

CHAPTER- I

INTRODUCTION

1.0 INTRODUCTION

Education brings desirable changes in all three domains of learning viz. Cognitive, Affective and Psychomotor. These desirable changes mold the individual to contribute to the development of society and the nation. Education produces knowledgeable and skilled individuals who contribute to the development of the economy. In turn, the nation allots funds to maintain standards of education. Schultz (1961) stated that the expenditure on education is not consumption, but an investment resulting in 'increased capacity of labor to produce material goods'. Thus it can be said that investment in education helps in gaining more output than in any one field. Hansen (1963) indicated that the rate of returns to investment in education is higher than the rate of physical capital. Education not only enhances the quality of life of an individual but also helps in the growth of development of the nation. This thought is depicted in the vision statement by the Government of India (GOI) (2002), "Education is the foundation for a vibrant democracy in which informed citizens exercise their franchise to support the internal growth of the nation and its constructive role in the world community. It is the foundation for growth in productivity, incomes and employment opportunities and for the development, application and adaptation of Science and Technology to enhance the quality of life."

There are formal, informal and non-formal systems of Education, where the formal system of education is emphasised more by the society. The levels of formal education are Pre-primary, Elementary, Secondary, Higher Education (HE), Vocational, and Professional courses. The quality of school education from Pre-Primary to Secondary Education depends on inputs in form of objectives, teachers, curriculum, infrastructure, researches, innovations, and curriculum transaction. The teachers are playing a pivotal role in school education. Qualified, well-equipped, skilled and educated teachers in terms of content mastery and pedagogy must lead to efficient curriculum transaction and the Teaching-Learning process. Teacher Education (TE) is a foundation professional programme for the preparation of Teachers. The Teacher Education Programme (TEP) performs like headquarter and provides a path to Pre-Primary to Secondary Education and HE.

A glance through the system of education in India shows a very long journey from Caste to Mass and Indigenous to Community Education. It was influenced by religion,

State, invaders, civilizations and reached the present education system. As the general education system is affected by various social changes, similarly the teacher preparation programme also passed through different phases. Initial teacher preparation was an informal monitorial system, and then it was teacher training and now called 'Teacher Education Programme'. The TEP is a pre-service professional programme for the preparation of students for formal teaching in schools. The TEP is a unique professional programme, which prepares teachers for schools by providing their theoretical understanding of Philosophical, Sociological, Psychological foundations of education along with field experiences of pedagogical skills. To make the TEP more effective, the duration of the programme has been increased from one year to two years. In order to prepare better teachers, the TEP is now proposed to four years integrated TEP with basic graduation course i.e. B.Sc. B.Ed. and B.A. B.Ed.

1.1 TEACHER EDUCATION PROGRAMME

Schooling is a strong organisation of society, which has established institutions to educate its individuals. The schooling is functioning on the objectives of society towards comfort, development, progress, and healthy life of individuals as well as smooth execution of the social activities. The conventional type of education will not fully satisfy these objectives. It requires innovative, updated, excellent, and grounded need-based education for the fulfillment of the Global needs. With this concern, the school brings qualitative changes in education considering the perspectives of the society, which will bring improvement in the quality of education and ensure a better quality of human life.

Gupta (2002) visualised the goals of the nation to be achieved by 2020 and indicated several dimensions for quality improvement in education. The following are dimensions given by Gupta (2002).

- A shift from methods that emphasise passive learning to those that foster the active interest and ability of children to learn on their own.
- A shift from rote memorization to the development of children's capacity for critical thinking.
- A shift from traditional academic to practically relevant Curriculum.
- A shift from imparting information to imparting life values such as independent thinking, self-reliance and individual initiative that are essential for success in any field of endeavor.

The above dimensions show that the pedagogical changes have to be brought in the classroom. Such efforts might bring quality in education and all-round development of individuals for the satisfaction of the expectations of society. According to Mukhopadhyay (2005), "The quality in education is determined by the kind of humans it produces. In education, where the shaping of the person takes place, quality is a more holistic concept, drawing from the taxonomy of educatedness, inputs, and processes that ensure the development of culturedness, emancipation and self-actualization of all human potentials indicate quality education. Quality in education cannot be restricted to the supplier specification and even apparent consumer satisfaction in terms of employability. There is an inner world in human life; quality in education includes a process that nurtures the seeds of inner development." The quality of education depends on the quality of learning that takes place in the students. Quality learning can lead students to a path of progress and development.

Quality of school education and teacher education are essential for desirable behavioural modification of students. Maintenance and management of quality of education depend on monitoring, supervision, inspection through specific tools and parameters. The use of specific tools and parameters is necessary while conducting the assessment.

Mukhopadhyay (2005) stated, "Interrelated issues for institutional assessment as- Parameters of Assessment, Tools of Assessment, Participants in Institutional Assessment, Quantitative vs. Qualitative Analysis and Use of Assessment Data." The quality measurement and assessment in education occur from internal and external sources. The internal sources are the Principal, Teachers, Students, Parents and school authorities, and various committees like Parent-Teacher Association (PTA), educational clubs, and quality assurance cell. The external sources are community, Non-Governmental Organisations (NGOs), and Government. The community and NGOs directly or indirectly indicate loopholes in education and provide suggestions for quality improvement. The government is measuring and assessing quality in education through inspection or core committee visits. The procedures of quality assessment about sensitise transaction of education and status of quality in the particular educational institution. Thus quality assessment ensures quality improvement in education and better student learning.

1.1.1 Committees and Commissions for Teacher Education

The GOI has been made different Committees, Commissions, Five Year Plans and Policies at different periods for improvement of educational practices. The recommendations of different Committees and Commissions on education and plans formulated for improving the quality of education will reveal the aspects of quality assessment in education.

1.1.1.1 University Education Commission (1948-49)

The University Education Commission (1948-49) under the chairmanship of Dr. Radhakrishnan was formulated to review the education system in India. The major recommendations of the Commission on Higher Education and Teacher Education by the commission were as follows.

- Lack of funds allotted to HE in Universities and attempts to improve it
- Retirement age, working days in a year, tutorial instructions, and improvement in libraries and laboratories in the Universities
- Recognition of their responsibility of financing the HE by the States
- ‘University Grants Commission’ to be set up for allocation of Grants to Universities and Colleges
- Maintenance of high standards of teaching and examinations by the Universities
- The establishment of effective machinery for the supervision and inspection of affiliated colleges to ensure maintenance and uniformity of standards should be devised

The GOI agreed to provide additional grants as per the recommendations of the University Education Commission (1948-49). It was also assured the efforts for maintenance of standards to ensure quality in education would be taken.

1.1.1.2 Education Commission (1964-66)

The Ministry of Education, GOI in 1964 appointed Education Commission under Dr. Kothari to find out measures of quality improvement in education. The Report suggested the following recommendations for quality improvement in TEP.

- Urgent need for a comprehensive programme of improvement through the removal of isolation of training institutions from universities, schools and one another
- Re-organisation of TEP and re-orientation of subject knowledge, vitalization of professional studies, improvement of student-teaching, development of special courses and programmes, and revision and improvement in curricula

- Quality improvement of training institutions to increase in the output of Doctors of Philosophy (Ph.D.s), M.Ed.s, and Masters of Arts (M.A.s) in education as well as to provide an adequate number of scholarships; to appoint specialists in Educational Psychology, Sociology, Science or Mathematics; and to organise summer institutions for in-service education programmes for staff of training institutions
- Maintenance of standards in Teacher Education at the National and State level and revise the need for organisations at both of these levels
- Continuing professional education of all teachers as part-time and full-time in-service education, In-service education of school teachers; and professional preparation of teachers in Higher Education
- To set up a joint standing committee for Teacher Education through University Grants Commission (UGC) in collaboration with National Council for Educational Research and Training (NCERT) and suggest its body too. The commission has recommended giving power to the standing committee on Teacher Education.
 - To develop and establish standards for training institutions and University departments
 - To coordinate and improve standards of Teacher Education at all levels
 - To advise Universities and State Departments of education regarding programmes, curricula, textbooks and qualifications of staff of training institutions at all levels
 - To grant funds to teachers' colleges, departments, or schools of education in the universities
 - To arrange for periodical inspections of training institutions and university departments of education
 - To develop and support financially- in cooperation with Universities or State Departments of Education- Programmes for in-service improvement of teacher-educators and teachers, both in professional qualifications and skill

The Education Commission has emphasised improvement in the teacher education by setting up standards of TEP at all levels and making a standing committee for ensuring these standards.

1.1.1.3 National Policy on Education (1986)

The committee on National Policy on Education (NPE, 1986) prepared a policy in 1986 for which plan of action was made in the year 1992 as Programme of Action (POA).

The MHRD (1986) and MHRD (1992) indicated implementation strategies and emphasised the reforms recommended in the NPE (1986) and POA (1992) respectively. Importance was given to the Teacher Education system for improvement of the quality of education. The NPE (1986) and POA (1992) have suggested the following recommendations.

- Prescribed the standards to be maintained in schools, in consultation with professional bodies like the State Board of School Education and State Evaluation Organisations and responsibility given for inspection and supervision of schools
- Indicated parameters related to the reorientation of the content and process of education as overhauling of the system of Teacher Education and strengthening of the technical and resource support structures
- Suggested strategy for teachers and Teacher Education for improvement in the status of teachers and substantial upgradation in the quality of Teacher Education. The strategy implementation focused on quality in Teacher Education as given below.
 - (a) Creation of opportunities and atmosphere to promote autonomy and innovation among teachers
 - (b) Introduction of reforms in the system of selection of teachers
 - (c) Improvement in the living and working/service conditions of teachers
 - (d) Creation of effective machinery for removal of grievances
 - (e) Involvement of teachers in the planning and management of education
 - (f) Involvement of teachers' associations in upholding the dignity of teachers, their professional integrity, and curbing professional misconduct
 - (g) Preparation of a code of professional ethics for teachers and ensuring that the teachers perform their duties in accordance with acceptable norms
 - (h) Willingness to take tough decisions with regard to the observance of (e) and (f) above

The NEP recommendation gave statutory status to the National Council for Teacher Education to maintain standards in institutions and courses. According to NEP 1986 recommendations, the NCTE was provided the necessary resources and capability to accredit institutions of teacher-education and provide guidance regarding curriculum and methods in TE. Self-evaluation and self-improvement were emphasised for making the Higher Education Institutions (HEIs) excellent in performance.

For this constant monitoring and improvement was proposed with the process of Assessment and Accreditation (AA) by a Council. Thus based on suggestions of NEP 1986 UGC took initiative to establish the Assessment and Accreditation Council as an autonomous body with its criteria and methodology for AA for various HEIs.

1.1.1.4 Eleventh Five year Plan (2007-2012)

Under education committees and commissions, GOI Planning Commission (2008) periodically prepared five-year plans. The Eleventh Plan (2007-2012) provided major inputs to education after observation of committees and commissions on education as well as the implementation of earlier five-year plans. The Eleventh Plan (2007-2012) gave measures for quality improvement in secondary education and noted adoption of National Curriculum Framework (NCF), 2005, adoption of National Eligibility Test (NET)/ State Level Eligibility Test (SLET)/ Central Board of Secondary Education (CBSE)/ State Council for Educational Research and Training (SCERT)/ State Boards to enable recruitment of quality teaching faculty; long-pending institutional reforms in school management, and ensuring accountability at all levels. The commission indicated quality improvement in HE by restructuring academic programmes to ensure their relevance to modern market demands and domestic and global linkages with employers and external advisory resource support groups and tracer studies. The eleventh plan emphasised on recruitment of adequate and good quality teachers; open-ended design-oriented work for encouraging invention and innovation; compulsory interactive seminar and tutorials as methods of education; and improvement in learning opportunities and conditions by updating textbooks and learning material.

The Planning Commission, GOI (2008) has observed the Tenth Five Year Plan and shown the thrust areas for Teacher Education like development and strengthening of Teacher Education Institutions, Improvement in quality of pre-service and in-service teacher education, professional development of teacher education, and assessment of students. Even during the planning period, the performance of TEP has not been found satisfactory. So the Planning Commission proposed the following specific programmes to be taken up in Teacher Education during the Planning period 2007-2012.

- Strengthening Teacher Education by
 - (i) developing Teacher Education Information Base in Public Domain
 - (ii) creating additional support systems in the field
 - (iii) strengthening academic capacity

- Continuation of schemes related to SCERTs
- Continuation of support to Institutes of Advanced Study in Education (IASEs) and Colleges for Teacher Education (CTEs)
- Conducting training of Educational Administrators including Head Teachers
- Introducing substitute/stipend scheme for enabling teachers and educational administrators to enhance their academic qualifications
- Continuation of support to District Institutes of Education and Training (DIETs)
- Augmenting Teacher Education capacity in Scheduled Caste SC/ Scheduled Tribe ST and minority areas
- Professional development of teachers through training programmes
- Professional development of Teacher Educators through Refresher Courses and Fellowship programmes
- Support to NGOs
- Integration of Technology in Teacher Education
- Integration of Elementary Teacher Education with HE

The recommendations of the eleventh five-year plan were supported by Twelfth Five Year Plan (2012-2017) and further new recommendations were suggested based on the challenges faced during the eleventh five-year plan.

1.1.1.5 Twelfth Five year Plan (2012-2017)

The Planning Commission, GOI (2013), stated several challenges during the implementation of the Eleventh Five year Plan (2012-2017) in terms of drop-out rates, enrollment and imbalance in teacher deployment. The learning outcome of students in Indian schools was observed low as compared to other countries. The existence of teachers without professional qualifications approved by the National Council of Teacher Education was a serious challenge. About 8.1 lakh untrained teachers were found in Bihar, Uttar Pradesh, Jharkhand, and West Bengal States.

The Twelfth Five Year Planning commission stated that "At the heart of the issue of quality are the incompetent teaching processes and transactions between teachers and learners that are neither child-friendly nor did they adopt a child-centered approach to curriculum. The capacity, motivation and accountability of teachers to deliver quality in education with significant and measurable improvements in learning outcomes of students need to be critically and urgently addressed. Similar challenges of quality of learning also exist at the secondary and Higher Education levels." The commission took

quality improvement as starting point and linked it to physical space, classroom processes, strengthening academic support system, building a strong systematic focus on teacher capacity, community participation, parents' involvement, and improvement of school leadership. A detailed district-wise database of teachers, teacher educators and Teacher Education Institutions (TEIs) was suggested to be maintained.

The Planning Commission, GOI (2013) stated that "National professional standards for teachers and teacher educators must be evolved. These must be used as a basis for designing pre-service and in-service training programmes and their performance assessment processes for professional development. A system for teacher performance appraisal and feedback needs to be put in place, as a tool for their development and empowerment and not as a punitive measure...Innovative ways need to be found to attract talent from other streams into the teaching profession."

The Planning Commission, GOI (2013) focused on revamping the Pre-service Teacher Education and stated, "In view of large gaps in both quantity and quality of teachers, pre-service Teacher Education would be revamped. A revised scheme for Teacher Education would be implemented during the Twelfth Plan...The content and pedagogy of Teacher Education would be gradually aligned with the National Curriculum Framework for Teacher Education (NCFTE), 2009, which, inter alia, recommended a shift to a four year integrated degree programme with a concurrent study of a subject discipline and education after Class XII or two-year Bachelor in Education degree after graduation. Diploma in Education programmes for teachers for the elementary stage currently imparted by DIETs and other independent institutes should be progressively upgraded to degree programmes and these institutions could be upgraded as undergraduate colleges affiliated to the universities." Thus, drastic changes were recommended in Teacher Education for quality improvement during the twelfth plan period. These changes were implemented in the field of Teacher Education in the states of India during the twelfth five-year plan period.

This commission proposed a comprehensive plan for the development of the State Higher Education system for ensuring access, equity and excellence. The GOI has formulated the Centrally Sponsored Scheme- Rashtriya Uchchatar Shiksha Abhiyan (RUSA), which would be extended over Twelfth and Thirteenth Plan period. Accreditation was adopted as a mandatory quality assurance framework, which has clearly defined the role of State governments vis-a-vis Higher Educational Institutions and facilitate the creation of State Higher Educational Councils (SHECs). The State

Higher Educational Programme (SHEP) should address each State's strategy to address issues of equity, access and excellence.

The Committees and Commissions on education as well as Five Year Plans gave inputs to Education System. According to recommendations of the committees and commissions on education, the Ministry of Human Resource Development (MHRD), GOI gradually brought changes in the improvement of the quality of HE and TE. Implementations of recommendations brought improvement in elementary education, secondary education and HE. According to recommendations of the committees and commissions, various educational bodies came into existence like University Grants Commission in the year 1956, National Council for Educational Research and Training in the year 1961, National Institute of Educational Planning and Administration (NIEPA) originated in the year 1962, Association of Indian Universities (AIU) formed in the year 1925 and registered in the year 1967, and National Council for Teacher Education (NCTE) in the year 1973.

1.1.2 National Council for Teacher Education

According to the GOI (1993), the NCTE came into existence since the year 1973 and became a statutory and autonomous body of the Government of India in the year 1995 in pursuance of the NCTE act 1993. Various TEP functions and transacts specific curriculum in India under the umbrella of NCTE. As an advisory body for the Central and State Governments on all matters about teacher education, the NCTE is functioning for the determination and maintenance of the standard of Teacher Education. The NCTE established norms and regulations for the TEIs. Its central office is in New Delhi and decentralised its powers to Regional Committees. The NCTE established four Regional Committees and specified locations and Territorial jurisdictions as per NCTE Regulations, 2003. Details of Regional Committees and states are given in table no. 1.1.

Regional Committees of NCTE

| Name of the | | | |
|-------------|----------------------------|-------------|--|
| Sr. | Regional | | |
| No. | Committee | Location | Territorial Jurisdiction |
| 1 | Eastern Regional Committee | Bhubaneswar | Arunachal Pradesh, Assam, Bihar, Jharkhand, Manipur, Meghalaya, Mizoram, Nagaland, Orissa, Sikkim, Tripura and West Bengal |

| | | | |
|---|-----------------------------|-----------|--|
| 2 | Western Regional Committee | Bhopal | Chattisgarh, Goa, Gujarat, Madhya Pradesh, Maharashtra, Dadra and N. Haveli and Daman and Diu. |
| 3 | Northern Regional Committee | Jaipur | Haryana, Himachal Pradesh, Punjab, Rajasthan, Uttar Pradesh, Uttaranchal, Chandigarh and Delhi |
| 4 | Southern Regional Committee | Bangalore | Andhra Pradesh, Karnataka, Tamil Nadu, A&N Islands, Lakshadweep, Pondicherry and Kerala |

[Source- NCTE (2003). NCTE- Regulations, 2003]

The Regional Committees functions to follow the norms and regulations given by NCTE for the smooth functioning of the TEP in India. The norms and regulations are about recognition, monitoring, assessment, recruitment, admission, curriculum construction, and curriculum transaction. The NCTE (2009) prescribed National Curriculum Framework for Teacher Education, 2009 (NCFTE, 2009). The NCFTE, 2009 drew a vision of teacher and teacher education concerning teacher's role, and the philosophy, purpose and practice of teacher education. NCTE (2009) stated concluding statements in NCFTE, 2009 as given below.

- Teachers should be prepared to care for children, enjoy with them, seek knowledge, own responsibility towards society, work to build a better world, develop sensitivity to problems of the learners, commitment to justice and zeal for social reconstruction.
- Teachers need to view learners as active participants in their learning and not as mere recipients of knowledge; need to encourage their capacity to construct knowledge, and ensure that learning shifts away from rote methods. Learning to be viewed as a search for meaning out of personal experiences and knowledge generation as a continuously evolving process of reflective learning.
- Teacher education must engage with theory along with field experiences to help trainees to be viewed knowledge not as external to the learner, but as something that is actively constructed during learning. Teacher education should integrate academic knowledge and professional learning into a meaningful whole.

- Teachers need to be trained in organisation of learner-centered, activity-based, participatory learning experiences- play, projects, discussion, dialogue, observation, visit thereby integration academic learning with productive work.
- Teacher education should engage teachers with the curriculum, syllabi and textbooks to critically examine them rather than taking them as ‘given’ and accepted without question.
- Teacher education should provide an opportunity to student-teachers for reflection and independent study without packing the training schedule with teacher-directed activities alone.
- The programme should engage teachers with children in real contexts rather than teach them about children only through theories. It should help them understand the psycho-social attributes and needs of learners, their special abilities and characteristics, their preferred mode of cognition, motivation and learning resulting from home and community socialization.
- The programme should help potential teachers to develop social sensitivity and consciousness and finer human sensibilities.
- Teacher education programme need to broaden the curriculum (both school and teacher education) to include different traditions of knowledge; educate teachers to connect school knowledge with community knowledge and life outside the school.
- Teacher education programme need to help teachers appreciate the potential of hands-on experience as a pedagogic medium both inside and outside the classroom, and work as integral to the process of education.
- Teachers need to re-conceptualise citizenship education in terms of human rights and approaches of critical pedagogy; emphasise the environment and its protection, living in harmony within oneself and with the natural and social environment; promote peace, democratic way of life, constitutional values of equality, justice, liberty, fraternity and secularism, and caring values.
- Because of the many-sided objectives of teacher education, the evaluation protocol needs to be comprehensive and provide a due place for the evaluation of attitudes, values, dispositions, habits, and hobbies; in addition to the conceptual and pedagogical aspects through appropriate quantitative as well as qualitative parameters.

The NCTE formed various TEPs on the demand of the school education systems with quality inputs in the society. As the term 'Teacher Education' defined by NCTE (1993), "Programme of Education for the training of persons for equipping them to teach at pre-primary, primary, secondary and higher secondary stages in schools includes non-formal, part-time education, adult education and correspondence education." Teacher education is pre-service and in-service programmes for elementary and secondary schooling varied in nature as general, integrated, subject-specific, special education and distance mode. NCTE (2014b) listed 15 TEPs as well as their norms and regulations for functioning in India. Information about these TEPs is already uploaded along with their regulations on the NCTE website. These TEPs are listed as under.

- (1) Diploma in Early Childhood Education Programme leading to Diploma in Pre-School Education (DPSE)
- (2) Elementary Teacher Education Programme leading to Diploma in Elementary Education (D.El.Ed.)
- (3) Bachelor of Elementary Teacher Education Programme leading to Bachelor of Elementary Education (B.El.Ed.) degree
- (4) Bachelor of Education Programme leading to Bachelor of Education (B.Ed.) degree
- (5) Master of Education Programme leading to Master of Education (M.Ed.) degree
- (6) Diploma in Physical Education Programme leading to Diploma in Physical Education (D.P.Ed.)
- (7) Bachelor of Physical Education Programme leading to Bachelor of Physical Education (B.P.Ed.) degree
- (8) Master of Physical Education Programme leading to Master of Physical Education (M.P.Ed.) degree
- (9) Diploma in Elementary Education Programme through Open and Distance Learning System leading to Diploma in Elementary Education (D.El.Ed.)
- (10) Bachelor of Education Programme through Open and Distance Learning System leading to Bachelor of Education (B.Ed.) degree
- (11) Diploma in Arts Education (Visual Arts) Programme leading to Diploma in Arts Education (Visual Arts)
- (12) Diploma in Arts Education (Performing Arts) Programme leading to Diploma in Arts Education (Performing Arts)
- (13) 4-year Integrated Programme leading to B.A.B.Ed./ B.Sc.B.Ed. degree

(14) Bachelor of Education Programme (Part-Time) leading to Bachelor of Education (B.Ed.) degree

(15) B.Ed. M.Ed. (3 years integrated) Programme leading to B.Ed. M.Ed. (Integrated) degree

TEIs provide specific TEP for the preparation of teachers. The TEP provides a platform to student-teachers for effective and efficient performance in schools or any other educational institutions. The student-teachers are undergoing various theoretical and practical professional training in TEP, which provides them a platform for the development of pedagogical learning and skill development. Quality input in TEP must lead to better teacher preparation. Mitra (1978) mentioned, "The success of any education reform depends on the quality of teacher which in turn, depends to a large extent on the 'Quality of the TEP'. In our case educational reforms being urgent, it is essential to develop national consciousness regarding a necessary improvement to be brought about in teacher education." The inputs in well and smooth functioning of TEP and professional learning of student-teachers required to be considered for quality of school education.

1.2 INPUTS IN TEP

The inputs in TEP are student-teachers, curriculum, infrastructure, human resources, teaching-learning process, monitorial mechanism, institutional assessment, governing body, and government representatives. Quality inputs are inevitable for the smooth functioning of educational institutions and the achievement of the goals and objectives of the society and nation. The quality measurement, assessment and evaluation by the institution itself along with outside sources provide status and guidelines to proceed towards excellence. It proceeds to think in the direction of quality improvement and quality maintenance in education. Different committees and commissions on education focused on quality in teacher education and recommended various reforms. The recommendations are being implemented in various ways in TEIs.

The TEIs transacts TEP and prepare teachers for schools, where their practice varies in nature. The overall level of performance needs to reveal a clear picture of the functioning of the TEIs. Measurement and identification of the status of TEI may be in terms of different parameters like- formation and implementation of policies, monitoring and funding bodies, financial provisions, demand and supply of teachers, a curriculum of teacher education in trends of the society, integration with other organisations or institutions, academic activities, AA, students' performance in society.

1.2.1 Curriculum

The curriculum for TEP given by NCTE was accepted by universities and constructed a University-specific curriculum to transact in its affiliated Secondary Teacher Education Institutions (STEIs). The curriculum for TEP was prepared according to a particular affiliating University, which varies from University to University. The STEIs follow the curriculum given by the affiliated University, and the curriculum implementation also differs to other TEIs affiliated with the same University. From the year 2015, NCTE has implemented two years STEP. The NCTE has made it mandatory for Universities to construct curriculum considering NCTE guidelines. The Universities have also constructed and implemented the curriculum. Variations were found in the construction and implementation of the curriculum due to different perspectives of the personnel involved in this process.

Kothari and Shelat (2015) stated that the course outline of TEP was like- philosophy and sociology of education, current problems and issues of secondary education, school management, principles and techniques of teaching as a combination of these courses differed from university to university. There were no provisions for training of the teachers for the subjects like art, craft and music while these subjects are very well taught in schools. Goel and Goel (2012) noted mismatches between the subject and pedagogy and the profiles of the learners and their education, and the TEP needed to integrate life skills, info-savvy skills, techno-pedagogic skills, human development climate and spiritual intelligence dimensions. Kothari and Shelat (2015) showed isolation of each type of training institute to the other and stated that there is no integration among pre-primary, primary, secondary teacher education institutes. As a result, great variation has been observed in the area of curriculum, methods of teaching, levels of standards and administration. Goel and Goel (2012) noted that there is little parity amongst various modes of education, such as distance mode, e-mode, and face-to-face mode. Distance mode is diluted, e-mode is in its infancy, whereas, the face-to-face mode is stagnant. There is no network amongst the various modes of teacher education. These are functioning more or less in isolation. Singh (2008) stated, "The teacher educators should emphasise on self and independent study of the trainees, group learning and group discussion methods, peer group tutoring, learning through field trips and excursion, problem-solving and preparation of projects."

Construction of curriculum is an essential aspect for TEP and many organisations are involved in it with their specific purposes. Proper implementation and timely evaluation

of the curriculum are also important for STEIs. Kothari and Shelat (2015) stated about the constructors of curriculum that there are many agencies involved in designing the curriculum for teacher education at the secondary level. NCERT, NCTE, UGC, and various universities have been involved in this process. As a result, the STEIs were always in dilemma in following the curriculum. Arya (2006) suggested that "There should also be the provision of curricular evaluation following a systematic and scientific approach. While revising the curriculum, the opinion of experts and different stakeholders should be utilised. New emerging social aspirations need also to be recognised. New experiences should be incorporated in the new curriculum in view of all these essential considerations." The National Knowledge Commission (NKC) (2009) stated in its final report, "The training of teachers is a major area of concern at present since both pre-service and in-service training of school teachers is extremely inadequate and also poorly managed in most states." Every TEI applied the curriculum in a specific way, which were varied in terms of working hours, academic planning, physical facilities, teaching-learning activities, the duration for completion of the syllabus, demonstration of lesson planning, practice teaching, internship, and use of technology.

1.2.2 Enrolment

There are variations in the implementation of the TEP in various universities and the affiliated TEIs in terms of enrolment criteria, admission procedure, courses, weightage to courses, practical lessons, practical assignments, evaluation system and duration of the TEP etc. Kothari and Shelat (2015) pointed out the admission policies and procedures as it differs from State to State and university to university within the State. The admission processes were adopted by the newly incepted teacher education institutions, wherein the admission process continues till August or September and then in April or May the teacher trainee is awarded the degree of B.Ed. Even the minimum percentage of marks also varies from university to university as criteria for admission. Goel and Goel (2012) also stated about TEP that the enrolment in TEPs varies from region to region. The enrolment in some Teacher Education is near full, but the physical presence is less in the face to face mode. These are exclusively commercial centers than educational.

1.2.3 Practice Teaching

Practice teaching is a very significant aspect of TEP. The student-teachers are learning theory of content and pedagogy. Practice teaching provides opportunities to the students to implement their learning in real classroom conditions in the schools. Kothari and Shelat (2015) indicated practice teaching and related practical work as the most important part of TEP because after successful completion of the course the student-teacher has to apply and verify the practicability of theoretical knowledge, curriculum transaction, and evaluation techniques in real conditions. But in reality, the practice teaching programme is far from satisfactory; because of time constraints and high student-teacher ratio, lessons are not observed fully. An analysis of feedback given to the student-teachers indicated global and subjective remarks given by teacher educators. Majority of remarks pertain to methods of teaching and very few for the content of teaching. Mukhopadhyay (2007) noted, "In most of the cases under the instruction of NCTE, trainee teachers practice thirty-five to forty lessons on the same format without verifying the optimum number of lessons required by an average teacher trainee to achieve the peak of his teaching competence in that particular method. Lesson plans also only emphasise Herbartian steps." Singh (2012) stated "The integration of theory and practice and consequent curricular response to the requirements of the school system remains inadequate. Teachers are prepared in competencies and skills which do not necessarily equip them for becoming professionally effective teachers. Their familiarity with the latest educational developments remains insufficient. The system still prepares teachers who do not necessarily become professionally competent and committed after initial teacher preparation programme. A large number of teacher training institutions do not practice what has been preached. Several skills acquired and methodologies learned are seldom practiced in the actual school system." Thus, the practice teaching and related practical works were carried out in different ways, where proper emphasis was required for integration between theory and practice in TEP.

1.2.4 Human Resource Planning

The number of TEIs increased, which affected directly on transaction of TEP in terms of input, process and output. According to Singh (2012), "Most of the Principals are not well qualified, while some of these institutions do not function with heads and faculty members having at least B. Ed. qualification, a few functions without adequate workload, as the concerned State governments do not give funds for conducting in-

service programme for school teachers. The Regional Institutes of Education (RIE) of the NCERT have been conducting courses with the help of contract teachers who are paid on an hourly basis. This is not a case of paucity of funds, but a case of ineffective management." Kothari and Shelat (2015) indicated major issues related to secondary teacher education and noted that there is a mushroom growth of TEIs in India. Another serious issue is to visualize the equivalence between M.A. in Education and M.Ed., the former is more academic and the latter more professional in nature. There is a mismatch between the demand and supply of teachers. There are no good teachers available in certain subjects while in the other there is only mushroom growth! In Gujarat, there are as many as 418 STEIs, with an intake capacity of 41,800 students against 7,980 secondary schools. This results in a high degree of unemployed teachers every year. According to Singh (2012), "The programmes are almost identical but the standard varies. Certain institutions conducted TEP for motives other than educational. In certain areas, the supply of teachers far exceeds the demand while in others there is an acute shortage and unqualified teachers are working under different names. The manpower planning is practically absent in teacher education." Goel and Goel (2012) also noted that the quality of product and placement criteria for TEPs varies from university to university. The authors indicated significant variance between expected and actual quality. The TEPs are largely traditional and the pace of modernisation is very slow and not in a position to infuse the technological innovations for transacting education.

Thus, the learning of student-teachers in the TEP is not updated with knowledge and pedagogical skills to implement learning in real classroom situations. The student-teachers are not getting enough practice of teaching. The TEIs are working in isolation and providing less competent teachers to the schools. The TEIs have no uniformity about the practical way of the real teaching period. Before the implementation of the Choice Based Credit System (CBCS), the TEIs used to teach from *Zanda to Zanda*- it means real teaching started from August and ended around January. The CBCS has drawn towards establishing uniformity in terms of the period of teaching and evaluation. There is a growth of STEIs in India, but the transaction of the TEP has a lower status in terms of curriculum and its implementation. The variation was found among the Universities and even amongst their TEIs. The variation is in enrollment, curriculum implementation, courses, practice teaching, physical facilities, and evaluation lead to think over the existence of quality in TEP.

1.3 QUALITY ASSURANCE IN TEACHER EDUCATION

The inputs in TEP and student-teachers learning needs a quality assurance mechanism to be followed by quality improvement. The quality assurance may be carried out by its measurement with scientific assessment of the institution. It depends on the self-assessment of an institution by internal as well as external assessment. It is not enough to get just status only but essential to bringing quality improvement in education. The internal quality assurance via assessment is possible through the performance in education beyond looking for self, critical scrutiny training with objectivity, maintenance of rigor in assessment, unbiased judgment, the relevance of the practice of the programme, and objectivity in the recording of outcomes of assessment for education.

The quality assurance in TEIs- as a type of HEIs in India carried out by different bodies. The HEIs in India are monitored by an apex body- UGC- indirectly controlled by the MHRD and funded by the State governments. Most universities are administered by the States. UGC is responsible for coordination, determination, and maintenance of standards and release of grants. Besides it, various bodies and Professional Councils are responsible for the recognition of courses, promotion of professional institutions, and providing grants to specific undergraduate programmes, various awards, and quality improvement. There are various bodies for quality assurance in HE like the National Board of Accreditation (NBA), All India Council for Technical Education (AICTE), Accreditation Council for Pharmacy Education (ACPE), National Assessment and Accreditation Council (NAAC) etc. Even there are collaborations with international bodies concerned with quality in education like Asia Pacific Quality Network (APQN), International Network of Quality Assurance Agencies in Higher Education (INQAAHE), and Council for Higher Education Accreditation (CHEA) with CHEA International Quality Group (CIQG).

1.3.1 National Assessment and Accreditation Council

The establishment and functioning of government bodies for quality assurance are due to recommendations of various educational policies. The NPE (1986) has emphasised the excellence of HEIs in self-evaluation and self-improvement. Apart from it, a major recommendation under the creation of machineries for coordinated development focused on the maintenance and promotion of standards of education. It has proposed to UGC to take the initiative to establish the Accreditation and Assessment Council as an autonomous body. The body expected to evolve its criteria and methodology for

accreditation and assessment and suggested setting up a mechanism to encourage self-assessment in institutions and also AA by this Council. The institutions would be constantly monitored and improved.

In pursuance of recommendations of NPE (1986), the UGC has established National Assessment and Accreditation Council in the year 1994 as an autonomous body. It laid special emphasis on evaluating the quality of HE in India. It was established to assess and accredit institutions of HE in the country.

Headquarter of NAAC is in Bangalore. It is decentralised by its five regional centers i.e. East, West, North, South, and North-East. The list of States covered under Regional centers is given in table no. 1.2.

Table 1.2

List of Region-wise States under NAAC

| Sr. No. | Region | States Covered |
|---------|------------|---|
| 1 | East | Bihar, Chhattisgarh, Jharkhand, Odisha, West Bengal |
| 2 | West | Dadra & Nagar Haveli, Daman & Diu, Goa, Gujarat, Madhya Pradesh, Maharashtra |
| 3 | North | Chandigarh, Delhi, Haryana, Himachal Pradesh, Jammu & Kashmir, Punjab, Rajasthan, Uttar Pradesh, Uttarakhand |
| 4 | South | Andaman & Nicobar Islands, Andhra Pradesh, Karnataka, Kerala, Lakshadweep, and Pondicherry, Tamilnadu and Telangana |
| 5 | North East | Arunachal Pradesh, Assam, Manipur, Meghalaya, Mizoram, Nagaland, Sikkim, Tripura |

[Source- NAAC (2015b). <http://www.naac.gov.in>]

The NAAC assessment laid focus on the institutional developments regarding three aspects- Quality initiatives, Quality sustenance, and Quality enhancement. NAAC has also assessed and accredited HEIs with the use of manual and provided quality inputs for quality improvement and maintenance. The Twelfth Five Year plan (2012-2017) has also given key indicators- Excellence, Expansion and Equity, where the excellence to be drawn by the Accreditation.

About TEI, the Planning Commission, GOI (2013) focused on AA of TEP in the Twelfth Five Year Plan and indicated, “Accreditation arrangements need to be strengthened and new credible agencies could be roped in for the purpose. There is an

immediate need to lay down performance standards and benchmarks for TEP with clear accountability. These needs to be balanced with greater flexibility and rational norms and standards around infrastructure, faculty, curricula, and entry eligibility from regulatory and governing bodies and Boards, in particular the National Council of Teacher Education ...The recently introduced Teacher Education Index would be widely used to measure the quality of Teacher Education Institutions. This third-party assessment by approved entities to avoid malpractice should be done periodically every five years and made public to ensure transparency." It indicates strengthening the AA process with the removal of malpractices in AA of Teacher Education Institutions. It leads to the framing body for accreditation other than the NAAC.

The need for revamping the accreditation system was given for better accreditation as "Setting up of a National Accreditation Regulatory Authority for Higher Educational Institutions (NARAHEIS) is under consideration to strengthen India's accreditation system.

- The capacities of existing agencies (e.g., NAAC and NBA) would also be enhanced.
- Indian institutions would be encouraged to obtain accreditation from international accrediting bodies to create competitive pressure on Indian accrediting bodies.
- Multiple accreditation bodies would be set up to handle the large volume of applications for accreditation."

The government has framed RUSA following the Twelfth Five Year Plan. Accreditation was also adopted as a mandatory quality assurance framework and recommended to set up SHECs. The GOI has given the responsibility to the SHECs for the collation of the information collected by the universities. In this regard, the MHRD (2013) stated, "The responsibility of timely and accurate data collection and maintenance of the Management Information System (MIS) is one of the major responsibilities of the SHEC. This information would have three-fold use.

- (1) Assess the performance of every university every year, in terms of the norms set by RUSA
- (2) Assess the performance of universities against specific grants or project-based funding
- (3) Formulation of the five/ten year State Education Plans based on the current performance and possible future growth."

Thus, based on recommendations from different bodies and various initiatives from the government, the TEIs are working for improvement and maintenance of quality. Gradually the GOI has brought changes in Teacher Education. The introduction of the RUSA and Secondary Teacher Education Programme (SHEP) is expected to bring quality improvement in education.

1.3.2 Internal Quality Assurance Cell

The NAAC has been advising colleges to set up Internal Quality Assurance Cell (IQAC). It is a central cell in any institution for the institutionalization of quality by making quality enhancement an integral part of institutional functioning. IQAC is playing a pivotal role in monitoring and maintaining quality in HEIs. The cell provides a runway to perform all functions of the institution and may channelize and systematize the efforts and measures of an institution towards academic excellence. IQAC works in functioning HEIs by involving IQAC coordinator, principal, teaching staff, supporting staff, management authorities, government, students, parents, NGOs, academicians, and community. IQAC provides a platform to generate good ideas, planning, practices and implementation. It measures the outcome of academic and administrative performance of the institution, ensures continuous improvement in all the operational aspects of an institution, and assures accountability of its stakeholders for quality in it.

1.3.3 Benefits of NAAC Accreditation

In accordance with educational policies, the NAAC is functioning for AA of HEIs. It has carried out AA with specific parameters, which are useful to assure quality in HEI and to provide inputs for its improvement and maintenance. It becomes beneficial to the HEIs to identify internal areas of planning and resource allocation; to help the institution to know its Strengths, Weaknesses, Opportunities and Challenges (SWOC) through an informed review process, to promote intra and inter-institutional interactions, to give institutions a new sense of direction and identity etc. Along with it, the NAAC is empowering HEIs by providing grants for seminars, workshops and symposia. From the Twelfth Five Year Plan (2012-2017), the UGC started to provide Rs. 3.00 lakhs to each College to meet the establishment and strengthening expenditure of the IQAC. It is supporting the functioning of the IQAC in the institution and towards its quality functioning.

The financial support has been increased the involvement of the number of HEIs in AA. Gandhi (2013) indicated, “Till 06 January 2000, NAAC completed the assessment of around 100 institutions and the institutional grades have been announced for 85

institutions, which included 6 universities and 79 colleges from only 11 States in India. With the UGC's decision taken in 1999-2000 to extend financial support to meet the accreditation cost to all the institutions of HE, more colleges started coming forward for accreditation and the total number of Institutions Accredited as of 08 January 2004 were 848, which consist of 104 Universities and 744 Colleges.”

Quality assurance by AA is useful to HEIs to recognise the status of quality to bring improvement. NAAC's efforts were strengthened as per the requirement for HEIs and recommendations from policies and plans. NAAC has tried to take useful steps in AA. The TEIs are also taking interest in going under this process for AA.

1.4 NCTE AND ASSESSMENT AND ACCREDITATION BY NAAC

The National Council for Teacher Education is a statutory and autonomous body of the Government of India, which provides norms and regulations for Teacher Education. It is giving recognition to TEI for functioning TEPs. The NCTE has accepted the NAAC AA for TEIs. NCTE is maintaining quality standards by monitoring as well as AA by NAAC.

1.4.1 Chronological Criteria and Weightage for Assessment and Accreditation of TEIs

NAAC has developed manuals and guidelines for AA of HEIs in India. The AA of the HEIs was carried out as per the eligibility criteria mentioned in the manual for Accreditation. The manual included performance of HEIs in terms of criteria analysis and respective weightage to different criteria and related key aspects. NAAC accepted the invitation for AA of HEIs including the TEIs as per the existed methodology for AA. At the initial stage of AA of HEIs including TEIs, the NAAC has introduced NAAC Regulation for AA of HEIs with Percentile Marking for Ten criteria and an overall average score in percentage till the year 1998, as shown in table no. 1.3.

Table 1.3

Criteria under Percentile Marking grading system for Assessment and Accreditation of HEIs by NAAC till the year 1998

| Sr. No. | Criteria |
|---------|-------------------------------|
| I. | Goals and Objectives |
| II. | Curriculum, Design and Review |

- III. Teaching, Learning and Evaluation
- IV. Research and Publication
- V. Consultancy and Extension Activities
- VI. Organisation and Management
- VII. Infrastructure facilities
- VIII. Support Services
- IX. Student Feedback and Counselling
- X. Generation and Management of Financial Resources

[Source- NAAC. (1998, December 12). Report of the Peer Team set up by the NAAC for Assessment and Accreditation of Vinayak Ganesh Vaze College of Arts, Science and Commerce, Mumbai]

Pillai (2004) stated that the NAAC and NCTE have identified the six criteria to serve as the basis for its assessment procedures for teacher education. Even Pillai and Rama (2004) mentioned a Six criteria framework for the Colleges of Education initially adopted by NAAC. The six criteria grading system is given in table no. 1.4.

Table 1.4

Criteria for Assessment and Accreditation of TEIs by NAAC

| Sr. No. | Criteria |
|---------|---|
| 1 | Curriculum Design And Planning |
| 2 | Curriculum Transaction And Evaluation |
| 3 | Research Development And Extension |
| 4 | Infrastructure And The Learning Resources |
| 5 | Students' Support And Progression |
| 6 | Organisation And Management |

[Source- Pillai (2004). Self-Evaluation, External Quality Assurance and Accreditation: A development-oriented Process for the Indian Teacher Education System.]

The initial Criteria and Weightage under the Percentile Marking grading system for AA of HEIs by NAAC was revised in the year 1999, which is given in table no. 1.5.

Table 1.5

Criteria and Weightage under nine-point grading System up to March 2007

| Sr. No. | Criteria | Weightage | | |
|------------|--|------------|------------------------|-------------------------------------|
| | | University | Autonomous Colleges | Affiliated/ Constituent Colleges |
| 1 | Curricular Aspects | 15 | 15 | 10 |
| 2 | Teaching-Learning and Evaluation | 25 | 30 | 40 |
| 3 | Research, Consultancy and Extension | 15 | 10 | 05 |
| 4 | Infrastructure and Learning Resources | 15 | 15 | 15 |
| 5 | Student Support and Progression | 10 | 10 | 10 |
| 6 | Organisation and Management | 10 | 10 | 10 |
| 7 | Healthy Practices | 10 | 10 | 10 |
| Total | | 100 | 100 | 100 |

[Source- NAAC (2005). NAAC: A Decade of Dedication to Quality Assurance]

The accreditation method of Percentile Marking for Ten criteria and an overall average score in percentage given by NAAC was revised in the year 1998. The revised accreditation method of percentile marking was a Five Star-grading system (A* to A*****) for seven criteria and a score of 100 in percentage. It was applied by NAAC from 1999 to 15th March 2002, which is given in table no. 1.6.

Table 1.6

A five-point grading system for Assessment and Accreditation of HEIs by NAAC from the year 1999 to 2002

| Grade | Institutional Score |
|--------|-------------------------|
| | (Upper limit exclusive) |
| A***** | > 75 |
| A**** | 70-75 |
| A*** | 65-70 |
| A** | 60-65 |
| A* | 55-60 |

[Source- NAAC (2015d). The Grading System]

The institutional overall score of 55 percent or more than it, possessed a specific grade and got the "Accredited status". Below the score of 55, the institution was given "Not Accredited" status. The accredited institutions were graded on a five-point scale star-grading system followed by the scale values.

The star-grading system was revised in the year 2002 and decreased the range of the weightage with 9 point scale. This accreditation method was percentile marking for seven criteria, and an overall average score in percentage with a Nine-point grading system. The Nine-point grading system is given in table no. 1.7.

Table 1.7

A nine-point grading system for Assessment and Accreditation of HEIs by NAAC from 16-03-2002 to 31-03-2007

| Sr. No. | Score | Institutional Grade |
|---------|--------|---------------------|
| 1. | 95-100 | A++ |
| 2. | 90-95 | A++ |
| 3. | 85-90 | A |
| 4. | 80-85 | B++ |
| 5. | 75-80 | B+ |
| 6. | 70-75 | B |
| 7. | 65-70 | C++ |
| 8. | 60-65 | C+ |
| 9. | 55-60 | C |

[Source- NAAC (2015). The Grading System]

The NCTE has continued the AA of TEIs by NAAC, which was strengthened in the year 2002. NCTE (2014a) indicated that both of the bodies- NCTE and NAAC- entered into a Memorandum of Understanding (MoU) on 16th August 2002 for executing the process of AA of all TEIs coming under the provision of the NCTE Act in the year 1993. The NCTE and NAAC had confirmed to continue to undertake the initially existing methodology for accreditation of TEIs, till the revision came up. NAAC has assessed and accredited TEIs using parameters in consideration of the norms and standards of NCTE in India. According to the MoU, the NCTE and NAAC have prepared a separate Manual for Self-appraisal of TEIs from 1st April 2007 with seven Criteria and Weightage for AA of TEIs by NAAC, as given in table no. 1.8.

Table 1.8

Criteria and Weightage for Assessment and Accreditation of TEIs by NAAC given in the year 2007

| | | Weightage | | |
|-------------|--|--|--------------------------------|---|
| | | University Department of Education /RIE | IASE/ Autonomous College | Affiliated/ CTE/ Constituent College/ Department of Education of a Composite College |
| I | Curricular Aspects | 150 (15) | 100 (10) | 50 (5) |
| II | Teaching-Learning and Evaluation | 250 (25) | 350 (35) | 450 (45) |
| III | Research, Consultancy and Extension | 200 (20) | 150 (15) | 100 (10) |
| IV | Infrastructure and Learning Resources | 100 (10) | 100 (10) | 100 (10) |
| V | Student Support and Progression | 100 (10) | 100 (10) | 100 (10) |
| VI | Governance and Leadership | 150 (15) | 150 (15) | 150 (15) |
| VII | Innovative practices | 50 (5) | 50 (5) | 50 (5) |
| Total Score | | 1000 | 1000 | 1000 |

(Note. Figure in the parenthesis indicates percent.)

[Source- NAAC (2007a). Institutional Accreditation Manual for Self-appraisal of Teacher Education Institutions]

Apart from the separate manual, the grading system was common for all types of HEIs. The earlier Nine-point grading system given in the year 2002 for AA of all HEIs was revised to a four-point scale with Cumulative Grade Point Average (CGPA) system in the year 2007 as given in table no. 1.9.

Table 1.9

Scale for CGPA grading system for Assessment and Accreditation by NAAC from April 2007

| Sr. No. | Range of institutional CGPA | Letter Grade | Performance Descriptor (Status) |
|---------|-----------------------------|--------------|------------------------------------|
| 1 | 3.01-4.00 | A | Very Good (Accredited) |
| 2 | 2.01-3.00 | B | Good (Accredited) |
| 3 | 1.51-2.00 | C | Satisfactory (Accredited) |
| 4 | Below 1.50 | D | Unsatisfactory (Not Accredited) |

[Source- NAAC (2007a). Institutional Accreditation Manual for Self-appraisal of Teacher Education Institutions]

The seven Criteria and Weightage given by NAAC in the year 2007 was revised in the year 2012, but the four-point scale with CGPA system given in the year 2007 was continued.

In the year 2012, NAAC (2013) indicated minor modifications in the criteria and weightage for AA and gave a Manual for Self-Study Report Affiliated/ Constituent Colleges. The seven Criteria and Weightage revised by NAAC in the year 2012 are given in table no. 1.10.

Table 1.10

Criteria and Weightage under CGPA grading system by NAAC revised in the year 2012

| | | Weightage | | |
|----------|-------------------------------------|--|--------------------------------|---|
| Criteria | | University Department of Education /RIE | IASE/ Autonomous College | Affiliated/ CTE/ Constituent College/ Department of Education of a Composite College |
| | | | | |
| I | Curricular Aspects | 150 (15) | 150 (15) | 100 (10) |
| II | Teaching-Learning and Evaluation | 200 (20) | 300 (30) | 350 (35) |

| | | | | |
|-------------|--|-------------|-------------|-------------|
| III | Research, Consultancy and Extension | 250 (25) | 150 (15) | 150 (15) |
| IV | Infrastructure and Learning Resources | 100 (10) | 100 (10) | 100 (10) |
| V | Student Support and Progression | 100 (10) | 100 (10) | 100 (10) |
| VI | Governance, Leadership and Management | 100 (10) | 100 (10) | 100 (10) |
| VII | Innovations and Best Practices | 100 (10) | 100 (10) | 100 (10) |
| Total Score | | 1000 | 1000 | 1000 |

(Note. Figure in the parenthesis indicates percent.)

[Source- NAAC (2013). Institutional Accreditation Manual for Self-Study Report Affiliated/Constituent Colleges]

The MoU between NCTE and NAAC signed in the year 2002 was revised on 14th August 2014. Both of the bodies agreed and made MoU with the following agreements.

- The NAAC and NCE shall continue to undertake accreditation of TEIs in the country as per the existing methodology till the revision come.
- To organise national or regional meets on accreditation and quality assurance, formulate mechanisms and schemes for quality promotion and sustenance among TEIs
- To develop linkage between various sectors of Teacher Education and disseminate good practices and innovations for the creation of quality culture.
- To analyse available data on quality assurance and accreditation and publish reports and undertake promotional activists

The MoU was operative for three years from the date of its commencement and signing. Both the bodies had the right to terminate the MoU at any time.

1.4.2 Eligibility of TEIs for Assessment and Accreditation by NAAC

NAAC gave eligibility criteria for AA of TEIs. The HEI or University offering TEP recognised by NCTE and having a standing of at least three years since establishment and with a record of two batches having graduated are eligible for undergoing the process of AA. The NAAC described such TEI as ‘Unit of Assessment’.

1.4.3 Manual for Assessment and Accreditation of TEIs from April 2007

NAAC pre-decided parameters in form of criteria and weightage for AA of HEIs including TEIs before the year 2007. NAAC renewed methodology for TEIs in the year 2007. NAAC developed a separate modified methodology for AA of TEIs in coordination with the expertise of NCTE. NAAC prepared a new methodology as 'Manual for Self-Appraisal of Teacher Education Institutions', which was implemented from 1st April 2007. The methodology was modified to 4 point grading system with 7 criteria having a total score of 1000. There are varied weightages for key aspects and criteria for different types of institutions under three categories- (1) University Department/ Regional Institutions of Education (RIE), (2) Institute of Advanced Study in Education (IASE)/ Autonomous and Affiliated/ College of Teacher Education (CTE)/ Constituent College/ Department of Education of a Composite College.

The NAAC prepared the 'Quality Assurance Toolkit for Teacher Education Institutions (QATTEI)' in the year 2007 for continuous quality assessment and appraisal of TEIs. The AA was made mandatory for all HEIs in the year 2011. In this concern, the same manual of the year 2007 was introduced by NAAC in the year 2012 for TEIs to go for mandatory AA.

1.4.4 Methodology for Assessment and Accreditation of TEIs

As a 'Unit of Assessment', the TEI has to follow the steps given in the Manual for Self-Appraisal of TEIs for AA by NAAC.

- Online Submission of Letter of Intent (LoI)
- Preparation and submission of Self-Appraisal Report (SAR) based on manual
- Allotment of Peer Team by NAAC from outside states in India
- On-site Peer Team visit according to pre-decided schedule, Peer Team Report and decision of Grade
- The final decision by the executive committee of the NAAC

NAAC selects experts of the Peer Team as Assessors from academics and administration in the field of HE to carry out the process of AA. NAAC takes due care about selection of assessors of the Peer Team from outside the state of TEI going to be assessed, who have no prior connection with that TEI. The assessors' role is to go through the SAR; visit the institution; and do cross inquiry and verifications of documents and stakeholders. Then the assessors derive the performance analysis of the institution in form of criterion-wise and overall analysis with observations on key-

aspects and recommendations for quality improvement of TEI based on actual practices, leading to performance status in form of weightage, CGPA and grade. Multi-dimensional assessment of TEIs takes place and its real status and picture is revealed, which becomes useful to the assessed TEI and other institutions too.

1.4.5 Criteria for Assessment and Accreditation for TEIs from April 2007

The NAAC has identified seven criteria of performance of TEIs to serve as the basis for the assessment of TEIs. The criteria are distributed in the Manual for Self-Appraisal of Teacher Education Institutions. It contains common seven criteria and 36 key aspects for three types of TEIs i.e. (a) University Department/ RIE, (b) Institute of Advanced Studies in Education (IASE) / Autonomous TEI, and (c) Affiliated/ Colleges of Teacher Education (CTE)/ Constituent College/ Department of Education of a Composite College. The three types of TEIs have differences in weightage to each of these seven criteria and their respective key aspects. The Weightage to seven criteria and their key aspects for affiliated TEIs are given in table no. 1.11.

Table 1.11

Key Aspect-wise differential Weightage under each Criterion for Assessment and Accreditation of TEIs by NAAC adopted in the year 2007

| | | Affiliated/ CTE/ Constituent College/ Dept. of Education of a Composite College |
|--------------------------|--|---|
| Criteria | Key Aspects | |
| 1. Curricular Aspects | 1. 1 Curricular design and development | 10 |
| | 1. 2 Academic flexibility | 15 |
| | 1. 3 Feedback on curriculum | 10 |
| | 1. 4 Curriculum update | 05 |
| | 1. 5 Best Practices in curricular aspects | 10 |
| | Total | 50 |
| 2. Teaching-Learning and | 2. 1 Admission process and student profile | 30 |
| | 2. 2 Catering to diverse needs | 45 |
| | 2. 3 Teaching-learning process | 270 |
| | 2. 4 Teacher quality | 65 |
| | 2. 5 Evaluation process and reforms | 30 |

| | | | |
|--|--|---|-----|
| | | 2. 6 Best practices in teaching, learning and evaluation | 10 |
| | | Total | 450 |
| 3. Research, Consultancy and Extension | | 3. 1 Promotion of research | 15 |
| | | 3. 2 Research and publication output | 25 |
| | | 3. 3 Consultancy | 05 |
| | | 3. 4 Extension activities | 40 |
| | | 3. 5 Collaborations | 05 |
| | | 3. 6 Best practices in research, consultancy & extension | 10 |
| | | Total | 100 |
| 4. Infrastructure and Learning Resources | | 4. 1 Physical facilities | 20 |
| | | 4. 2 Maintenance of infrastructure | 10 |
| | | 4. 3 Library as a learning resource | 35 |
| | | 4. 4 Information and Communication Technology as Learning resources | 15 |
| | | 4. 5 Other facilities | 10 |
| | | 4. 6 Best Practices in infrastructure and learning resources | 10 |
| | | Total | 100 |
| 5. Student Support and Progression | | 5. 1 Student progression | 30 |
| | | 5. 2 Student support | 30 |
| | | 5. 3 Student activities | 30 |
| | | 5. 4 Best practices in student support and progression | 10 |
| | | Total | 100 |
| 6. Governance and Leadership | | 6. 1 Institutional vision and leadership | 15 |
| | | 6. 2 Organisational arrangements | 20 |
| | | 6. 3 Strategy development and deployment | 30 |
| | | 6.4 Human Resource Management | 40 |
| | | 6. 5 Financial management and Resource mobilisation | 35 |
| | | 6. 6 Best practices in Governance and Leadership | 10 |
| | | Total | 150 |
| 7. Innovative | | 7. 1 Internal Quality Assurance System | 20 |
| | | 7. 2 Inclusive Practices | 15 |
| | | 7. 3 Stakeholder Relationships | 15 |

| | |
|-------------|------|
| Total | 50 |
| Total Score | 1000 |

[Source- NAAC (2007). *Institutional Accreditation Manual for Self-appraisal of Teacher Education Institutions*]

1.4.6 Grading System

According to the methodology of AA of TEIs, weightage was given to every key aspect. After the assessment, an Institution is given CGPA with letter grades 'A', 'B', 'C' or 'D'. The CGPA system is given in table no. 1.9. If the overall CGPA is more than 1.50, the institution will get the 'Accredited' status. Institutions that secure a CGPA equal to or less than 1.50, are notionally categorised under the letter grade "D" (=Performance descriptor- Unsatisfactory; Status- Not Accredited). Such institutions will also be intimated and notified by NAAC as “Assessed and found not qualified for Accreditation”.

The Peer Team assesses the TEIs considering the manual for TEI and the Guideline for Peer Team. The team goes for Assessor's expert observations, opinions, and respective contributions and prepares a Peer Team Report (PTR) as the outcomes of the evaluation. The PTR includes criterion-wise analysis with observations and recommendations for quality improvement of TEI based on actual practices. After the preparation of the PTR, the peer team carries out statistical calculations and recommends a CGPA with a grade leading to the performance descriptor. The team shows the PTR and discusses with the steering committee of the assessed TEI about the observations on Key aspects in form of criterion-wise analysis and respective recommendations in the PTR, whether they have suggestions for any factual corrections in the report. The Peer Team gives a sealed PTR to the Principal to be opened on a given date and submits another copy of PTR to the NAAC along with Quality Profile in form of a Score Sheet. The Executive Committee of the NAAC approves the CGPA and Grade to the assessed TEI.

1.4.7 Major Grade Determinant Criterion and Key Aspects of Manual

The criteria and key aspects are exposing the performance of TEIs in terms of AA by NAAC. Detailed study of the Manual draws attention to the major judgmental and grade determinant criterion and key aspects in the performance of TEIs. These are Best Practices, Innovative Practices, and Teaching-Learning Process.

1.4.7.1 Best Practices

Every TEI has to follow an expected level of proper functioning of TEP for quality improvement, where the practices of TEP play the main role. The criteria of the Manual are assessing only the common, desirable and traditional practices of TE. These practices are just sustaining quality in teacher education; while effective, efficient, or better than these practices, would contribute more to the quality improvement. Any TEP practicing effectively or strengthening the common or traditional practices is termed as 'Best Practices'. Every criterion of the manual for TE includes 'Best practices' as a key aspect except criterion-7. Better performance of TEI in the common and traditional practices of key aspects contributes to Best Practices or can say the good performance of TEI in Best Practices indicates better performance of TEI in common and traditional practices of key aspects under specific criterion.

Thus, the 'Best practices' are exposed as more than common and traditional practices and indicate quality measures and application of practices in its respective criterion for quality improvement in STEP. Even having a less weightage score of 10 in every six criteria and a total weightage of six percent with a score of 60, it is presumptive and suggestive for the level of the overall performance of TEI in the respective criterion of the manual. In this way, the weightage of Best Practices contributes more to the quality of the TEI.

1.4.7.2 Innovative Practices

The NAAC has covered Best Practices in the first six criteria of the manual. Besides it, an essential and specific criterion-VII has been given separately as 'Innovative Practices'. These practices are beyond the common or traditional practices. These are innovative or new practices, which are drawing novel paths towards excellence and practicing efficiently in TEP. The NAAC has emphasised the Internal Quality Assurance System (IQAS), Inclusive practices and Stakeholder relationships, which are included as key aspects in criterion 7. Contribution in this criterion indicates the level of performance of TEI in all other criteria of the manual.

➤ Internal Quality Assurance System

‘Internal Quality Assurance System’ is the main functioning cell in any institution. It is providing a platform for all activities of an institution towards quality improvement. Innovations in the IQAS must bring quality improvement in TEI. The Innovative practices in the IQAS involve its activities, mechanism

for evaluation, ensures the quality of academic programme and administration and management process of the TEI. NAAC has included in the performance of TEI in the 'IQAS' as a key aspect under criterion Innovative Practices.

➤ **Inclusive Practices**

'Inclusive Education' is also emphasised in the present day education system. Inclusive Education covers the impact of inclusion on learning, the background of students, learning environment, special needs of children, and gender issues. Innovative practices under Inclusive education will give identity, attention and learning opportunity to students and strengthen their learning. NAAC has emphasised Inclusive Practices and included them as a key aspect in the manual under Innovative Practices.

➤ **Stakeholder Relationships**

TEI requires support and recognition to carry out every activity from principal, teachers and students as well as government, management authority, academicians, resource persons, parents, community and NGOs. All of them are considered as 'Stakeholders'. Their mutual relationship and collaborative efforts for activities of institutions lead towards bringing quality improvement in education. Their relationship is considered as a key aspect to the TEP in respect of access to the organisational information, status of success or satisfaction, and feedback mechanism to the stakeholders for quality improvement. NAAC has focused on Innovative practices in strengthening the Key aspect 'Stakeholder Relationships'.

Analysis of the manual indicates that the performance of any TEI may vary to any extent in the first six criteria. The seventh criterion is drawing a new path for quality in the field of TEP. Better performance of any TEI may possible in it if the TEI is performing well in all first six criteria. It says that, if there is a better level of performance of TEI in Innovative Practices, then there must be a greater performance of TEI in the other six criteria. Thus the criterion-7 of the manual is presumptive and suggestive towards the level of efforts of TEI to measure its performance of TEI quality.

The key aspects of the criterion Innovative practices i.e. Internal Quality Assurance System, Inclusive Practices and Stakeholder Relationships possess weightage scores of about 20, 15 and 15 respectively. Even this criterion possesses a total weightage score of only 50, its key aspects provide a foundation to all other criteria in form of providing a platform to perform in quality TEP. Thus the criterion-7 Innovative Practices is also a

judgemental criterion in the determination and decision of performance of TEI in quality of TEIs.

1.4.7.3 Teaching-Learning Process

The main objective of this TEP is to provide learning opportunities to student-teachers to be prepared for real classroom situations. The teaching-learning process is at the center because all other activities and works of TEI are oriented to the teaching-learning process only. Even all other criteria in the manual are also contributing to the teaching-learning process. Strengthening this process leads to quality improvement in TEP and desirable behavioural modifications of the student-teachers. Even the NAAC has also allotted a weightage score of 270 to the key aspect 'Teaching-Learning Process' out of a total weightage score of 1000, which possesses 27 percent of weightage. Thus, the performance of TEI in the Teaching-Learning Process under the criterion Teaching-Learning and Evaluation is contributing more to the decision of the CGPA and grade. Thus, it is contributing more and it becomes a judgemental criterion for performance of TEI and accreditation.

Thus, the major grade determinant criterion and key aspects are Best Practices as a key aspect in all first six criteria; criterion-VII: Innovative Practices; and key aspect Teaching-Learning Process under the criterion Teaching-Learning and Evaluation. The two key aspects and a criterion are presumptive, suggestive, and major judgemental in the determination of CGPA and grade.

1.5 NAAC ASSESSMENT AND ACCREDITATION IN GUJARAT

NAAC applied manual for assessment and accreditation of HEIs in states of India under specific regional committees. The HEIs of Gujarat state are under the Western Region of NAAC. NAAC assessed and accredited Universities and HEIs of Gujarat and provided grades. Madhukar, Shanbhag, Patel, Ved and Mehta (2014) indicated the number of NAAC accredited all HEIs in Gujarat.

Table 1.12

Grade-wise distribution of NAAC Accredited colleges of Gujarat under CGPA System

| Sr. No. | Name of University | Grades | | | Total |
|------------|---|--------|----|----|-------|
| | | A | B | C | |
| (1) | Sardar Patel University, Vallabh Vidyanagar | 2 | 16 | 2 | 20 |
| (2) | Saurashtra University, Rajkot | 2 | 36 | 21 | 59 |
| (3) | Veer Narmad South Gujarat University, Surat | 1 | 37 | 7 | 45 |

| | | | | |
|---|---|-----|----|-----|
| (4) Gujarat University, Ahmedabad | 3 | 79 | 26 | 108 |
| (5) Maharaja Krishnakumarsinhji Bhavnagar University, Bhavnagar | 1 | 10 | 2 | 13 |
| (6) Hemchandracharya North Gujarat University, Patan | 0 | 26 | 12 | 38 |
| (7) Krantiguru Shyamji Krishna Verma Kutchchh University, Bhuj | 0 | 4 | 0 | 04 |
| Total | 9 | 208 | 70 | 287 |

[Source- Madhukar, Shanbhag, Patel, Ved and Mehta (2014). State-wise analysis of accreditation reports- Gujarat]

Table no. 1.12 shows that 9, 208 and 70 Colleges were assessed and accredited by NAAC with grades A, B and C respectively. Majority of colleges were graded with 'B'. Madhukar, Shanbhag, Patel, Ved and Mehta (2014) have given a list of Grade-wise Distribution of types of financial arrangement and Region-wise Colleges of Gujarat under the CGPA System.

Table 1.13

Grade-wise Distribution of types of financial arrangement and Region-wise Accredited Colleges of Gujarat under CGPA System

| CGPA Grade letter | Government- GIA | SF | Total | Urban | Rural | Total |
|-------------------|-----------------|----|-------|-------|-------|-------|
| A | 6 | 3 | 9 | 8 | 1 | 9 |
| B | 174 | 34 | 208 | 11 | 97 | 208 |
| C | 61 | 9 | 70 | 31 | 39 | 70 |
| Total | 241 | 46 | 287 | 50 | 137 | 287 |

[Source- Madhukar, Shanbhag, Patel, Ved and Mehta (2014). State-wise analysis of accreditation reports- Gujarat]

As shown in table no. 1.13, the numbers of accredited G-GIA, SF, Urban and Rural colleges were 241, 46, 50 and 197. More number of 'A' graded colleges are seen in G-GIA and Urban.

1.6 NAAC ASSESSMENT AND ACCREDITATION OF TEIs IN GUJARAT

The assessment and accreditation of HEIs in Gujarat included TEIs under various Universities. The TEIs in Gujarat are supported by school education, NCTE, UGC, NAAC, and the government. By following the National policies, the Gujarat state formed its plans and initiatives in the field of education. The Knowledge Consortium of Gujarat (KCG) is one of the major initiatives of Gujarat State to facilitate interface

among different HEIs. Gujarat took initiatives in the areas of education, research, extension, teaching, and quality assurance. As initiatives of education, the state has introduced CBCS, Information and Communication Technology (ICT) and active learning methodology. The extension under KCG was by programme of All Gujarat Integrated Classroom (SANDHAN), Universal Development of Integrated employability Skills through Higher Education (UDISHA), and Saptdhara. It has strengthened libraries via Information and Library Network (INFLIBNET).

Gujarat developed elementary, secondary, higher secondary, higher education, and vocational education. The expansions of HE and TE are considerable in Gujarat. The expansion of TEI in Gujarat needs to glance over existing Universities and HEI. UGC (2015) indicated 49 Universities in Gujarat, which is given in table no. 1.14 and 1.15.

Table 1.14

Distribution of Universities in the state of Gujarat as of March 2015

| Sr. No. | Type of University | Number |
|--------------------|--------------------|--------|
| (1) | Central University | 01 |
| (2) | State University | 25 |
| (3) | Deemed University | 02 |
| (4) | Private University | 21 |
| Total Universities | | 49 |

[Source- UGC (2015). Consolidated list of All Universities]

Table 1.15

List of Universities in the state of Gujarat as of March 2015

| Sr. No. | Sr. No. | Name of University | Place |
|---------------------------------|---------|---|-------------|
| Central Government Universities | | | |
| 1 | (1) | Central University of Gujarat (CUG) | Gandhinagar |
| State Government Universities | | | |
| 2 | (1) | Anand Agricultural University (AAU) | Anand |
| 3 | (2) | Children's University (CU) | Gandhinagar |
| 4 | (3) | Dharmsinh Desai University (DDU) | Nadiad |
| 5 | (4) | Dr. Babasaheb Ambedkar Open University (BAOU) | Ahmedabad |
| 6 | (5) | Gujarat Ayurved University (GAU) | Jamnagar |
| 7 | (6) | Gujarat Forensic Sciences University (GFSU) | Gandhinagar |

| | | | |
|----------------------|------|--|--------------------------------|
| 8 | (7) | Gujarat National Law University (GNLU) | Gandhinagar |
| 9 | (8) | Gujarat Technological University (GTU) | Ahmedabad |
| 10 | (9) | Gujarat University (GU) | Ahmedabad |
| 11 | (10) | Hemchandracharya North Gujarat University (HNGU) | Patan |
| 12 | (11) | Indian Institute of Teacher Education (IITE) | Gandhinagar |
| 13 | (12) | Institute of Infrastructure Technology Research and Management (IITRM) | Ahmedabad |
| 14 | (13) | Junagadh Agricultural University (JAU) | Junagadh |
| 15 | (14) | Kamdhenu University (KU) | Gandhinagar |
| 16 | (15) | Krantiguru Shyamji Krishna Verma Kachchh University (KASVKU) | Kachchh |
| 17 | (16) | Maharaja Krishnakumarsinhji Bhavnagar University (MKBU) | Bhavnagar |
| 18 | (17) | Navsari Agricultural University (NAU) | Navsari |
| 19 | (18) | Raksha Shakti University (RSU) | Ahmedabad |
| 20 | (19) | Sardarkrushinagar Dantiwada Agricultural University (SDAU) | Dantiwada |
| 21 | (20) | Sardar Patel University (SPU) | Vallabh Vidyanagar |
| 22 | (21) | Saurashtra University (SAU) | Rajkot |
| 23 | (22) | Shree Somnath Sanskrit University (SSSU) | Veraval |
| 24 | (23) | Swarnim Gujarat Sports University | Gandhinagar |
| 25 | (24) | The Maharaja Sayajirao University of Baroda (MSUB) | Vadodara |
| 26 | (25) | Veer Narmad South Gujarat University (VNSGU) | Surat |
| Deemed Universities | | | |
| 27 | (1) | Gujarat Vidyapith (GV) | Ahmedabad |
| 28 | (2) | Sumandeep Vidyapith | Vadodara |
| Private Universities | | | |
| 29 | (1) | Ahmedabad University | Ahmedabad |
| 30 | (2) | AURO University of Hospitality and Management | Surat |
| 31 | (3) | C. U. Shah University | Wadhwan City, Surendranagar |
| 32 | (4) | Calorx Teachers' University (CTU) | Ahmedabad |

| | | | |
|----|------|--|-----------------------|
| 33 | (5) | Centre for Environmental Planning and Technology (CEPT) University | Ahmedabad |
| 34 | (6) | Charotar University of Science & Technology | Changa, Anand |
| 35 | (7) | Dhirubhai Ambani Institute of Information and Communication Technology (DA-IICT) | Gandhinagar |
| 36 | (8) | G.S. F. C. University | Vadodara |
| 37 | (9) | Ganpat University | Mehsana |
| 38 | (10) | Indus University | Ahmedabad |
| 39 | (11) | Institute of Advanced Research | Gandhinagar |
| 40 | (12) | ITM Vocational University | Waghodia, Vadodara |
| 41 | (13) | Kadi Sarva Vishwavidyalaya (KSV) | Gandhinagar |
| 42 | (14) | Lakulish Yoga University (LYU) | Ahmedabad |
| 43 | (15) | Navrachana University (NUV) | Vadodara |
| 44 | (16) | Nirma University (NU) | Ahmedabad |
| 45 | (17) | Pandit Deendayal Petroleum University (PDPU) | Gandhinagar |
| 46 | (18) | R. K. University | Rajkot |
| 47 | (19) | Rai University | Ahmedabad |
| 48 | (20) | Team Lease Skills University | Vadodara |
| 49 | (21) | UKA Tarsadia University | Bardoli |

[Source- UGC (2015). Consolidated list of All Universities]

The above 49 universities included Secondary TEIs. Data about the number and names of those STEIs were available on websites of respective Universities as well as NCTE. The list of STEIs was not found updated and correct from both of the sources, because of withdrawal of recognition from the NCTE or closing the course by the TEI itself as well as no proper update about the name of TEI on the respective website. A reliable, valid and updated list of TEIs was available from the B. Ed. admission form or updated University Diary of the respective University for a specific year. An accurate list of the TEIs affiliated to respective universities was prepared from the admission forms or updated University Diary of the year 2014-15. The University-wise number of STEIs in Gujarat State is given in table no. 1.16.

Table 1.16

University-wise number of affiliated STEIs in Gujarat State

| Sr. No. | Name of University | No. of Type-wise TEIs | | | | | No. of Area-wise TEIs | |
|------------|---|--------------------------|-----|----|--------------------|-------|--------------------------|-------------|
| | | Govt. | GIA | SF | Total GO/ GR/SF | Urban | Rural | Total U & R |
| 1 | Calorx Teachers' University, Ahmedabad | - | - | - | - | - | - | - |
| 2 | Central University of Gujarat (CUG), Gandhinagar | - | - | - | - | - | - | - |
| 3 | Dr. Babasaheb Ambedkar Open University (BAOU), Ahmedabad | - | - | - | - | - | - | - |
| 4 | Gujarat University (GU), Ahmedabad | 1 | 15 | 77 | 93 | 44 | 49 | 93 |
| 5 | Gujarat Vidyapith (GV), Ahmedabad | - | - | - | - | - | - | - |
| 6 | Hemchandracharya North Gujarat University (HNGU), Patan | 1 | 6 | 72 | 79 | 19 | 60 | 79 |
| 7 | Indian Institute of Teacher Education (IITE), Gandhinagar | - | - | - | - | - | - | - |
| 8 | Kadi Sarva Vishwavidyalaya (KSV), Gandhinagar | - | - | 4 | 4 | 2 | 2 | 4 |
| 9 | Krantiguru Shyamji Krishna Verma Kachchh University (KSKVKU), Kachchh | - | 1 | 5 | 6 | 6 | - | 6 |
| 10 | Maharaja Krishnakumarsinhji Bhavnagar University (MKBU), Bhavnagar | - | 1 | 7 | 8 | 2 | 6 | 8 |
| 11 | Navrachana University (NU), Vadodara | - | - | - | - | - | - | - |
| 12 | Sardar Patel University (SPU), Vallabh Vidyanagar | - | 4 | 9 | 13 | 8 | 5 | 13 |

| | | | | | | | | |
|--------------|--|----------|-----------|------------|------------|------------|------------|------------|
| 13 | Saurashtra University (SU), Rajkot | 1 | 8 | 74 | 83 | 44 | 39 | 83 |
| 14 | Shree Somnath Sanskrit University (SSSU), Veraval | - | - | - | - | - | - | - |
| 15 | The Maharaja Sayajirao University of Baroda (MSUB), Vadodara | - | - | - | - | - | - | - |
| 16 | Veer Narmad South Gujarat University (VNSGU), Surat | 3 | 6 | 20 | 29 | 16 | 13 | 29 |
| Total | | 6 | 41 | 268 | 315 | 141 | 174 | 315 |

(Source- Website of affiliating University, University Diary of the year 2015 or Admission form of the year 2015)

There were 49 universities in Gujarat State in April 2015, where sixteen Universities were transacting TEP. The universities have Departments of Education, where eight universities have affiliated colleges. The number of colleges affiliated to Universities of Gujarat was increased in the last few years in form of Self-financed Colleges. There was a rapid growth of such TEIs in Gujarat. NCTE has given recognition to such TEIs without provision of Grants from UGC, but the financial arrangement has to be done by a collection of fees from the student-teachers. The Colleges of TEI have to be affiliated with a University in Gujarat and to follow the same norms and regulations given by NCTE. The number of Self-financed TEIs was more in the TEIs.

1.7 RATIONALE OF THE STUDY

Education plays a vital and major role in bringing desirable behavioural modifications in human beings and preparing them for the efficient social endeavour. It prepares individuals by the development of cognitive, affective, psychomotor and spiritual domains and contributes to society. The demand for quality in society requires bringing quality in its strong and major foundation- 'Education'. Quality in the formal system of education gives major inputs to prepare individuals for efficient social interaction and endeavour. This formal system of education covers pre-primary to HE, where the teacher's role is very much essential in the teaching-learning process. Teachers as human resources transact curriculum and provide learning opportunities and experiences to the students. Teachers inculcate values, provide knowledge, develop skills and construct desirable behaviour and healthy life in students. Considering the students at the center, the teachers do more efforts for bringing all-round development according to the objectives of the specific levels of the schooling. They prepare

students to be a good citizen of the nation and individuals of society. The teachers perform their role and carry out the education process. Teachers' attitude, knowledge, skills, pedagogy, experiences and behaviour reflects in the teaching-learning process. It leads to a greater impact on students' behaviour. Conscious efforts from well-prepared teachers in the right direction for the student's learning must achieve the best results. The preparation of teacher in TEP provides greater input to the learning of school students. So the teachers' performance depends on their learning in the TEP.

The student having eligibility in a specific discipline enters as a student-teacher in the TEP. Student-teacher learns the foundations of education, pedagogy, activities and receive real classroom experiences. The rigorous training in theory and practice prepares to teach in schools. Thus, the TEP has greater importance than the other disciplines of education. The National Education Commission report (1964-66) stressed, "Investment in teacher education can yield very rich dividends because the financial resources required are small when measured against the resulting improvements in the education of millions." So, the importance of TEP cannot be neglected for the well functioning of the education system for better functioning of society and nation.

The quality in TEP leads to the preparation of student-teachers for schools as efficient teachers, Mukhopadhyay (2014) noted, "Confronted with declining standards, primarily due to expansion of HE system, the question of quality becomes critical. The teacher education system is not the exception. In the name of development of education for access to maximum, self-financing TEIs are mushrooming nowadays. The quantitative expansion has been accompanied by qualitative deterioration." It proceeds to the functioning and quality improvement in the TEIs. Goel and Goel (2012) suggested, "Surveys need to be conducted to find out the present status and requirement of TEP. These projections ought to be in tune with the growth of school education. Also, futurological studies need to be conducted to make forecasts of teacher education." So, the researcher was interested in finding out the quality assurance and monitoring of TEP, hence proposing this study.

Acknowledgment of the status of quality in TEP needed quality inputs in itself. The status of quality in TEP was to be drawn out through checking, measuring, or assessing the educational institutions via monitoring, supervision, inspection and visit. NAAC assesses and accredits HEIs. NAAC prepared a separate manual and guidelines for the assessment of TEIs in the year 2007. The AA of the TEIs was carried out utilising the

parameters of criteria having key aspects with weightage given in the manual. The NAAC allotted Assessors to form Peer Team for visiting TEI for AA. Before the visit, the Peer Team has to be gone thoroughly to the SAR of TEI, which was to be observed and verified during the visit for assessment. The Peer Team stated performance of TEI in PTR in form of performance analysis of criterion-wise and overall analysis with observations on Key- Aspects based on actual practices, and performance status in form of statistical calculations of the weightage, CGPA and grade. Those PTRs were reports of the individual TEI, which expressed the status of quality in one TEI only. The overall picture of quality existence in all TEIs needed an aggregate report of all TEIs.

The review of related studies indicated that the NAAC carried out 12 research studies in form of state-wise analysis of the PTRs of HEIs based on the observations in PTR as performance analysis and CGPA as performance status of weightage. The researcher came across only one research study on analysis of all HEIs of Gujarat state conducted by Madhukar, Shanbhag, Patel, Ved and Mehta (2014) and did not come across any related study on analysis of TEIs. Kaur and Sharma (2012) conducted a research study in Panjab, which created vagueness in terms of its findings and recommendations. Darji (2015) conducted a research study on Innovative Practices in TEIs of Gujarat. Thus, a research study on observations given by Assessors in PTR and CGPA of all TEIs drew out by reviewed research studies neither in India nor in Gujarat state; hence the researcher planned a scientific investigation on the AA of TEIs in Gujarat.

The NAAC manual for AA of TEIs was implemented in Urban or Rural areas and Government/ Grant-in-Aid (GIA) or Self-Finance (SF) type of TEIs. Different questions arose in the mind of the researcher about the different weightage of the criteria to various areas or types of the TEIs. The NAAC manual for AA of TEIs was common for TEIs in Urban or Rural areas and Government/ Grant-in-Aid or Self-finance type of TEIs. This led to certain queries regarding the performance, homogeneity of performance and the integrative effect between TEIs from different types and areas. The AA process was carried out by Assessors in specific TEI. The Assessors carried out document verification, observation of TEIs, communication with stakeholders and provided inputs with a suitable grade. The governing body of TEI, principal, teaching faculty, supporting staff, student-teachers, parents, alumni and community were stakeholders of TEIs. Satisfaction and opinions about AA of TEIs were essential from Assessors and Stakeholders for leading to certain pertinent points. Gandhi (2013) indicated, “Most of the issues in assessment and accreditation centered

on the questions like more sensitive to apply criteria to the varying institutional contexts; indicators narrowing down the inter-team variances in their assessment of institutions and programmes; and assistance of indicators interpreted to the peer judgment objectively.”

The academic and administrative background, training for AA, and knowledge about the functioning of TEI were important aspects to be considered for Assessors. It was also important to find out the exact AA process by NAAC using the criteria given in the manual. The comfort of Assessors in document verification, difficulties faced in the AA process, integration amongst the Peer Team, objectivity in observations and satisfaction about the process were other significant points to be considered. Views of Assessors were also to be emphasised on the criteria and weightage given in the manual.

The AA included interaction between Assessors and stakeholders of TEIs. Stakeholders' roles, opinions, perspectives, and expectations about the AA process were also required to be acknowledged. The interaction that took place between the Assessors and stakeholders in meetings and other institutional assessment work according to the manual and guideline to Peer Team was also essential. These points drew attention to the researcher for conducting a scientific study. The process of preparation of TEI for AA, involvement of specific stakeholders before and after the Peer Team visit needed to be considered from the perspective of stakeholders. The other points to be investigated were a gap between the theoretical procedure given by NAAC in manual-guideline and its actual application by Peer Team and stakeholders. The perceptions of stakeholders towards arrangements from TEI, preparation for AA, the role of Assessors, criteria and weightage given in the manual for AA were also points to be researched.

The review of the related studies implied that the perceptions of stakeholders were studied in terms of the AA process and performance of the Peer Team, while the opinion of the stakeholders and Peer Teams about the AA process required to be studied. The researcher came across a few studies on the process of the AA of HEIs by NAAC. Some contradictory findings were also found like Gagare (2014) denying Peer Teams' testing of the teachers' teaching, while on the other side Chowdhury (2012) focused practice-oriented teaching, use of gadgets for teaching, and varied ways of teaching. Pillai and Srinivas (2006), and Lynne (2014) raised the need for reforms in accreditation and regulation of HEI, while Gagare (2014) indicated that the new methodology for AA was superior to the previous.

Thus the reviewed studies emphasised conducting a study on the AA in TEI. The SARs and PTRs of specific TEI were available. The observations of the Peer Team in PTR and CGPA to TEIs were in isolation, which did not exhibit the overall analysis of observations and CGPA of all TEIs of a State or Nation. Such a comprehensive research study was not carried out by NAAC or any individual researcher also. The comparison of accreditation between areas and types of TEIs, and the AA process including the Assessors' and stakeholders' roles drawn the researcher's attention and created interest for conducting a research study.

1.8 STATEMENT OF THE PROBLEM

‘A Study on NAAC Accreditation of Teacher Education Institutions of Gujarat’

1.9 OBJECTIVES OF THE STUDY

1. To study the overall Accreditation status of Teacher Education Institutions (TEIs) of Gujarat State accredited by National Assessment and Accreditation Council (NAAC)
2. To compare the Cumulative Grade Point Average (CGPA) on Seven Criteria for Urban and Rural area TEIs
3. To compare the Overall CGPA for Urban and Rural area TEIs
4. To compare the CGPA on Seven Criteria for Grant-in-Aid and Self-financed TEIs
5. To compare the Overall CGPA for Grant-in-Aid and Self-financed TEIs
6. To compare the CGPA on Seven Criteria for Cycle-1 and Cycle-2 TEIs
7. To compare the Overall CGPA for Cycle-1 and Cycle-2 TEIs
8. To compare the CGPA on Seven Criteria for Urban Grant-in-Aid and Urban Self-Financed TEIs
9. To compare the Overall CGPA for Urban Grant-in-Aid and Urban Self-Financed TEIs
10. To compare the CGPA on Seven Criteria for Rural Grant-in-Aid and Rural Self-Financed TEIs
11. To compare the Overall CGPA for Rural Grant-in-Aid and Rural Self-Financed TEIs
12. To compare the CGPA on Seven Criteria for Grant-in-Aid Urban and Grant-in-Aid Rural TEIs

13. To compare the Overall CGPA for Grant-in-Aid Urban and Grant-in-Aid Rural TEIs
14. To compare the CGPA on Seven Criteria for Self-Financed Urban and Self-Financed Rural TEIs
15. To compare the Overall CGPA for Self-Financed Urban and Self-Financed Rural TEIs
16. To study the relationship amongst the Seven Criteria based on CGPA for all TEIs
17. To study the relationship between Overall CGPA and CGPA on Seven Criteria for all TEIs
18. To study the relationship amongst the Seven Criteria based on CGPA for Urban TEIs
19. To study the relationship between Overall CGPA and CGPA on Seven Criteria for Urban TEIs
20. To study the relationship amongst the Seven Criteria based on CGPA for Rural TEIs
21. To study the relationship between Overall CGPA and CGPA on Seven Criteria for Rural TEIs
22. To study the relationship amongst the Seven Criteria based on CGPA for Grant-in-Aid TEIs
23. To study the relationship between Overall CGPA and CGPA on Seven Criteria for Grant-in-Aid TEIs
24. To study the relationship amongst the Seven Criteria based on CGPA for Self-financed TEIs
25. To study the relationship between Overall CGPA and CGPA on Seven Criteria for Self-financed TEIs
26. To study the relationship amongst the Seven Criteria based on CGPA for Cycle-1 accredited TEIs
27. To study the relationship between Overall CGPA and CGPA on Seven Criteria for Cycle-1 accredited TEIs
28. To study the relationship amongst the Seven Criteria based on CGPA for Cycle-2 accredited TEIs
29. To study the relationship between Overall CGPA and CGPA on Seven Criteria for Cycle-2 accredited TEIs
30. To analyse the observations of Peer Team Reports

31. To study the opinions of the following Assessors of NAAC accredited TEIs about assessment and accreditation of TEIs
- Chairperson of the Peer Team
 - Member Coordinator of the Peer Team
 - Member of the Peer Team
32. To study the opinions of the following Stakeholders of NAAC accredited TEIs about the assessment and accreditation of TEIs
- Principal
 - IQAC Coordinator
 - Teaching Faculty
 - Supporting Staff

1.10 HYPOTHESIS

The objectives about comparison amongst the seven criteria and overall CGPA for all accredited TEIs as well as Region, Funding type and Accreditation Cycle-wise TEIs, needed formulation of Hypothesis for the present study. The researcher has formulated Null Hypotheses (Ho) for objectives no. 2 to 29. The Hypotheses are given below.

- Ho₁ There will be no significant difference in the CGPA on Seven Criteria for Urban and Rural area TEIs
- Ho₂ There will be no significant difference in the Overall CGPA for Urban and Rural area TEIs
- Ho₃ There will be no significant difference in the CGPA on Seven Criteria for Grant-in-Aid and Self-financed TEIs
- Ho₄ There will be no significant difference in the Overall CGPA for Grant-in-Aid and Self-financed TEIs
- Ho₅ There will be no significant difference in the CGPA on Seven Criteria for Cycle-1 and Cycle-2 accredited TEIs
- Ho₆ There will be no significant difference in the Overall CGPA for Cycle-1 and Cycle-2 accredited TEIs
- Ho₇ There will be no significant difference in the CGPA on Seven Criteria for Urban Grant-in-Aid and Urban Self-Financed TEIs
- Ho₈ There will be no significant difference in the Overall CGPA for Urban Grant-in-Aid and Urban Self-Financed TEIs

- Ho₉ There will be no significant difference in the CGPA on Seven Criteria for Rural Grant-in-Aid and Rural Self-Financed TEIs
- Ho₁₀ There will be no significant difference in the Overall CGPA for Rural Grant-in-Aid and Rural Self-Financed TEIs
- Ho₁₁ There will be no significant difference in the CGPA on Seven Criteria for Grant-in-Aid Urban and Grant-in-Aid Rural TEIs
- Ho₁₂ There will be no significant difference in the Overall CGPA for Grant-in-Aid Urban and Grant-in-Aid Rural TEIs
- Ho₁₃ There will be no significant difference in the CGPA on Seven Criteria for Self-Financed Urban and Self-Financed Rural TEIs
- Ho₁₄ There will be no significant difference in the Overall CGPA for Self-Financed Urban and Self-Financed Rural TEIs
- Ho₁₅ There will be no significant relationship amongst the Seven Criteria based on CGPA for all TEIs
- Ho₁₆ There will be no significant relationship between Overall CGPA and CGPA on Seven Criteria for all TEIs
- Ho₁₇ There will be no significant relationship amongst the Seven Criteria based on CGPA for Urban TEIs
- Ho₁₈ There will be no significant relationship between Overall CGPA and CGPA on Seven Criteria for Urban TEIs
- Ho₁₉ There will be no significant relationship amongst the Seven Criteria based on CGPA for Rural TEIs
- Ho₂₀ There will be no significant relationship between Overall CGPA and CGPA on Seven Criteria for Rural TEIs
- Ho₂₁ There will be no significant relationship amongst the Seven Criteria based on CGPA for Grant-in-Aid TEIs
- Ho₂₂ There will be no significant relationship between Overall CGPA and CGPA on Seven Criteria for Grant-in-Aid TEIs
- Ho₂₃ There will be no significant relationship amongst the Seven Criteria based on CGPA for Self-financed TEIs
- Ho₂₄ There will be no significant relationship between Overall CGPA and CGPA on Seven Criteria for Self-financed TEIs
- Ho₂₅ There will be no significant relationship amongst the Seven Criteria based on CGPA for Cycle-1 accredited TEIs

- Ho₂₆ There will be no significant relationship between Overall CGPA and CGPA on Seven Criteria for Cycle-1 accredited TEIs
- Ho₂₇ There will be no significant relationship amongst the Seven Criteria based on CGPA for Cycle-2 accredited TEIs
- Ho₂₈ There will be no significant relationship between Overall CGPA and CGPA on Seven Criteria for Cycle-2 accredited TEIs

1.11 EXPLANATION OF THE TERMS

The present study was about the NAAC AA of TEIs followed the Manual for Self-appraisal of TEIs of Gujarat. The key terms used in the present study have been explained herewith.

1.11.1 Assessment

The term ‘Assessment’ was concerning NAAC accreditation, which referred to measuring or checking the availability and effectiveness of value of a specific course or instructional programme based on parameters established and included in a specific scientific tool. It was measuring the extent of achievement of its objectives.

The term ‘Assessment’ referred to the evaluation of practices of TEI by Peer Team based on seven criteria with key aspects in the manual for TEIs given by NAAC. The assessment was followed by weightage of scores, CGPA, and grade letter.

1.11.2 Accreditation

The assessment led to the allotment of weightage of scores and grades with number credit. The NAAC provided credit and a certificate to the HEI regarding the quality provision that was valid for a fixed period of years. The status of ‘Accredited’ had been given by the NAAC to the institution for five years validity. The total weightage for TEIs was 1000 and the Peer Team allotted weightage to every key aspect of a criterion and total weightage of individual criterion and overall weightage. The allotted all weightages followed by prescribed statistical calculation. The criterion-wise and overall weightage drew CGPA with a letter grade. The range of institutional CGPA was 3.01-4.00, 2.01-3.00, 1.51-2.00, and Below 1.50, which led to four-letter grades- A, B, C and D respectively. Grade A, B and C indicated the accreditation status ‘Accredited’ and D indicates ‘Not accredited’. Thus the 'Accreditation' means Overall CGPA, Grade, and Accreditation Status given by NAAC in respective Score sheet of Quality Profile of assessed TEI.

1.11.3 Stakeholder

The term ‘Stakeholder’ referred to all those individuals or groups connected to the functioning of the school and the education of students.

The Glossary of Education Reform (2014) explained ‘Stakeholder’ that, “the term stakeholder typically refers to anyone who is invested in the welfare and success of a school and its students, including administrators, teachers, staff members, students, parents, families, community members, local business leaders, and elected officials such as school board members, city councilors, and state representatives. Stakeholders may also be collective entities, such as local businesses, organisations, advocacy groups, committees, media outlets, and cultural institutions, in addition to organisations that represent specific groups such as- teachers unions, parent-teacher organisations; and associations representing superintendents, principals, school boards, or teachers in specific academic disciplines (e.g., the National Council of Teachers of English or the Vermont Council of Teachers of Mathematics). In a word, stakeholders have a "stake" in the school and its students, meaning that they have a personal, professional, civic, or financial interest or concern."

NAAC (2007b) also gave a list of stakeholders as under.

- Government
- Institution (Management)
- Academic world (Teachers and others)
- Students
- Employers
- Society at large

Thus, the stakeholders were all those individuals and groups, who were involved and connected to education. The ‘Stakeholders’ of TEIs involved Government, Funding and Monitoring agencies, affiliating universities, Employers, Principals, Teaching Faculty, Supporting Staff, Students, Parents, Alumni, Practicing Schools, the Academic world and the Community.

In relation to the present study ‘Stakeholders’ included Principals, IQAC Coordinators, Teaching faculty and Supporting Staff of accredited TEIs.

1.11.4 Assessor

Academic expert and trained specialist by NAAC about the process of AA of HEI was 'Assessor'. NAAC selected Assessors from academics and administration in the field of HE. NAAC prepared them for AA by providing Training in Assessors Interaction Meet. They were supposed to have deep knowledge about the target course or programme to be assessed and accredited as well as knowledge about the AA. NAAC had appointed and allotted duty to Assessors by an onsite visit of the HEI for AA. They are also referred to as 'Panel of Peers' for AA of HEIs. In the present study, the term 'Assessors' referred to the expert and trained specialist by NAAC, who had visited and TEIs for AA and assessed by following NAAC prescribed manual.

1.11.5 Peer Team

The Assessors were referred to as 'Peers' being colleagues in the teaching profession. They formulated a team or a Panel of Experts, which is called 'Peer Team' for validation of the SAR of specific HEI and recommendations of assessment outcome to the NAAC. The team comprised of three Assessors- a Chairperson, a Member Coordinator, and a Member of the Peer Team. NAAC (2007a) indicated that "The Chairperson is an experienced former or present senior Professor of Education in a University or a sitting or former Vice-Chancellor. Experienced teacher educators, education experts from the university system, and the Principals of colleges of education are selected to be the members of the peer teams. However, the team composition may vary depending on the unit of assessment and other criteria decided by NAAC from time to time."

On-demand of HEI for its assessment, NAAC had selected Assessors for that HEI from outside its State in India and not connected with the institution proposed to be assessed. Their list was to be sent by NAAC to the Head of the HEI to know whether the institution had any reservations/ objections against any of the panel members. Before the visit of the institution for assessment as a member of the Peer Team, they had to do depth study of the Self-Appraisal Report submitted by the HEI. As a team, they had to be visited the institution on fixed dates and had to be conducted a cross inquiry of documents and stakeholders for deriving performance and for verifying and measuring the actual practices on the parameters of quality improvement of HEIs. Based on specific parameters and tools given by the NAAC, the Peer Team assessed the performance of TEI and stated observations in PTR, and recommended credit and grade to the NAAC for accreditation of the respective assessed TEI.

Thus, the Assessors are referred to as 'Peers', who comprised a team or a Panel of Experts. The 'Peer Team' comprised of a Chairperson, a Member Coordinator, and a Member of the Peer Team. They visited and verified the SAR of the TEI, stated observations in the Peer Team Report along with recommendations of credit and grade to the NAAC in form of a quantitative report of scores for the Quality profile of TEIs.

1.12 DEFINITION OF THE TERM

1.12.1 CGPA

The term 'CGPA' referred to the Cumulative Grade Point Average provided by the Peer Team of TEI after statistical calculation based on the NAAC prescribed formula. From Criterion-wise qualitative observations of TEI, the CGPA was drawn for every criterion and overall weightage and to be given in the Score sheet/ Gradesheet of Quality Profile along with PTR.

1.12.2 Performance of TEI

The term 'Performance of TEI' means observations of actual practices and activities of assessed TEI after verification of SAR. Peer Team of respective TEI had provided observations in a qualitative descriptive form in PTR.

1.13 DELIMITATION OF THE STUDY

The study was delimited to only the NCTE recognised Teacher Education Institutions affiliated to Universities of the Gujarat state offering one-year full-time B. Ed. course for all subjects, which were assessed and accredited by NAAC from April 2007 to March 2015.

1.14 SCHEME OF CHAPTERISATION

The scheme of chapterisation in this study is as follows.

- ✎ The first chapter presents the introduction of Teacher Education, Committees and Commissions for Quality in Teacher Education, the role of NCTE, the status of Teacher Education, Quality Assurance in Teacher Education by NAAC, Manual for AA of TEIs from April 2007, Higher Education and teacher education in Gujarat state and their AA by NAAC, Rationale of the study, statement of the Problem, Objectives of the study, Hypothesis, Explanation of the terms and delimitation of the study.
- ✎ The second chapter presents the review of related studies concerning the process, perspective, performance, and impact of Accreditation; summary of related studies; and conclusion.
- ✎ Chapter third deals with the methodology for the study including the type of study, population, sample, tools for data collection, and data analysis.
- ✎ The fourth chapter deals with data analysis and interpretation of data about the objectives and hypothesis.
- ✎ The fifth chapter deals with major findings, suggestions, and discussion for improvement in NAAC Assessment and Accreditation process for TEIs.