

## CHAPTER - VI

### SUMMARY AND IMPLICATIONS

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#### 6.0. Introduction

The pattern of Education is changing very fast. Many a new phenomena, viz., Scientific and Technological advancement, Industrialization, Globalization and Modernization have emerged in the Society. Education is a discipline for preparing to meet the challenges to lead meaningful life. The modern generation needs compatible skills, updated knowledge, latest information of changing social needs, technologies and attitudes to make them fit to survive gracefully. Lifelong and continuous learning is the need of the modern age to empower the modern generation. So, there is need Powerful Education System.

UNESCO's Commission on Education (1972) declared that education is a lifelong process and its purpose is to establish a learning society, i.e., a society that knows how to learn, to grow and to transform itself to the needs of ever changing world. It is only through learning that one acquires knowledge and this knowledge comes mainly through education. The process of education is shaped and moulded by the human personality called the teacher, who plays a crucial role in education of country. In order to meet the demands of globalization the educational system of the country needs more efficient, as well as, competent teachers. The quality of teachers mostly depends on the Teacher Education Programme of any nation. National Policy on Education (NPE, 1986) has rightly emphasized, "The status of teacher reflects the socio-cultural ethos of the society and no people can rise above the level of its teacher. Good teachers are concerned it can be produced only when we have good and effective Teacher Education Programme."

According to National Curriculum Framework for Teacher Education (NCFTE, 2009), 'A teacher needs to be prepared in relation to the needs and demands arising in the school context, to engage with questions of school knowledge, the learner and the learning process. The expectations of the school system from a teacher changes from time to time, responding to the broader social, economic and political changes taking place in the society.' On this background of demand and expectation from schools and society, Teacher Education Programmes need to be strengthened in all aspects adding innovative ideas and practices.

Education commission (1964-66) says, ‘Of all different factors which influence the quality of education and its contribution to national development, the quality, competence and character of teachers are undoubtedly the most significant. Nothing is more important than securing a sufficient supply of high quality of recruits to the training profession, providing them with the best possible professional preparation and creating satisfactory conditions of work in which they can be fully effective’. The quality of Teacher Education in our country especially at the secondary level is far from satisfactory. This may be due to lack of focus on providing meaning full experiences to the student-teachers trained for secondary classes. Thus, insufficiently trained teacher may fail to make quality citizens for the country.

According to Goel & Goel (2012) “Teacher Education is a discipline which educates the progressive generations on what has gone by, where we are, where we want to go, and what we like to create, observing healthy, meaningful and long life.” Thus, Teacher Education can be considered as a life directing discipline.

The entire educational system of our country is in the process of change. We all know that no educational reform can be successful unless the quality of teacher is improved; but in turn the quality of teacher depends to a large extent on the quality of Teacher Education.

During the last five decades, certain efforts have been made to indigenize the system. The gaps, however, are still wide and visible. The imperatives for building the bridges may be as follows: (NCFTE, 2009)

1. To build a national system of Teacher Education based on India’s cultural ethos, its lenity and diversity synchronizing with change and continuity.
2. To facilitate the realization of the constitutional goals and emergence of the new social order.
3. To prepare professionally competent teachers to perform their roles effectively as per needs of the society.
4. To upgrade the stranded of Teacher Education, enhance the professional and social status of teachers and develop amongst them a sense of commitment.

Entering into the 21<sup>st</sup> century does not mean a simple shift of calendar year. Presently, we are in the ‘Knowledge Era’ which is supported by high and low technology. As teachers are the king point of any education system, their enrichment and training is of at most importance.

Due to the evolutionary developments, standards of learning have become higher in the 21<sup>st</sup> century than it had been in the 20<sup>th</sup> century. As a result, teachers would need to acquire additional knowledge and skills, both general and specific, to be able to survive and be successful in the 21<sup>st</sup> century school environment.

### **6.1 Implications of the Reviewed Literature for the Present Study**

Total 58 studies were reviewed in 5 different categories, namely, Studies on Teacher Education Programme, Studies on Teacher Education Curriculum, Studies on Specific Skills and Methods in Teacher Education, Studies related to Innovative Proneness of Teachers and Studies on Innovative Practices in Teacher Education Programme.

There were studies on relative effectiveness of teaching through Traditional Method and Innovative Method. Most of the studies used Survey method and tools, such as, Questionnaire, Observation Schedule, Interview Schedule, Rating Scale, Attitude Scale, Check List, Portfolio and Techniques like Interview and Participant Observation.

The studies reviewed on “Innovative Practices in Teacher Education Programme” revealed that the pre-practice teaching preparation is the base on which the structure of student teaching is laid. In certain States of India, the programme has not been found to be effective. It may be worthwhile to study various types of programmes being carried out for such a preparation, as well as, practice teaching programmes. Not only the practice teaching provisions are to be made, but, adequate supervision, guidance and feedback are necessary for its effective utilization.

The studies reviewed on “Teacher Education Programme” revealed that the pre-practice teaching preparation is the base on which the structure of student teaching is laid. In certain States of India, the programme has not been found to be effective. It may be worthwhile to study various types of programmes being carried out for such a preparation, as well as, practice teaching programmes.

The review of related literature revealed that most of the studies concentrated on the factors affecting the innovations, ICT integration, duration of the course, finance and resource availability, guidance, attitude and proneness of Teacher Educators, types of governing body, i.e., Government & Self-financed, Role of Headship, Curriculum, Method of Teaching, Practice Teaching, Micro-Teaching, Team Supervision, Criticism of Lesson and Climate of the Organization.

The reviewed Studies on “Teacher Education Curriculum” revealed that the present Teacher Education Curriculum is too much theoretical. In fact, it is this large component of theory papers that has hampered the growth of practical and pedagogical aspects of the programme. This has in turn impeded the growth of Teacher Education. Most of the studies pointed out the drawbacks of the existing Curriculum of the Teacher Education Programme. It is encouraging to note that steps were taken by NCTE to rectify the defects and make the curriculum up to date to meet the requirements.

A total 8 studies were reviewed on “Innovative Skills and Methods in Teacher Education” which mainly focused on Micro-Teaching technique in the controlled laboratory environment, skill integration in practice teaching and strategies implemented for the integration of skills & cooperative learning.

Literature suggested that the Teacher Education Institutions were lacking various things required to enhance its quality. In the last 2 decades a large number of such colleges have been opened in each State of India. With the quantitative increase the quality has reduced.

The reviews revealed that most of the studies employed survey and comparative methods to study the Innovative Practices. Keeping in mind the recent Innovations in Technology and Global Teacher Education, our Teacher Education needs to be enhanced in terms of, use of technology, Methodology for Curriculum Transaction and Practice Teaching. It is evident that there is a scarcity of research on Innovative Practices in Teacher Education. More researches are needed for implementing innovative practices in Teacher Education across the country. Hence, the present study has attempted to explore the Innovative Practices in Teacher Education.

## **6.2. Rationale for the Study**

Teacher Education means programmes of education and research which equip an individual to teach at schools. The role of teacher has been changing from being a knowledgeable person on the stage to a facilitator and guide beside. In this context the Teacher Education Programme is undergoing changes nationally as well as internationally. The NCTE (2004) stating that, “The programme of Teacher Education is institution based. The students are not exposed to the realities of school and community, internship, practice of teaching; practical activities are not paid proper

attention. Despite the commendable improvement in service conditions and perks, the profession is yet to attract best brain”.

A teacher plays an important role in shaping the students and also the future of nation. Therefore, any nation cannot neglect the preparation of teachers. In India, Teacher Education Programme has been given importance both before and after the independence. With reference to the Teacher Education Programme many eminent personalities in the field of education from the education field i.e. Vachhrajani (2005), Goel & Goel (2005) are of the view that there is an urgent need to update the Teacher Education Programme with reference to the changing needs of society. Education is one of the major aspects of the society. So, our education system needs to bring desirable changes with the changes in society. Therefore, the teacher preparation programme needs to be updated in the light of the changing needs of society and for that adoption of innovative practices is necessary. Further, in this era of globalization, we need to prepare teachers for the global world. This can only be made possible if innovations are introduced in system to bring about quality improvement. The National Curriculum Framework (NCF, 2005) has also emphasized the need for bringing change in Teacher Education for developing professional identity of teachers and to make Teacher Education more relevant in School Education.

Further NCFTE (2009) states that, there is also a dire need to critically review the Secondary Teacher Education system. The one-year second Bachelor’s degree (B.Ed.) model seems to have outlived its relevance. With the proliferation of B.Ed. colleges, particularly with privatization and commercialization, B.Ed. programmes have become weak both in theory and practice. Even the few institutions, which keep struggling to make this programme meaningful, find it difficult to overcome the structural constraints that the short duration of the programme poses. While the second Bachelor’s degree model may still be relevant, it is imperative that this needs strengthening in terms of intensity, rigor and duration.

Mohd. Akhtar Siddiqui, the former chair person of National Council for Teacher Education (NCTE) emphasized upon innovation in Teacher Education Programme in these words, “Teacher Education in India is all set for revival.” He further emphasized that the National Council for Teacher Education will be coming out with a new curriculum for teacher training courses. Also the council will be laying down strict regulatory norms to check the quality of Teacher Education institutes and to control the rapidly increasing of sub-standard private institutions. He also said that “teacher

training in India has been getting diluted from over the years. There are good, bad and even worse institutes offering Teacher Education Programme. But along with this, there is also need to improve the quality of Teacher Education in existing institutes.”

Proper implementation of innovations will lead to real progress only if they are brought about in an orderly sequence of goal setting, planning and systematic execution. The aim of innovation is the change for better. Such changes bring progress. To be competitive in the period of globalization it is important to change our traditional methods so as to meet the challenges posed by the global markets. To meet these demands, a teacher must supplement or replace traditional methods of instruction with innovative educational approaches.

One of the questions that are being increasingly considered is: How best may innovation improve quality? It is not possible to answer this question in general terms other than to say that, if the current quality needs to be improved, something new will have to be done. Even if the question is rephrased such as: What innovations are likely to best improve quality of Teacher Education? The answer is still hard to define because it depends on what aspect is under consideration and what is known to work best in the specific aspect. There is, however, considerable consensus in the region that teachers are of central importance in improving the quality of education. This implies that innovations in pre-service teacher training are a good form of investment. The rationale behind selecting the Teacher Education institutions providing training to teachers for secondary and higher-secondary education is that secondary education has a key role to play in the social, economic, and human capital development of a country. Further education at these levels is a crucial link between primary schooling and higher education. The task before today’s societies is to transform secondary education institutions and current schooling practices to align them with the demands of a globalized and technology-driven world. Policymakers and educators must address the twin challenges of increasing “access to” and “quality and relevance of” secondary education for all young people.

Children of today are very advance with regard to technology. Contrary to it are our teachers who are hardly technology savvy. There is a major paradigm shift in the instructional methods with the change of time. To be competitive in the period of globalization it is important to change our traditional methods so as to meet the challenges posed by the global markets. To meet these demands, a teacher must

supplement or replace traditional methods of instruction with innovative educational experiences.

Keeping in view the important role of secondary education in the development of the children, preparation of teachers for this level is indeed a very important and challenging task.

It is possible that apart from these institutions there are other Teacher Education institutions which may have adopted some innovations which have not been brought out. The researcher feels that by visiting some institutions and checking out whether any kind of innovations has been initiated by them would prove to be a fruitful exercise.

### **6.3. Statement of the Problem**

A Study of Innovative Practices in Teacher Education Institutions of Gujarat State

### **6.4. Objectives of the Study**

- 1) To study the status of Innovative Practices in the Secondary Level Teacher Education Institutions of Gujarat State.
- 2) To study in-depth the Innovative Practices in selected Secondary Level Teacher Education Institutions of Gujarat State.
- 3) To study the factors facilitating and impeding the implementation of innovations.

### **6.5. Explanation of the Terms**

#### **i. Innovative Practices**

In the present study Innovative Practices include newly practiced activities in Curriculum, Modes of Transaction, Practice Teaching, Evaluation, Practical work and Co-curricular Activities in the Secondary level Teacher Education institutions of the Gujarat State. It also stands for novel, creative ideas, methods, devices and activities which are being originated in the Secondary level Teacher Education institutions.

#### **ii. Teacher Education Institutions**

In the present study, the Teacher Education institutions stand for institutions offering B.Ed. programme.

## **6.6. Delimitation of the Study**

The study was delimited to the secondary level Teacher Education institutions.

## **6.7. Type of the Study**

Survey method has been employed for the present study.

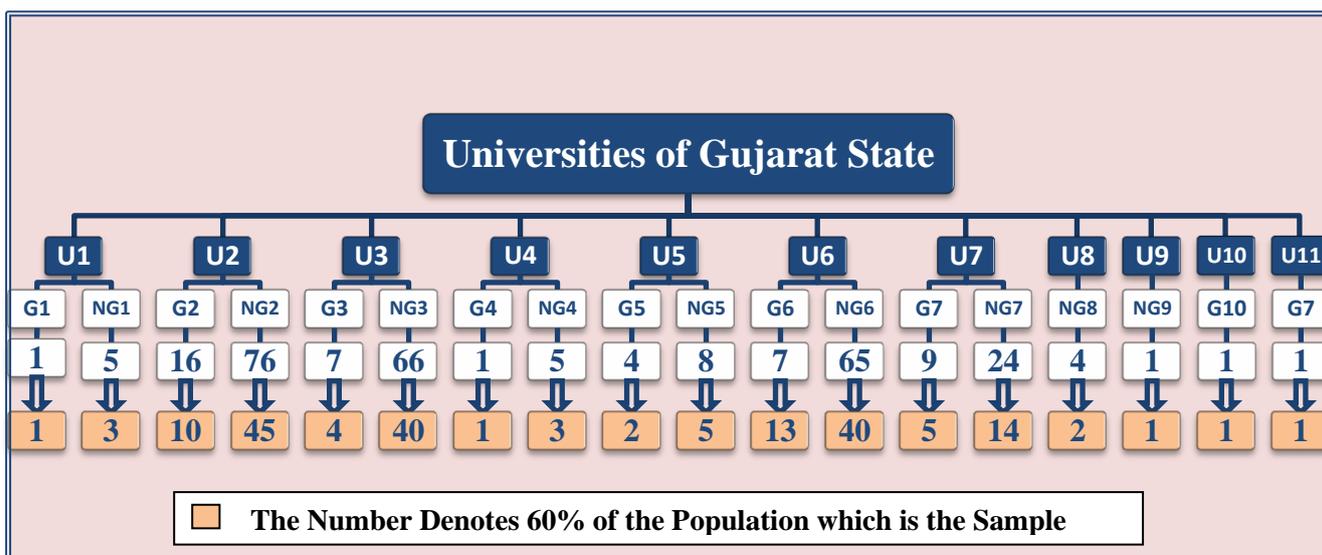
## **6.8. Population for the Study**

The population of this study is comprised of all the Secondary level Teacher Education institutions affiliated to/run by different universities of Gujarat state. All the Principals/ Heads of the Departments, Teacher Educators and Student-Teachers of the respective Institutions during the academic year 2012-13 constituted the population.

## **6.9. Sample for the Study**

- a. The sample was representative of all the eleven Universities of Gujarat State. Stratified Proportionate Random Sampling was done and 60% of the Secondary Level Teacher Education Institutions from each stratum were selected randomly.
- b. A total 191 Secondary level Teacher Education Institutions constituted the final sample for the study.
- c. All the Principals/Heads of the Departments, Teacher Educators and Student-Teachers of the selected Secondary level Teacher Education Institutions constituted the sample for the study.
- d. All the Teacher Educators with teaching experiences of three years constituted the sample from the selected Secondary level Teacher Education Institutions. Further, 15% Students-Teachers were selected randomly for each of the selected practices.
- e. Out of the 191 selected Teacher Education Institutions 42 did not provide data. So, finally 149 Institutions of Teacher Education constituted the sample for the present study.

**Figure: Figure Showing Selected Sample Size**



[Total selected Teacher Education Institution through Stratified Proportionate Random Sampling]

(G: Grant-in-aid, NG: Non grant-in-aid, UGS: Universities of Gujarat State)

**Table: Size of Population**

| UGS and its Code |  | No. of Institution |              |                  |            |
|------------------|--|--------------------|--------------|------------------|------------|
| Code             | Name of Universities                             | Government         | Grant in Aid | Non-Grant in Aid | Total      |
| U1               | Maharaja Krushnakumarsinhji Bhavnagar University | -                  | 01           | 05               | 06         |
| U2               | Gujarat University, Ahmedabad                    | 01                 | 15           | 76               | 92         |
| U3               | Hemchandracharya North Gujarat University, Patan | 01                 | 06           | 66               | 73         |
| U4               | K. Shyamji Krishna Verma Kutchh University, Bhuj | -                  | 01           | 05               | 06         |
| U5               | S. P. University, Vallabh Vidhya Nagar           | -                  | 04           | 08               | 12         |
| U6               | Saurashtra University, Rajkot                    | -                  | 07           | 65               | 72         |
| U7               | Veer Narmad South Gujarat University, Surat      | 02                 | 07           | 24               | 33         |
| U8               | Kadi Sarva Vishwa Vidhyalaya, Gandhinagar        | -                  | -            | 04               | 04         |
| U9               | Navrachana University, Vadodara                  | -                  | -            | 01               | 01         |
| U10              | Gujarat Vidyapith, Ahmedabad                     | -                  | 01           | -                | 01         |
| U11              | The M. S. University of Baroda, Vadodara         | -                  | 01           | -                | 01         |
| <b>Total</b>     |  | <b>04</b>          | <b>43</b>    | <b>254</b>       | <b>301</b> |

**Total Population Size = [ 301] Teacher Education Institutions**

(Source: Data Gathered from all Universities latest Prospectus)

## **6.10. Tools & Techniques for Data Collection**

Questionnaires, Check list, Observation Schedule, Semi-Structured Interview Schedule were employed for data collection. All these tools were constructed by the Researcher and validated by the Experts.

### **i. Questionnaire for Principals/Teacher Educators (Appendix\_I)**

Questionnaire was constructed by the researcher to study the status of innovative practices implemented by Teacher Educators and Principals.

The questionnaire constituted close-ended as well as open-ended questions based on Admission, Modes of Transaction of the Curriculum, Practice-Teaching, Internship, Guidance and feedback, Evaluation for award of grades, Practical Work, Co-Curricular Activities and adopted/adapted innovative practices.

The questionnaire was given to experts for validation and final copy of the questionnaire was made after incorporated the changes suggested by experts.

### **ii. Check List (Appendix\_II)**

A Check list was constructed by the researcher to study the status of innovative practices implemented by Teacher Educators and Principals. It contained items related to the Transaction of Curriculum, Practice-Teaching, Evaluation, Practical Work, and Co-Curricular Activities. It was validated by the experts.

### **iii. Questionnaire for Student-Teachers (Appendix\_III)**

A Questionnaire was constructed by the researcher to study the implemented Innovative Practices in Teacher Education Institutions of Gujarat State. The questionnaire constituted open-ended questions related to the orientation part, planning and implementation part, and evaluation part of Innovative Practices.

### **iv. Semi-Structured Interview (Appendix\_IV & V)**

Semi-structured Interview was conducted to collect the data from the Principals/Heads of the Education Departments and Teacher Educators of the selected Teacher Education Institutions regarding innovative practices in their institutions and the factors facilitating and impeding the innovations.

## **v. Observation**

Observation was done by the researcher to observe different aspects of selected innovative practices. The observation was done when the selected Innovative Practices were being presented / demonstrated and Practiced during workshop by the student-teachers. Observation was also done of the student-teachers while implementing the selected innovative practices during simulation.

## **vi. Document Analysis (Appendix\_VI)**

For clarity in understanding the nature of innovative practices document analysis of the selected innovative practice was done. Lesson plans, Syllabi, Time-Tables and Photographs of the activities were included in this document analysis. A detailed list of all the documents analyzed has been provided in appendix.

### **6.11. Data Collection**

The data were collected phase wise:

#### **Phase - 1:**

In the first phase of data collection the researcher collected data through questionnaires from the sampled Secondary Level Teacher Education Institutes to know the innovative practices prevailing therein.

#### **Phase – 2:**

In the second phase the researcher identified innovative practices which were prevailing in the Teacher Education Institutions of the Gujarat State. This identification was done based on the data collected in phase 1. The researcher personally visited the identified Teacher Education institutes and conducted interview with the Teacher Educators and Principals to know the details about innovative practices. Questionnaire was administered on student-teachers to find out their opinion regarding the particular selected innovative practices.

#### **Phase - 3:**

On the basis of the data gathered in the second phase, various innovative practices were further studied in detail, through personal visits and observation.

## **6.12. Data Analysis Technique Employed**

All the data were analyzed by using Content Analysis. Along with this to have a comprehensive view of the Innovations Practiced by the Institutes of Education, Frequency and Percentage have been computed.

## **6.13. Findings of the Study**

### **Objective 1:**

- None of the Teacher Education institutions was found to administer entrance test as an admission modality. The institutions were found to be following merit based admission process where marks of under-graduation/ post-graduation were considered to prepare admission list.
- In the area of curriculum (Foundations and Optional Courses), Spoken English and Personality Development, English for Specific Purpose and Life Skills Education were found to be the new courses.
- For the all round development of the student-teachers one of the Teacher Education institutions has adopted English Spoken & Personality Development compulsory course for the enhancement of English Language and Personality Development, whereas, one institution has adopted an elective paper namely English for Specific purposes.
- With the aim to bridge the gaps between School Education and Teacher Education a separate paper - “Life Skills Education” has been introduced in one of the Teacher Education institutions.
- It was found that affiliated Teacher Education institutions of four universities and five self financed institutions have developed more than 100 ICT aided instructional material for general subjects of B.Ed. Courses.
- It was found that in many Teacher Education Institutions the faculty members use self-prepared power point presentations, downloaded videos, ready to use worksheets, and multimedia modules for the orientation lessons and theory teaching sessions.
- One of the surveyed Teacher Education institutions has introduced Reflective Way of Teaching, Dialog Mode of Seminar Instruction and Balloon Debate as innovations in Teaching Learning Process.

- Teacher Educators were found to be using interesting interactive methods, like, group discussion, doubt clearing sessions, role play, dramatization of events, and audio-visual aids related to the teaching of different components of theory papers.
- Need has been felt to introduce Constructivist Approach, Life Skills, and Multiple Intelligence.
- Two of the surveyed institutions found to be practicing Open Book Examination, wherein, one institution was found conducting Open Book Exam for all the Core and Foundation courses and another institution was found conducting Open Book Exam only for the foundation paper - Education in Emerging Indian Society.
- Most of the Teacher Education Institutions have adopted Semester System - pattern with Seven Point of Grading Scale.
- Most of the Teacher Education institutions were found to be following Micro-Teaching approach.
- Out of 11 universities only one Teacher Education institutions has adopted Simulated Stage Teaching Practice (SSTP) approach as part of Practice Teaching.
- Majority of the Teacher Education Institutions were following the traditional approach for block teaching/Practice teaching, i.e., going to schools in two phases, after simulation or micro teaching.
- Skills that were found to be focused during practice teaching in schools were - framing objectives in lesson plans, use of A.V. Aids, explanation, conducting activities in classroom, use of Black Board, group work, confidence, voice modulation, dealing with students, and giving reinforcement in evaluation of practice teaching.
- Four of the Teacher Education Institutions were found to be involved with some new practices, like, providing opportunities to teach in different types of schools i.e. rural school, urban school, and sub-urban school.
- Two institutions were found to be providing International School Teaching exposure to their student-teachers.
- Four of the institutions were found to be giving training to the student-teachers using Smart Board/Interactive White board for practicing in schools.

- Most of the institutions were found to be following Skill Based Teaching Practice (SBTP) based on Micro-teaching to provide awareness to student teachers about teaching skills and their use in practical aspects of teaching learning in schools.
- It was observed that out of 11 universities surveyed, six universities were having a specific format of lesson plans whereas other universities are giving freedom to the institutes to make lesson plans on their own.
- One of the self financed colleges was found to incorporate Value and Activity Based learning components in their lesson plans.
- Only one university was found implementing Multiple Intelligence Based Lesson Plans.
- Very less number of Teacher Education institutions have implemented innovative lesson designing in Practice Teaching, i.e., Life skills based, Multiple Intelligence based, Constructivist Approach based and Digital lesson plans.
- One of the private universities has adopted Constructivist Approach lesson designing. After practicing in a simulated condition the student-teacher take up lessons in schools during practice teaching phase.
- One of the surveyed Teacher Education Institutions has adopted Script writing practice based lesson plan.
- One institution was found practicing for the Enhancement of content knowledge among student-teachers in Teaching Learning Process through Participatory Learning.
- One institution was found to be focusing on incorporating 30 percent extra information in science lesson plans by practicing spark sessions.
- Only two universities have adopted rubric to give feedback along with the oral feedback whereas in other institutions Teacher Educator grades each lesson on a Rating Scale.
- To maintain objectivity in practical lessons some of the universities have designed a format in the form of mark sheet which contains criteria for evaluating the lessons.
- It was found that for Teacher Educators it is not possible to observe full 35 minutes lesson as he/she has to observe 2-3 lessons together at the same period of time.

- Teacher Educators were also of the opinion that student-teachers need to observe the lessons of school teachers in various subjects or at least in their respective teaching methods, to enhance their understanding of teaching skills.
- Peer observation practice was also seen in school based practice teaching of many institutions.
- Internship programme was conducted through on campus as well as off-campus mode.
- Internship programmes in all the surveyed institutions were pre-planned. It was observed that the Teacher Education institutions have developed special module for internship programmes.
- With the aim to make the student-teacher capable enough to work with the rural school environment & community where the student-teachers take part in each and every activity under the guidance of Supervisor, off Campus practice was organized by one of the surveyed institutions at a minimum distance of 500 Km.
- One of the institutions was found practicing annual test lessons where textbook materials were not allowed to be taught during annual test lessons.
- One of the Teacher Education Institutions was found giving training of 40 hours for preparing digital Lessons.
- For developing computer skills most of the institutions have adopted a practice of submission of E-Plan to enable the student-teachers to design computer based interactive teaching leaning presentation.
- Student-teachers prepare computer aided material as teaching aids which could be considered as one of the practical work submissions.
- From the surveyed Teacher Education institutions it was noticed that only two institutions were giving innovative projects to the student-teachers.
- Experience method was adopted for Account, Commerce, Economics and Social Science method student-teachers.
- Seminar organization was practiced in some organizations. Current educational issues form the discussion part of these seminars.
- Action Research was now discontinued in some of the universities.
- Submissions of reports of Case Studies of practice teaching schools were observed by some institutions.

- One of the Teacher Education institutions was found practicing Reflective Diary writing. In this practice the student-teachers maintain Reflective Diary in which they write all their reflections related to the programme during the whole academic year.
- One of the institutions was found practicing Dream School Work with the aim of exploring the vision of student-teachers about a school.
- No Teacher Education institute was found to be practicing to deal with the CCE practice due to time constraints and lack of permission from school. It is not possible for student-teachers to learn practicing of CCE in schools within the time limitations allotted for practice teaching.
- With the aim to provide hands on experience to the student-teachers to evaluate answer scripts of school students' answer sheet is provided to student-teachers and after checking discussion is organized to understand the level of evaluation.
- With the aim at training future teachers, one of the surveyed institutions was found giving training to conduct online examinations which might help to reduce the burden of evaluation.
- One of the surveyed Teacher Education Institutions was found imparting Seven Habits of Highly Effective people by Stephen Covey among student-teachers.
- With the aim to develop values among student-teachers one of the institutions found practicing Value Week celebration.
- It was found that four institutions were having Open Educational Resources for the access of various important e-materials which is to be downloaded from their respective website.
- Only two institutions were found to be very actively doing Socially Useful Productive Work.
- One of the institutions was found practicing Creative Hands with the aim to organize exhibition by preparing creative materials in the Teacher Education institution.
- Many of the Teacher Education institutions were found to have a Remedial Program for academically low achievers.

## **Objective 2:**

Basing on the findings of objective 1, some Innovative practices are presented under the heading of Innovative Practices in objective 2, as follows.

- Scripting the lesson in dialogue form encouraged teacher trainees to reach balanced teacher-student talk categories, tried to be better organized and more confident in front of students.
- Constructivist approach based lesson plans made teaching and learning enjoyable for both pre-service teachers and the learners.
- Reflective Diary Writing practice helped the student-teachers to learn many things from their peers to become better teachers and enabled them by improving their personal attributes, since this practice taught them critical self analysis.
- Digital lesson plan application of ICT improved the achievements of pre-service teachers by enhancing their ICT skills and school students in their classes.
- The ICT Integration in curriculum transaction helped the student-teachers, as well as, Teacher Educators in the learning process and encouraged them to use various multimedia learning resources.
- Home Room Practice improved the one-to-one interaction between the student-teachers and the Teacher Educator, which has helped to solve many of their academic and other problems.
- The student-teachers could increase the sense of social responsibility participating in community work.
- Multiple Intelligence based lesson plan helped the student-teachers extend the boundaries of traditional classroom, considering different talents and abilities of the students.
- The student-teachers learnt the concept of life skills through active learning and participation in school practice teaching programme.
- By getting teaching experience in international school the student-teachers could learn the skills to deal with students with global perspective.
- The communication skills of student-teachers developed significantly by creating active learning environment through Dialog Mode of Seminar Instruction.

- Participatory learning approach enriched the content learning of the participants.
- *Gramjeevan Padyatra* helped the student-teachers to develop awareness about the rural community and schools.
- Career Centered activity strengthened the student-teachers.
- Creative hands activity encouraged and improved managerial skills of student-teachers.
- Spark sessions helped the student-teachers to gain a lot of information which contributed to enrich their teaching learning programme.
- Simulated Stage Teaching Practice made the teaching practice easier for the student-teachers to get into their roles, focus on specific stages in a process and it enabled them to deal with varieties of situations.
- Open Book Exam though liked by a majority of the student-teachers as an innovative practice, but time required for attempting open book examination questions was found to be an impeding factor.
- The Activity & Value based lesson plan practice made the student-teachers to develop and use activities more effectively in the teaching learning environment.
- The student-teachers found the group activities and group presentations in Spoken English and Personality Development practice encouraging them to start speaking English
- Balloon debate practice improved the student-teachers' writing and speaking skills as they enabled to produce more developed arguments.
- The Dream school work encouraged the student-teachers to envision all the important aspects of a school by analytical thinking.
- By observing Demonstration lesson, the student-teachers could learn many skills of teaching and classroom management.
- Construction of a Concept Map during lesson planning process helped pre-service teachers to be more reflective in their instructional decision making.
- Rubric use in checking the progress of student-teachers' teaching practice and also to check the progress of school students by student-teachers emerged as an innovation.
- Code of Conduct sessions facilitated the student-teachers to gain professional etiquettes.

- By getting experience from long distance off campus internship programme, the student-teachers could learn to deal with different types of students and environment.
- The student-teachers found that the Open Educational Resources practice was useful and it facilitated their learning.
- Smart Board practice increased the confidence of the student-teachers.
- TAT/TET sessions made the student-teachers aware of the types of questions that are asked.
- Grouping helped the student-teachers learn different subjects especially Educational Evaluation.
- By evaluating the answer sheets the student-teachers familiarised with the grading pattern, criteria of evaluation and types of questions to be framed.
- The practice of online examinations helped the student-teachers to know about the precautions to be taken as well as various aspects that have to be taken care of in open examination.
- By teaching in a variety of schools the student-teachers experienced the different strategies which have to be modified as per the school and level of students.
- Educational panorama practice enabled the student-teachers to create awareness about various useful websites related to their teaching methods.
- Visit method gave a sense of confidence to the student-teachers when they went to teach in schools during practice teaching sessions.
- Educational Forum provided a lot of information about various social and educational topics and it enhanced their communication ability.
- By taking outside textbook lesson for annual test lessons the student-teachers learnt new things, faced challenges and to overcome them.
- Through Value Week celebration, the student-teachers experienced the importance of values to lead life.

**Objective 3:**

- Decision making of major innovative practices in the Teacher Education institutions has the double characteristic of being both consultative and authority based.

- Governing bodies of institutions take interest in the decision making on innovations, especially when it is the matter of institutions objectives, policies and financial concerns.
- The teaching staff were frequently consulted and involved in the decisions relating to adoption of innovative practices in the various institutions.
- Innovative practices adopted in participative consultation with the staff have a greater chance of continuance in institutions.
- Decisions for the adoption of innovative practices were taken consultatively and through participative discussion with the staff which enhanced the chances of their success in achieving the objectives.
- The staff meetings, both, departmental and university level, and their frequency regularity and the quality of interactions and communication therein contribute to the success of innovations.
- The new administrative structures set up in autonomous institutions, such as, Academic Council, Boards of Studies and Boards of Examiners provide forums for the participation of Teacher Educators in the decision making in general, and particularly on the implementation of innovative practices.

#### **6.14. Implications of the Study**

- Apex agencies of India such as NCTE, UGC, NCERT, and AICTE should promote innovative practices in Teacher Education.
- Professional development programmes should be organized on innovative practices for deployment of the innovative practices.
- Innovative Practices in Teacher Education should be appreciated through suitable rewards at the State level and national level.
- Innovative practices should be integrated in the Teacher Education curricula.
- Once the value of innovative practices in Teacher Education is established the NCTE should work out its norms and standards for deployment.
- The Board of Studies of the Education Departments should have experts to examine judiciously the proposed Innovations.
- The expert committees of the apex bodies should have experts to examine the proposed innovations.
- The institutes of education should discuss the innovations to be proposed in their departmental committees.

- The institutes of education should make due provisions for the incubation and institutionalization of the innovations.
- Policy makers and Administrators should encourage Innovations.
- Teacher Educators should develop their understanding about Innovations and their use in the teaching learning.
- Teacher Education Institutions should make provisions for implementing Innovations.

### **6.15. Suggestions for Further Research**

- Research can be conducted on Innovative Practices in Teacher Education institutions of various States of India.
- Case studies of innovations in Teacher Education could be done innovation-wise.
- A comparative study of innovation in Government, Government Aided and Private Teacher Education Institutions can be conducted.
- Case study of Educational Climate of the Highly Innovative Teacher Education Institutions can be done.
- Study of factors facilitating & impeding Innovations in Teacher Education Institutions could be done.
- Study of the most common & liked Innovations could be done countrywide.
- Studies could be conducted to explore the possible role in Innovations of apex agencies, such as, UGC, NCTE & AICTE in India.
- Research can be conducted on comparison of Teacher Education Curricula of Indian universities with respect to innovations.
- Studies can be conducted on the Innovations of State Board Schools, Central Board of Secondary Education (CBSE) schools, Indian Certificate of Secondary Education (ICSE) schools and International General Certificate of Secondary Education (IGCSE) schools.

### **6.16. Conclusion**

About one tenth of the respondent Colleges of Education have been found to practice innovations in their Colleges of Education. Maximum number of innovations has been found to be practiced by School of Science and Education - Navrachna University. Next in the series are Anand College of Education, Way Made College of Education,

H. R. Gajwani College of Education and R. H. Patel English Medium B.Ed. College, The M. S. University of Baroda, J. G. College of Education, M. B. Patel College of Education, M. N. Shukla College of Education, I. J. Patel College of Education, New Progressive College of Education, Gujarat Vidhyapeeth, S. D. Sethiya College of Education, Shri Rang Shikshan Mahavidyalaya and L.N.K College of Education.

It is the evident that five institutions of Teacher Education out of a total of 15 Institutes of Education have been found to offer more than fifty five percent of the innovations. A variety of innovations, namely, Constructivist Approach, Multiple Intelligence, Life Skills, Digital Lessons, Activity and Value base lessons, Simulated Stage Teaching Practice, International School Practice Teaching, ICT Integrated Teaching, Home Room, Reflective Diary Writing, Balloon Debate, Spark Sessions, Open Book Examination, Participatory Learning Approach, Dialog Method Approach, Career Centered Activity, Creative Hands, Seven Habits of Life Skills, Community Work Participation, Gramjeevan Padyatra, English Spoken and Personality Development, English for Specific Purpose, School of My Dream, Demonstration lessons, Concept Mapping, Rubric Making, Open Educational Resources, Educational Instructions through Smart Boards, Aptitude Testing for grouping of the student-teachers, Interactions with the assessed answer sheets of school students by the student-teachers, Online Examination, Multi perspective Teaching, Educational panorama, Annual Test lessons excluding prescribed Textbook contents, Education Forum, Value Week Celebration, Long Distance Off Campus Practice Teaching, Saasu-Vahu Sammelan and Self Regulation have been found to be practiced by the Institutes of Education in Gujarat State.

Facilitating factors for adapting/adopting innovative practices have been found as identification with the philosophy of the innovative practices such as cooperative learning, identification with the research endeavour, and prior experience of Teacher Educators. The impeding factors in institutionalizing the innovations have been found to be limited time available for the course coverage, lack of confidence in innovations, inability to convince colleagues, curricular restrictions, negative attitude and lack of faith of Teacher Educators, lack of interest of student-teachers, diffidence of Teacher Educators, low expected perceptible return through investment on innovations, lack of ICT competency, lack of resources and incentives, lack of participation in decision making, imposition of innovation by the external agencies, lack of priority and leadership.

It is a happy moment to note that a variety of innovations have emerged from the Institutes of Education in the Gujarat State, originated by the institutes of the Education, adapted or adopted. Though only about one tenth of the Teacher Education institutions have been found to observe innovative practices but their passion, dedication and immersion have been found to be largely marvellous. The developmental challenges of the present era demand round the clock innovations. Any innovation irrespective of its origin ought to be the responsibility of all.