

CHAPTER - V

FINDINGS AND DISCUSSION

5.0 Introduction

This chapter presents the findings of the study followed by discussion and implication. The discussion goes as reflections on present findings and that of prior research on innovative practices and tries to find the reality through emerging trends.

Objective wise findings have been presented followed by discussion.

5.1 Findings of Objective 1

Objective 1: To study the status of Innovative Practices in the Secondary Level Teacher Education Institutions of Gujarat State.

5.1.1. Innovative Practices in Theoretical aspects

a) Admission Process

- 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.

b) Curriculum

- 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.

c) Curriculum Transaction

i. ICT Integration

- 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.

ii. Various Approaches of Teaching

- One of the surveyed Teacher Education institutions has introduced Dialog Mode of Seminar 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.

d) Evaluation

- Two of the surveyed institutions were found to be practicing Open Book Examination, wherein, one institution was found conducting Open Book Exam for all the Core and Foundation courses, whereas, 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.

5.1.2. Innovative Practices in Practical Aspects

a) Practice Teaching

i. Simulation/Micro-Teaching

- 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.

ii. Practice Teaching Phase

- 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.
- 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.

iii. Lesson Planning

- 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.

iv. Observation

- 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.

v. Internship

- 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.

vi. Off-Campus

- 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.

vii. Annual Test Lessons

- One of the institutions was found practicing annual test lessons where textbook materials were not allowed to be taught during annual test lessons.

viii. ICT integration in Practice Teaching

- 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 aid which could be considered as one of the practical work submissions.

b) Practical Work

- 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 by one of the surveyed institutes for Account, Economics, Commerce, 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 has been 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 constrains 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 sheets were provided to student-teachers and after checking, discussion was 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.

c) Co-Curricular Activities (CCA)

Productive Work

- 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 two 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.

5.2. Findings of Objective 2

Objective 2: To study in-depth the Innovative Practices in selected Secondary Level Teacher Education Institutions of Gujarat State.

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 was enjoyed by a majority of the student-teachers as an innovative practice, but time consumption was cited as a hindrance in answering by a majority of the student-teachers.
- 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-teacher 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.

5.2.1 Discussion

The Investigator visited various colleges of Teacher Education institutions affiliated to different universities and departments of Education from the Gujarat state and found out a variety of practices which were described at length in chapter 4. Out of these 20 healthy miscellaneous innovative practices were also described in brief as they were found to be significant in affecting the process of teacher education in respective institutions. All these practices have been divided into two aspects viz., theoretical and practical.

Theory courses are prescribed by universities to which the institutions were affiliated. There was not much difference among these institutions in their teacher education processes. Since almost all institutions are affiliated to the universities irrespective their management, they stick to only prescribed courses of affiliating university. Out of 11 universities surveyed, three institutions have initiated curriculum viz., English Spoken & Personality Development (ESPD), English for Specific Purpose (ESP) and Life skills Education to enhance the communication ability and all round development of the student-teachers.

The investigator felt that the student-teachers required such practices for their future growth and development and it is possible if enough resources are provided. The same ideas were expressed by King (2003) in his study for Teacher Education programs at the State universities of Pennsylvania i.e., including more reading and language arts courses.

The survey indicated that in all the surveyed Teacher Education institutions the ratio of the theory and practical aspects was equally distributed and the same opinion was found in a study by Bhatia (1987) where practical work was found to be a useful part of the curriculum and was recommended to be organized more seriously. Largely the B.Ed. curriculum was found to be mechanical and book-oriented. It was indicated that the theory load should be brought down and the ratio of the theory and practice should be fifty: fifty.

To enrich the social interaction in the student teachers inside and outside the classroom, various efforts were done. Classroom teaching techniques like group work/ pair work, healthy debates/ discussions, activity oriented learning experiences, tutorial, group discussion, term paper, project work nurtured social interaction positively. These techniques prepared the student-teachers for co-operative & collaborative learning. The same has been recommended by Nagpure (1991) that Innovative methods like team teaching and models of teaching need to be practiced in the Colleges of Education.

The findings showed that the faculty members of respective universities use diverse methods of instruction like Seminar, group/pair work, discussion and self study techniques for instruction. Though there was a large difference among these types of institutions with regard to the adoption of method of teaching they use various strategies in general classes as well as in method classes. Particularly in method and field classes they have small groups, so it is more convenient to implement various classroom strategies.

It is evident that a majority of the Teacher Educators were found to have positive reactions towards ICT integration in curriculum transaction. A few institutions have developed technology related instructional material for general subjects of B.Ed. Courses. The Teacher Educators were of the opinion that the use of ICT enables the learners to think and create new knowledge based on prior experiences, helps them, as well as all kinds of learners to get updated with current reforms in education through Internet. It helps to become techno-savvy. The investigator felt that if all the Teacher Educators start preparing ICT aided materials, it would have been easier for them to reach the student-teachers. It provides associations with real life experiences, which encourages the meaningful learning. It develops communication skills and provides wide opportunity for assessment as it covers various evaluation techniques to answer

both how to learn and what to learn. Same ideas were expressed by Atisabda (2001) on the design of technology implementation model and faculty development and the cultivation of organizational climate & culture to foster change.

The results of the study indicated that technology equipment and applications were available in many of the Teacher Education Institutions of Gujarat. However the utilization of technology equipment and applications varied from institutions to institutions. Older and familiar technology equipment such as the overhead projector, WIN/DOS computers and Video cassette records were utilized more than the upcoming technology equipment such as the Video Laser, Disc Player and Digital Camera. The same held true for the technology applications. The same has been found in the study of Finely (2003). The findings of the study by Hemabujam (1983) also pointed out that the comprehensive B.Ed. curriculum was not effectively implemented due to shortage of time.

Many innovative lesson plans were to be prepared by the student-teachers for simulation prior to the practice teaching phase. It was noted that the planning and implementation of such lessons was difficult for them because of the constraints of time and resources. These hindrances could be addressed if enough time and resources were provided to the student-teachers. Thus, such practices can easily become a part of the Teacher Education curriculum to address the current needs of the School Education.

Based on the findings the investigator felt that out of these practices i.e. Multiple Intelligence based lesson plans, Life skill based lesson plans, Constructivist approach based lesson plans, ICT based Digital lesson plans should be incorporated because nowadays school students thinking is very high, more media oriented learning taking place so ICT should also find an important place in the Teacher Education curriculum.

It has been also recommended that Multiple Intelligence also helps teachers to create more personalized and diverse lessons to accommodate their students' learning needs, which leads to more opportunities for students to learn the expected material (Wilson, 1998). This also allows teachers to provide concrete opportunities to develop their students' intellectual potential. Further Campbell and Campbell (1999) found that when teachers looked to their students' strengths instead of weaknesses, both teachers and students had higher expectations and this led to greater student achievement. As a

result of higher expectations and the "positive and explicit belief in student intelligence, teaching practices change and, ultimately, so does student achievement" (p.97). Implementation of Multiple Intelligence in the classroom increased students' achievement in many classrooms.

The findings showed that Looking to the demands of ICT use of Smart board is increasing day by day. The investigator felt that this should be enhanced during practice teaching by giving opportunity to deliver minimum one lesson in the training programme. The same idea was expressed by Sinha (1982) that recent innovations in Teacher Education have not been incorporated into the system.

The study revealed that the student-teachers who have opted for elective paper i.e. 'Computer Education' need to prepare power point presentations with audio, audio-visual and text-based materials following learner-centered pedagogy in their teaching methods.

The investigator felt that in many universities Computer Education subject was offered as an optional subject. So it would have been better if it is made compulsory for all the student-teachers, so that, each student-teacher gets benefit of the practical knowledge of actual technology. Since the number of computer was less it was difficult for the Teacher Educators to teach technology because many student-teachers come from rural background who have never used computer. So it was the biggest barrier for them to offer this course. The investigator felt that if these student-teachers are given an opportunity to learn through peer group tutoring it would develop confidence and make the learning of ICT joyful for them. It was also recommended by Sinha (1982) that a majority of the colleges had inadequate equipments and laboratory.

The study revealed that most of the universities have adopted semester system and the same was recommended by Das (1991) in his study. The findings pointed that in most of the surveyed Teacher Education institutions the student-teachers were evaluated by taking traditional approach of examination i.e. internal assessment, external assessment. Only two institutions were found to be conducting open book examination. The student-teachers expressed their preference for change in the examination system. The reasons for acceptance for the change could be that the younger generation is more prone to change; their maturity level due to exposure

through media and gadgets is increasing. So, if the student-teachers themselves face exams of these kinds they can develop proper attitude towards conducting such exam reforms in their school or employment settings. Because they face the examinations as students during their training period so can understand different feelings of their own students in school settings. However, more research findings need to be surveyed to understand the felt opinion of investigator thoroughly.

All the Teacher Education institutions are found practicing Micro-teaching/simulation approach to master the teaching skills. And it was recommended by Singh (1981) that the Micro-Teaching Technique in the controlled laboratory environment, as well as, the reality of bonafide teaching was quite effective.

The findings focussed that only one Teacher Education institution found to be practicing Simulated Stage Teaching Practice. The researcher felt that if the student-teachers are given an opportunity to do practice each skill stage wise in a simulated condition that would be better to master each skill perfectly by observing the same in their peer group.

The findings revealed that in seven universities only four major teaching skills were practiced i.e. Skill of Introduction, Skill of Explanation, Skill of Questioning and Skill of giving reinforcement. So, the investigator felt that there are many skills identified and practiced in simulation and school based practice teaching. Knowledge and practice of these skills is very important for student-teacher in present scenario, like, Skill of Stimulus variation and Non Verbal Communication, and Techno Pedagogy skill.

The findings showed that Demonstration lessons in the colleges under study were delivered by the college staff members. Generally one lesson per method is delivered. The investigator felt that if the Teacher Educator demonstrates the lesson in front of school students then it would increase the leaning of student-teachers.

It was noticed that many of the Teacher Education institutions are keeping their practice teaching phase only for one week and the student-teachers have to complete minimum 15 lessons in a given time. So the time factor was found biggest barrier in practice teaching phase. And the same has been recommended by Deo (1985) where most of the Student-Teachers felt that 'lack of time' was a major factor in not being able to achieve the objectives of the practical programme. Behari (1998) reported that

the methodology of teaching paper was more helpful than foundation papers taken together in developing abilities, especially skills, but practice teaching or practical skills in teaching were found to be more helpful than the rest of the Teacher Education Programme in developing skills.

Deo (1985) reported that Teacher Educators opined that lack of sufficient opportunities and lack of time were the causes for non-fulfillment of objectives of practical programme. The Student-Teachers felt that there could be a large number of practical programmes in the Colleges of Education, but due to lack of time, lack of proper guidance, lack of sufficient opportunities and lack of feedback from the teachers they were not able to achieve the objectives.

During the practice teaching phases, when student-teachers plan and execute various curricular and co-curricular activities, they are provided with the experiences of putting into practice the knowledge and skills related to diversity and inclusion and apply them effectively in classroom situations. If the same opportunity is given to the student-teachers it would be good for them to learn administrative skills which would be necessary for their future purpose. This was also recommended by Sohoni et al. (1992) who found that the Student-Teachers appreciated the various aspects of the training programme and they were highly motivated to implement these activities in the schools. Sultana (1988) found that there was a remarkable change in the behaviour of Student-Teachers of Science on the Skill of Experimentation.

The researcher felt that observation of teaching of good school teachers would help the student-teachers in getting orientation about role of teachers. This was not found to be practiced in many of the Teacher Education institutions. If this is made compulsory it would give greater scope for the enhancement of knowledge, skills amongst the student-teachers.

Every student-teacher has to observe 20 lessons. There was a format which they have to follow, and write the observation report in their observation diary. But the investigator felt that if the student-teachers are given the task to observe school teacher lessons along with the peer observation it would have been better learning for them.

Evaluation of practice teaching is an important aspect of various activities of student-teachers but no training is provided on constructing different tools of evaluation

according to the specific training needs of practice teaching, simulation, Internship, School based practice teaching and test lessons.

The findings showed that as a part of curriculum, student-teachers are oriented about the methodology of conducting Action Research. Each student-teacher has to undertake Action Research and submit the report of the same as an assignment. The student-teachers undertake the issues like the social economic background of a child, institutional environment of the school for the action research. Various problems undertaken by student-teachers for action research end up with identification of causes for a specific problem of either school or individual student/ group. None of the research reports talks about implementation of programmes to improve upon the problems found in the context which is the essence of action research.

The findings focussed that the field visit method enlightened student-teachers about the various concepts of Commerce and Social Science students. The investigator felt that if the student-teachers are given an exposure to get as many as direct experiences then the college must provide several opportunities for student-teachers, to explore, inquire and manipulate because first hand experiences are vital. Providing such assignments to learners at application level & connecting the classroom knowledge to society facilitates meaningful learning.

The findings showed that many Institutions have introduced 'SAPTDHARA' programme as a part of the co-curricular activities in which different days and festivals are celebrated. Through Celebration of co-curricular activities student-teachers develops the idea about the role of diversity and equity in teaching-learning process. But the result was not favourable in all the institutions because the planning was not proper. These hindrances can be overcome if enough time is provided to the student-teachers to plan. It is evident that the student-teacher required these practices. It can be facilitated if enough resources, infrastructure is provided. Hence such practices can become the part of the Teacher Education curriculum to address the current needs of the School Education. The same was found by Deo (1985) in the study that social work had not been an integral part of the Teacher Education programme.

A study by Bhatnagar (1988) revealed that there was a need of developing common tools for assessment of activities under student-teaching and other practical work for

all Universities in the Country and the common areas in which the tools were required to be developed were lesson planning, supervision/evaluation of actual teaching by Student-Teachers, Co-Curricular Activities, SUPW, and community work arising out of theory papers, including assignments.

The findings showed that writing the Reflective daily diary for all the student-teachers helped them to express their ideas openly and constructively and it increased their writing skills, and encouraged them to record the daily activities. The investigator felt that if this opportunity is given that would make them reflective teacher.

The findings revealed that practicing Dream School Work explored the vision of student-teachers about a school. The investigator felt that if the student-teachers are given an opportunity to do such work than their vision of a school also makes them creative teachers who care about the students and motivate them towards success. Such an activity makes the student-teachers realise their own idea about innovative, creative schools according to the present needs. This would also lead to exploration of new ideas, evoke the passions of the student-teachers and push them toward their true human potential.

The findings showed that there were no Teacher Education institutes which were found practicing to deal with the CCE practice. It may be due to the time constrains and lack of permission from school making it difficult for student-teachers to learn practicing of CCE in schools. The investigator felt that if the student-teachers are shown some of the CCE reports of the school students wherein they take class during practice teaching or internship would provide them idea of the actual CCE scenario status. They might be given task to make 2-3 students reports based on their classroom students performances during their internship.

5.3. Findings of Objective 3

Objective 3: To study the factors facilitating and impeding the implementation of innovations.

From the analysis the following findings have been arrived.

- 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.

The following suggestions have been derived from the interview.

1. Effective spreading and utilisation are facilitated by informal opinion leaders, particularly, when these opinion leaders are innovative in orientation and have considerable influence over a large number of colleagues.
2. The adoption of new ideas and practices is strongly influenced by the perceived norms of the user's professional reference group.
3. Informal person-to-person contact is an important factor in effective spreading, particularly when the user is at the trial stage.
4. Individual adaptation behaviour follows a sequence which includes the steps of initial awareness, valuation, trial and adoption.
5. To achieve utilization, a variety of messages, must be generated pertaining to the same innovation and directed to the potential user in a purposeful sequence on a number of different channels in a number of different formats.

5.3.1 Discussion

The decision to adopt an innovation is an active and dynamic process with interactions between the individual, situational factors and contextual factors as well as attributes of the innovation itself. Planning the innovations involve managing the innovations, managing the people in prevailing situations and creating situations where change can be sustained and the growth could be positive. It was in connection with Singh (1997) on those institutions which adopted innovations, were able to maintain them, and frequently discontinued innovations were those that involved heavy expenditure for which training Institutions had to depend on other financing agencies.

The findings showed that the stage of implementation is different in the different universities. The major responsible factors for these differences were due to the different nature of administrative efforts and initiatives taken by the authorities. The existing institutional culture was different in each university due to different perceptions and internal external pressures in the system. It was also in connection with Joshi (1972) on acceptance of and resistance to innovations, who found that there is no category of acceptors as opposed to the category of rejecters. Acceptance of or resistance to an innovation depends on various factors, such as situation, facilities, leadership, personal qualities and the atmosphere. Further, Joshi (1974) reported that the most significant factors of resistance to innovations were: lack of facilities, lack of funds, lack of time to pursue the new ideas, lack of professional guidance and lack of support from Education Department. Mani (1987) identified 41 factors such as clarity and relevance of Institutional goals, staff motivation, human and material resources that facilitated innovations whereas, 21 factors, such as, lack of freedom for Colleges to experiment, financial shortages, heavy work load of the staff that were found to inhibit such programme. So, it is necessary to take care while planning for the change, the implementation might be easy, interesting but challenging.

The survey highlighted that adopters bring with them interests, values, and power that further shape and add complexity to the innovation adoption process. Enhancing adopters understanding of these many influencing factors could provide valuable information to guide dissemination efforts and thereby increase the efficiency of innovation implementation. The investigator felt that communication from the seminars and workshops based on rational and informational input may not be

sufficient to overcome such a barrier. It is in connection with findings of Mani (1987) that the success of the innovations was affected by the change oriented skills, knowledge, values and attitudes of the personnel involved in the change efforts. Effective human relations and personnel management also were found to be enhancing the productivity of innovations. So, the initiator would need to use possible representative, authorities and experts to motivate educators to change their existing patterns in the particular institution, and adopt the innovation.

In order to overcome this problem, the adopter could make use of both multimedia communication, as well as, interpersonal communication. Personal trials, as well as, interpersonal communication with peers, colleagues and friends can also encourage personal experience by the educators and help overcome this risk.

In the autonomous colleges the Academic council was empowered to decide upon the introduction of new courses and hence the governing body was not involved in the decision to start the particular practice/syllabus.

It was also noticed that as a result of autonomy the decision making had become decentralised, from the university to the autonomous college with respect to the approval of new courses and curricula. This was an important component of the academic freedom offered to the autonomous colleges.

5.4. Conclusion

Various innovations have been found to be practiced by various Teacher Education Institutions at secondary level in Gujarat State. The present study also came up with different practices of innovation in almost all aspects of teacher training at secondary level. But these were found to be practised with more fervour and interest in English medium, self-financed Colleges of Education and University Departments of Education in Gujarat State. There is a need to extend these practices in all types of Teacher Education Institutions working in public and private sectors using Gujarati and English as a medium of instruction. There is also a need to channelize the process of planning and implementation of these innovations.