009 than teacher trainees of Jai Narayan Vyas University, Jodhpur.

H₀18. Teacher trainees of B.Ed. colleges under University of Rajasthan, Jaipur and Jai Narayan Vyas University, Jodhpur will not differ significantly in their perception towards the NCFTE-2009.

Findings of H₀18

The hypothesis was rejected and it was found that teacher trainees of University of Rajasthan, Jaipur tended to have higher mean (162.32) perception towards the NCFTE-2009, while teacher trainees of Jai Narayan Vyas University, Jodhpur tended to have lower mean (99.31) perception towards the NCFTE-2009 than their counterpart. Virtue of the importance of the *t-value*, the mean value cannot be neglected. It entails that teacher trainees of University of Rajasthan, Jaipur are having better perception towards NCFTE-2009 than teacher trainees of Jai Narayan Vyas University, Jodhpur.

H₀19. Teacher trainees of B.Ed. colleges under University of Kota, Kota and Jai Narayan Vyas University, Jodhpur will not differ significantly in their perception towards the NCFTE-2009.

Findings of H₀19

The hypothesis was rejected and it was found that teacher trainees of University of Kota, Kota tended to have higher mean (167.52) perception towards the NCFTE-2009, while teacher trainees of Jai Narayan Vyas University, Jodhpur tended to have lower mean (99.31) perception towards the NCFTE-2009 than their counterpart. Virtue of the importance of the *t-value*, the mean value cannot be neglected. It entails that teacher trainees of University of Kota, Kota are having better perception towards NCFTE-2009 than teacher trainees of Jai Narayan Vyas University, Jodhpur.

H₀20. Teacher trainees of B.Ed. colleges under Jai Narayan Vyas University, Jodhpur and Maharaja Ganga Singh University, Bikaner will not differ significantly in their perception towards the NCFTE-2009.

Findings of H₀20

The hypothesis was rejected and it was found that teacher trainees of Jai Narayan Vyas University, Jodhpur and Maharaja Ganga Singh University, Bikaner tended to have lower mean (93.86) perception towards the NCFTE-2009, while teacher trainees of Maharaja Ganga Singh University, Bikaner tended to have higher mean (163.57) perception towards the NCFTE-2009. But by virtue of the importance of the *t-value*, the mean value cannot be neglected. Therefore, it entails that teacher trainees of Jai Narayan Vyas University, Jodhpur are having inferior perception towards NCFTE-2009 as teacher trainees of Maharaja Ganga Singh University, Bikaner.

H₀21. Teacher trainees of B.Ed. colleges under Jai Narayan Vyas University, Jodhpur and Raj Rishi Bhartrihari Matsya University, Alwar will not differ significantly in their perception towards the NCFTE-2009.

Findings of H₀21

The hypothesis was rejected and it was found that teacher trainees of Jai Narayan Vyas University, Jodhpur tended to have lower (99.31) perception towards the NCFTE-2009 while teacher trainees of Raj Rishi Bhartrihari Matsya University, Alwar tended to have higher mean (205.72) perception towards the NCFTE-2009 than their counterpart. But, owing the importance of the *t-value*, the mean value cannot be neglected. Therefore, it is declared that teacher trainees of Jai Narayan Vyas University, Jodhpur are having poor perception towards NCFTE-2009 than teacher trainees of Raj Rishi Bhartrihari Matsya University, Alwar.

H₀22. Teacher trainees of B.Ed. colleges under Maharaja Ganga Singh University, Bikaner and Raj Rishi Bhartrihari Matsya University, Alwar will not differ significantly in their perception towards the NCFTE-2009.

Findings of H₀22

The hypothesis was rejected and it was found that teacher trainees of Maharaja Ganga Singh University, Bikaner tended to have lower (163.57) perception towards the NCFTE-2009 while teacher trainees of Raj Rishi Bhartrihari Matsya University, Alwar tended to have higher mean (209.52) perception towards the NCFTE-2009 than their counterpart. But, owing the importance of the *t-value*, the mean value cannot be left aside. Therefore, it is declared that teacher trainees of Maharaja Ganga Singh University, Bikaner are having smaller perception towards NCFTE-2009 than teacher trainees of Raj Rishi Bhartrihari Matsya University, Alwar.

Conclusion

The application of Analysis of Variance (ANOVA) revealed that stakeholders and teacher trainees of B.Ed. colleges of different universities of Rajasthan were differed significantly in their perception towards NCFTE-2009. Factors influencing their perception regarding NCFTE-2009 for being different are discussed here:

Since, the curriculum of B.Ed course under various universities of Rajasthan is decided by the National Council for Teacher Education on the basis of curriculum frameworks for teacher educations being prepared time to time. Today curriculum of B.Ed course is followed under the NCFTE-2009. Therefore, the five dimensions of NCFTE-2009 extracted by the researcher were found to be differing in perception of stakeholders and teacher trainees which relies on contents of syllabuses prepared by the universities. Teacher trainees want that teacher might apply various styles for integrated learning such as task oriented approaches to help their students strengthening their knowledge of the world.

5.15.2.2 Qualitative analysis of perceptions of stakeholders regarding NCFTE-2009

- **Dimension (1) Planning and Preparation for Student Learning** - Stakeholders of Maharaja Surajmal Brij University, Bharatpur were found to have highest mean (48.93) perception, while stakeholders of Jai Narayan Vyas University were found to have lowest mean (35.50) perception regarding *planning and preparation for student learning* of NCFTE-2009.
- **Dimension (2) Teaching and Instructions** - Stakeholders of Maharaja Surajmal Brij University, Bharatpur were found to have highest mean (36.83) perception, while stakeholders of Jai Narayan Vyas University were found to

have lowest mean (27.75) perception regarding *teaching and instructions* of NCFTE-2009.

- **Dimension (3) Examination and Analysis of Teaching and Learning** - Stakeholders of Maharaja Surajmal Brij University, Bharatpur were found to have highest mean (28.13) perception, while stakeholders of University of Kota, Kota, Jai Narayan Vyas University, Jodhpur, Maharaja Ganga Singh University, Bikaner and Raj Rishi Bhartrihari Matsya University, Alwar were found to have almost equal mean (as in sequence 23.12≈23.08≈22.40≈22.96) perception regarding *examination and analysis of teaching and learning* of NCFTE-2009.
- **Dimension (4) Examination and Analysis of Professional Responsibilities** - Stakeholders of Maharaja Surajmal Brij University, Bharatpur were found to have highest mean (28.13) perception, while stakeholders of University of Kota, Kota, Jai Narayan Vyas University, Jodhpur and Maharaja Ganga Singh University, Bikaner were found to have almost equal mean (as in sequence 50.84≈49.33≈50.27) perception regarding *professional responsibility* of NCFTE-2009.
- **Dimension (5) Examination and Analysis of Social Responsibilities** - Stakeholders of Maharaja Surajmal Brij University, Bharatpur were found to have highest mean (41.63) perception, while stakeholders of Maharaja Ganga Singh University, Bikaner were found to have lower mean (29.93) perception regarding *social responsibility* of NCFTE-2009. Stakeholders of University of Kota, Kota and Jai Narayan Vyas University, Jodhpur were found to have equal mean (as in sequence 32.04≈32.00) perception regarding *social responsibility* of NCFTE-2009.

5.15.2.3 Qualitative analysis of perceptions of teacher trainees regarding

NCFTE–2009

- **Dimension (1) Planning and Preparation for Student Learning** - Teacher trainees of B.Ed. colleges under University of Rajasthan, Jaipur were found to have highest mean (41.00) perception, while teacher trainees of B.Ed. colleges under Jai Narayan Vyas University, Jodhpur were found to have lower mean (26.28) perception regarding *planning and preparation for student learning* of NCFTE-2009.
- **Dimension (2) Teaching and Instructions** - Teacher trainees of B.Ed. colleges under University of Rajasthan, Jaipur were found to have highest mean (31.22) perception, while teacher trainees of B.Ed. colleges under Jai Narayan Vyas University, Jodhpur were found to have lower mean (16.52) perception regarding *training and instructions* of NCFTE-2009. Teacher trainees of B.Ed. colleges under Maharaja Ganga Singh University, Bikaner and Raj Rishi Bhartrihari Matsys University, Alwar were found to have equal mean (as in sequence 30.33≈30.39) perception regarding *training and instructions* of NCFTE-2009.
- **Dimension (3) Examination and Analysis of Teaching and Learning** - Teacher trainees of B.Ed. colleges under University of Rajasthan, Jaipur and Maharaja Ganga Singh University, Bikaner were found to have highest equal mean (as sequentially 22.27≈22.24) perception, while teacher trainees of B.Ed. colleges under Jai Narayan Vyas University, Jodhpur were found to have lowest mean (13.45) perception regarding *examination and analysis of teaching and learning* of NCFTE-2009. Teacher trainees of B.Ed. colleges under Maharaja Surajmal Brij University, Bharatpur and Raj Rishi Bhartrihari

Matsys University, Alwar were found to have equal mean (sequentially 19.94≈19.82) perception regarding *examination and analysis of teaching and learning* of NCFTE-2009.

- **Dimension (4) Examination and Analysis of Professional Responsibilities -** Teacher trainees of B.Ed. colleges under University of Rajasthan, Jaipur and Raj Rishi Bhartrihari Matsys University, Alwar were found to have highest equal mean (sequentially 43.31≈43.54) perception, while teacher trainees of B.Ed. colleges under Jai Narayan Vyas University, Jodhpur were found to have lowest mean (26.66) perception regarding *professional responsibility* of NCFTE-2009. Teacher trainees of B.Ed. colleges under University of Kota, Kota and Maharaja Ganga Singh University, Bikaner were found to have equal mean (sequentially 42.21≈42.52) perception regarding *professional responsibility* of NCFTE-2009.
- **Dimension (5) Examination and Analysis of Social Responsibilities -** Teacher trainees of B.Ed. colleges under University of Rajasthan, Jaipur, Maharaja Ganga Singh University, Bikaner and Raj Rishi Bhartrihari Matsys University, Alwar were found to have highest equal mean (sequentially 28.63≈28.10≈28.54) perception, while teacher trainees of B.Ed. colleges under Jai Narayan Vyas University, Jodhpur were found to have lowest mean (16.41) perception regarding *social responsibility* of NCFTE-2009.

Conclusion

It was concluded that differences were found in perceptions of stakeholders and teacher trainees for *planning and preparing for student learning* which may be due to differences of classroom setup, classroom instructional and management strategies being used, variations in co-curricular activities. Some other reasons for

differences in perception may include participation in faculty development training programmes, seminars, workshops and sharing their personal experiences with their teacher trainees. The perception of stakeholders and teacher trainees regarding ‘teaching and instructions’ were found to be different which may be due to change in reflective practices, use of information communication technologies and media techniques, encouragement for experiments in classrooms, skill enhancement strategies in their counterparts.

The significant differences were seen in the process of *examination and analysis of teaching and learning* due to a continuous and comprehensive evaluation by welcoming inclusion and remembering individual differences. Since the NCFTE-2009 recommends and guides for the professional development of stakeholders and teacher trainees of B.Ed. colleges. Therefore, the perception regarding professional responsibilities was found to be different due to the ability of academic leadership, mentorship, punctuality, awareness regarding affiliation, norms and standards for B.Ed colleges, awareness for Right to Education, child rights and rights of persons with disability.

The teacher trainees were found more aware to social responsibilities in maintaining collaboration with colleagues, sharing personal experiences and being humane while stakeholders were found socially responsible in the sense of making classroom interaction and demonstrating appropriate professional conduct.

5.16 Objective (3). To study the policy document of NCFTE-2009 in the context of its implementation in Rajasthan at B.Ed.level

Findings

It was found that the government of Rajasthan implemented the NCFTE-2009 in means of directly or indirectly through implementing its educational schemes as follows -

- **School integration:** Primary or upper primary schools located in close proximity of secondary or senior secondary schools have been integrated for better supervision and optimum utilisation of resources. Out of the total 13380 schools under secondary education department, 12272 schools are merged.

Result:

Class	Increase in
I-V	~19% increase in enrolment
VI-VII	~18% increase in enrolment
IX-X	~12% increase in enrolment
XI-XII	~19% increase in enrolment
Source: http://vasundhararaje.in/rajasthan-reforms/school-education	

- **Adarsh Schools:** As per the budget announcement of 2015-16, one school (preferably form class I to X/XII) in every Gram Panchayat are developed as Adarsh School in a phases which are working as mentor schools and resource centres for the other schools located in the Gram Panchayat. Till now 9895 government schools have been developed as Adarsh School (School Education, n.d.).
- **Swami Vivekananda Government Model Schools (SVGMS):** These are the CBSE affiliated, English medium schools opened for providing quality education to the talented rural children of Educationally Backward Blocks (EBBs). Today more than hundred SVGMS are working sincerely (School Education, n.d.).
- **Sharde Girls' Hostels:** The state government of Rajasthan has opened Sharde Girls' Hostel in each Educationally Backward Block to provide residential facilities for girls studying in IX to XII classes. Till now more than 150 hostels

are providing safe, clean, hygienic and balanced accommodation with educational prestige of more than 7500 girls (School Education, n.d.). Due to these efforts enrollment of girls is increases and Gender Parity Index also improved.

- **Information and Communication Technology Interventions:** The National Policy of Education (NPE-1986) and the Programme of Action (PoA-1992) recommended the freedom of teachers for devising appropriate methods of communication. Various innovating activities relevant to the needs, capabilities and concerns of the community have also been suggested. The National Education Policy – 2020 recommended for preparing tech-savvy teachers with creative and diverse strategies of teaching (GoI, 2020, p. 59). It suggested for establishing a (NETF) National Educational Technology Forum. The NEP-2020 and NPE-1986 states that teacher education is a continuous process and it's all components like pre and in-service are indivisible. Therefore, overhauling of the education system will be treated primary deed. The government of Rajasthan has done the following works for applying innovations in teacher education directly or through school education.

a) Shaala Darpan: It is an e-Governance platform for all government schools in the Rajasthan which is prepared to improve quality of learning, efficiency of school administration, governance of schools and service delivery to key stakeholders namely, students, parents, teachers, community and schools. It is a real time Management Information System (MIS) (Shaala Darpan. n.d.).

- b) Rajasthan Education Portal:** This portal has been developed and is being enriched. It offers e-content in form of chapters, videos, worksheets etc. for all classes from I to XII in consonance with the syllabus (Rajasthan Education Portal, n.d.).
- c) Digital Literacy under PM's Digital India Campaign:** It is the programme under which ICT labs in more than 7000 secondary and senior secondary schools are established and more than 3700 Non-IT literate teacher trained (Digital India Programme, 2018).
- d) Satellite Classes:** About 2000 schools of Rajasthan are getting help through it focusing on difficulty areas with quality and improved learning.
- e) Regular Video Conferencing:** The ICT department of Rajasthan is doing well for preparing video content for the schools by video conferencing. Till now more than 13380 schools have discussed about their ideas.
- **Transport Voucher Scheme:** For ensuring ease of access of schooling for girls, the government of Rajasthan provides bicycles and transport voucher of Rupees 20/- per day for girls of class IX to XII coming from more than 5 kilometres. More than 12000 girls have been benefitted in this project. Girls more than 7388 of class VI to VIII who are studying in SVGMS, benefitted also. Due to this project, transition rate, enrollment and retention of girls have improved considerably.

- **State Initiative for Quality Education (SIQE):** This project was started for improving level of learning of students of class I to V. Under this project for intensive care of children, fast and furious training is being given to teachers with five day orientation on Child Centred Pedagogy (CCP), Activity Based Learning (ABL) and, Continuous & Comprehensive Evaluation (CCE) committably.
- **Vocational Education:** It has been started as additional for students of class IX to XII in selective schools with the aim of developing employability skills in students and reduce dropout. In this project more than 16000 students have been benefitted by developing skills of automobile, wellness, healthcare, beauty and information technology.
- **Inclusion of Differently Aabled:** The government of Rajasthan has taken initiative of welcoming differently abled into main stream of education by giving admission into normal schools. Therefore, in schools of more than 249 blocks of Rajasthan, Environment Building Programme has been initiated for ensuring the inclusion and retention of differently abled.
- **Staff Rationalisation:** The government of Rajasthan is following the Right to Education Act - 2009 under which student-teacher ratio of 1:40 is being followed in rural areas to ensure the optimum use of strength.

Conclusion

It is concluded that the government of Rajasthan had started some schemes and projects in the area of education. These are – (i) fixing the 25% quota in private schools to get admission under Right to Education-2005 for the economically and socially marginal groups of Rajasthan; (ii) inclusion of differently-abled children in normal schools, merging of primary, middle and secondary schools into senior

secondary schools to maintain the quality of education; (iii) opening of Swami Vivekananda English Medium Schools; and, (iv) opening Adarsh school at every Gram Panchayat etc. which is a step for implementation of the NCFTE-2009.

5.17 Objective (4). To give suggestions for the better management of teacher education institutions in regard of NCFTE-2009

From the qualitative and quantitative analysis, it is suggested to the NCFTE-2009 which is given in the following points -

- Timely updation of the curriculum should be for satisfying the need of current perspectives of society, technology, profession and global world in the light of Indian knowledge tradition.
- Regular monitoring of B.Ed. colleges may be done time to time with taking action if they fail to be filled expectations demanded globally.
- Training may be included in the NCFTE-2009 to overcome on (7) seven tensions as (i) tension between global and local; (ii) tension between universal and individual; (iii) tension between tradition and modernity; (iv) tension between long term and short term consideration; (v) tension between competition and equality of opportunity; (vi) tension between unlimited expansion of knowledge and the limited capacity of human being to assimilate; and (vii) tension between spiritual and material.
- Training of value education may be included with a compulsory need to prepare teachers for insightful and multi-facet strategies of teaching and training. The curriculum of today may be for sustaining teachers to face the problem of social isolation and parental pressure.

- We may include the development of critical and diverse thinking as an opportunity - (i) to ask questions; (ii) helping in making basic assumptions; (iii) to awaken the cognitive biases and personal prejudices of learners; and (iv) enabling the learner for reversing things, evaluating the existing evidence and believing that no one think critically and diversely hundred per cent.
- For development and continuous evaluation of life skills content related to life skills as self-awareness, self-actualisation, problem solving, thinking skills, creative thinking, diverse thinking, critical thinking, decision making, interpersonal and intrapersonal relationship, communication skills, sympathy and empathy, emotion understanding skills etc. may be included.
- The NCFTE-2009 may be reformed for developing competencies among teachers.
- The content of the NCFTE-2009 may be reformed for encouragement teachers for research and quality. Therefore, teachers should be viewed as equal partners in deciding what works best and what needs improvement in their classrooms.
- It is the main requirement of B.Ed colleges of Rajasthan to maintain practically educator and pupil ratio of 1:14 which is decided by the NCTE.
- It is needed to maintain quality in internship for B.Ed. course with regular evaluation.

Conclusion

The government of Rajasthan has done efforts for implementation of the NCFTE-2009 directly or indirectly through its various schemes in the area of elementary education, secondary education and higher education. But a proper plan of implementation may help to get the result of extent. The research suggested the following model for developing and reforming a curriculum. According to this model, relevant technology will help to know and interconnect with the societal needs as well as universal needs since a curriculum should be a mirror of its society and perspective. Therefore, relevant technology will enrich the relevant science of learner and teacher by implementing this model.

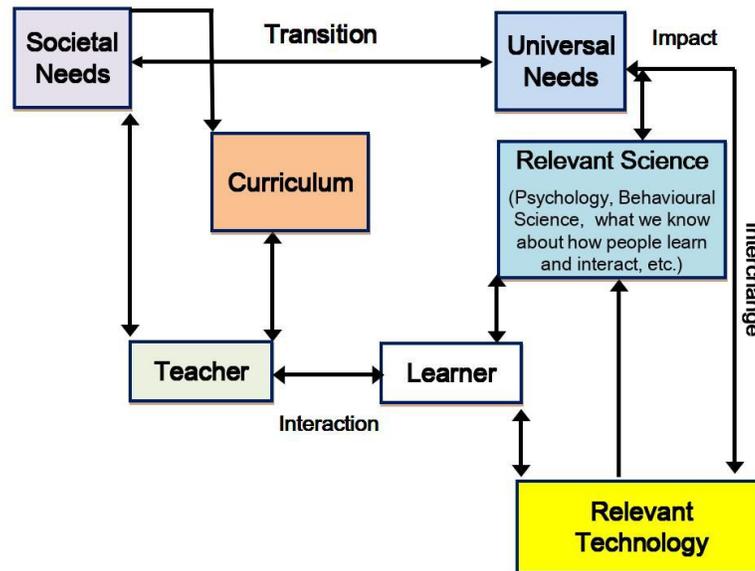


Figure (5.2) Curriculum Development cum Reforming Model

5.18 Educational Implications of the Study

It is concluded, “Measuring teachers and developing teachers are different purposes with different implications” (Marzano, 2012, p. 16). Marzano (2012) asserted that techniques for measuring teacher capability should be inherently different for arrangements that are created to improve teacher performance. For teacher educators in the field, outcomes of the evaluation of teacher trainees can have personal and professional implications (Sawchuk, 2015). Hence, recognising this

analysis, it is declared that NCFTE-2009 has the potential to enhance professional growth, humanistic approach and teacher effectiveness (Stiggins & Duke, 1988). It is important also to understand how educators perceive the evaluation process as it relates to their teaching practice (Lee, 2011). Implications from Leggett's research indicated that more study of principal characteristics in relation to their perceptions of teachers is necessary and that policymakers should consider all factors that influence thinking process when curricula for teacher education are being developed or revised. Implications of this research have been primarily considered in light of the analysis of data collected and organised by the research questions. The presentation of study findings, limitations, and recommendations for further research may reflect educational implications for the policy maker, teacher educators and teacher trainees of Rajasthan state. These are as following –

a) Perception is probably for affecting the implementation of curriculum, accountability of teacher educators and performance of teacher trainees. Hence, the university should take sincere steps for preparing and reforming the curriculum for teacher education on following grounds –

1. Global perspective and its need in the light of local perspective.
2. Social perspective of learner and teacher.
3. Cognitive understanding of learner.
4. Indian cultural perspective and Indian knowledge tradition.
5. Current approaches of teaching and learning as constructive and re-conceptualistic.
6. Elimination of regionalism, casteism, gender differences and nepotism.
7. Inclusion of individual differences, child rights, gender equity, person of marginal etc.

8. Implementing models of teacher education of varying durations and to encourage institutions for experimenting with the new innovative models with the academic support of NCTE.

5.19 Suggestions for Future Research

Besides the above educational implications, the experiences in the area of teacher education gained during this analytical study have enabled the researcher to make the following suggestions for future research.

1. A comparative and analytical study between state and central varsities may be conducted.
2. An analytical study may be conducted for special education curriculum.
3. A case study can be done of a curriculum and its implementation for any regular or Distance Mode University.
4. A comparative study also may be conducted on curriculum of teacher education of central universities of India.

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Appendices

- 1. Stakeholders' Perception Scale regarding NCFTE – 2009**
- 2. Perception Scale of Teacher Trainees regarding NCFTE-2009**
- 3. Data Obtained from Stakeholders (University Wise)**
- 4. Data Obtained from Teacher Trainees (District Wise)**
- 5. Research Paper**
- 6. Certificate of Seminar/Workshop**
- 7. Report of Plagiarism**