CHAPTER -FIVE

ANALYSIS AND INTERPRETATION OF DATA

In the previous chapter the development of modern education in general and teacher education programme in particular were reported. The present chapter is devoted to the analysis and interpretation of the data. The interpretation is done basically under the following aspects:

5 : 1 ADMISSION PROCEDURES TO THE TEACHER EDUCATION INSTITUTIONS.

Prevailing Practice :- Admission to the four government institutions is given to the government teachers on the basis of service seniority with exception to B.Ed. course where provision of 14.28% of the seats is reserved for the admission of fresh local trainees and private school teachers who are serving in the state. The selections of non-government candidates are done on the basis of an oral interview by the selection committee consisting of the Director, Higher & Technical Education as the Chairman, Principal of Nagaland College of Education as the Secretary and members from the teacher educators and educational administrators.

The investigator found that 54.16% of the teacher educators are in favour of selecting the trainees on the basis of academic record and a written test whereas
40% of the Heads of the Teacher Education Institutions are of the opinion that academic record and an aptitude test for teaching should be given priority in the selection.

From the above findings, it may be concluded that selection of the trainees should be done basing on the academic works as well as performances on the written test and aptitude test(s) conducted by the admission panel.

However, if no new institutions come up, the admission to the government institutions for next twenty to twenty five years will continue on seniority basis keeping in view the large backlog of untrained government teachers, which implies no change in the present practice of the selection of teachers for admission to the training institutions. The selection for the fresh trainees may be done on basis of achievements in previous examination, written and oral tests, and an aptitude test.

"Many a time the competent persons get admission in the course whereas committed persons do not get admission. This is because the affective variable of the candidates are not taken into consideration at the time
of the construction of the test." * The test should be developed so as to measure both competence as well as commitment of the candidate.

To screen off the unsuitable personnel from the teaching community, the original appointment may be done strictly on the basis of aptitude test for teaching and good academic record. In view of the growing trend of the fresh local private candidates coming for admission the required qualifications for the fresh appointment of teachers should be (a) a good general academic record (b) a professional diploma or degree in teaching. This approach to appointment policy can check the large backlog of untrained and unqualified teachers in the state.

5 : 2 DURATION OF THE COURSES

Relating to duration 56.67% of the trained teachers were of the opinion that the duration of the course should be extended while 44.05% of them suggested for the extension to two years course and 12.62% for 18 months duration. Out of the total teacher educators 41.66% of them suggested for the extension of duration

to two years or at least 18 months whereas 58.33% indicated the present duration was satisfactory.

The suggestions given by different categories of respondents reveal that duration of one year for all the three courses is not sufficient. A majority of the trained teachers (56.67%) and a good number of teacher educators (41.66%) indicated the need to extend the time duration to two years or at least eighteen months. On the basis of the findings above, it is imperative that the duration of the courses needs to be extended. It may be stated here that "The National Commission on Teacher-I recommended lengthening the duration of secondary teacher training to five years after class-XII, revamping the curriculum of existing one year B.Ed programme and at least two years duration of training after Class XII for elementary teachers." *

Under Graduate Teacher Training Course and Junior Teacher Training Course in the state needs to be extended to two years in line with the rest of the country to develop competence and skills by strengthening the general education and orientating the metho-

dologies, pedagogy and practice teaching. As the general education of the state is very low in standard, a good foundation of teacher education be given extending the duration of the course. St. Paul's Institute Phesama offers the course of UGTT for one and a half years which is only one year under Nagaland State Board of Teacher Education. The first six months is concentrated on the improvement of the English content, and the remaining period of one year on the prescribed course of UGTT by Nagaland SBTE. This practice is found to be very effective and relevant as the medium of instruction in the schools is English, the trainees get an opportunity to develop competency in the language which is very important for teachers at this level.

1988 National curriculum for Teacher Education: A framework provide one year duration for the pre-primary teacher education curriculum, two years for elementary level and one year both for secondary and higher secondary level.

However, the secondary teacher education duration may continue to be one year in line with the national curriculum for teachers framework. Although the need of extending the duration at this level is sounded time and again, it has not been implemented anywhere.

The prevailing curriculum is according to the National Curriculum for Teacher Education - A framework 1978 guidelines. The details of the curricula is attached in the Appendix-I. A sound and relevant curriculum of teacher education is essential for the qualitative improvement of education. The content and the methodologies need to be in relevance with the changing context of Indian society with special reference to the particular state or community.

As high as 90.10% of the trained teachers were found expressing their satisfaction with the present curriculum and 75% of the teacher educators also expressed the same. The analysis of data relating to Deputy Inspector of Schools and Inspector of Schools showed that 90% of them found improvement in the teachers after the course. A positive change in the trained teachers was observed by 87.87% by the Headmasters after the course. Interestingly 65.25% of trained teachers realised a positive change in their attitude towards teaching profession after the completion of the course.

It can be stated from the findings that the present curriculum is relevant to the needs of the
system to a large extent. However 56% of the Headmasters are not satisfied with the quality of education imparted to the teacher trainees. Therefore, this group suggested to improve the quality of teacher education by enriching the following aspects in the teacher education curriculum.

(i) More practical activities.
(ii) Extension of duration of the course.
(iii) Relevant teaching equipments.
(iv) Competent and committed teaching staff.
(v) Increase of assignment and tests.

In the same way 40.26% trained teachers also suggested to organise more seminars for strengthening the programme, 15.1% suggested the need for competent and committed teacher educators. It has been suggested by 33.33% of teacher educators to make the curriculum more activity-oriented.

The curricula for the three courses of studies such as JTTI, UGTT and B.Ed were found to be revised from time to time. The State Council of Teacher Education controls the curricula of JTTI and UGTT. The JTTI curriculum was revised in 1984. The Undergraduate teacher Training Course was revised in 1983. The B.Ed curriculum was revised by the NEHU in 1981 and 1983. It is again under revision in the current year.
The practical works of the teacher education is the most significant component in preparing the teacher for a natural classroom situation.

"Practical works relating to the foundation courses, teaching methodologies and specialization help in further strengthening knowledge and understanding acquired by student teachers." *

The practical works were found to be relevant and helpful to their work situations in the school by 85.71% of the trained teachers. Though a high majority (85.71%) were satisfied with the relevancy of the practical works, 21.67% of the trained teachers and 56% headmasters suggested for the enrichment of the practical work items. It has also been suggested by 25% of the teacher educators to improve the practical works making it more relevant to the theory papers and work situations.

Practice Teaching of the teacher students is the heart of the teacher education course. It refers

* Op.cit Page-148*
to the art of learning the techniques of teaching students through well-structured, well-planned, well-organised courses. It aims at preparing teachers through some specialised forms of strategies, techniques, and methods in managing classrooms, pupils, teaching learning activities both theoretically and practically.

It is observed that 52.50% of the trained teachers and 60.06% of teacher educators suggested the need to improve practice teaching programme in the teacher education institutions.

5:6 PRACTICING SCHOOL

Out of the five teacher education institutions only one school has a practicing school attached to the institution, that is, St. Paul's Institute Phesama. The rest have to depend on the neighbouring schools which cause different problems such as shortage of schools for practice teaching of the teacher-trainees, adjustment of practice teaching time with the schools involved, supervisory problems for the teacher educators, trainees adjustment problem in a new situation, and shortening the time duration of practice teaching. As many as 26.19% of trained teachers reported facing problems during practice teaching in the new situation. As high as 90% of
the teacher educators projected the need of having own practicing school attached to the institution. Attachment of practicing school will ensure better supervision due to longer exposure of the trainees to the teaching situation under the supervision of the teacher educators. The trainees will also get opportunity to observe more classes of the peers for better self evaluation. Practicing school for each of the teacher education institution will ensure qualitative improvement of teacher education in the long run. The notion that the students in practice teaching schools will suffer does not hold any water as the classes conducted will be well organised and supervised by the teacher educators.

5:7 **SUPERVISION OF PRACTICE TEACHING**

Trainees are prepared for the practice teaching within the institution by conducting micro-teaching under the simulated situation. During the micro-teaching process, the trainees are equipped with some very important teaching skills before the actual situation is conducted. "In simple words, simulation may also be defined as role-playing in which the process of teaching is enacted artificially and an effect is made to practise some important skills of communication through this."
Herein, the student-teachers and the students simulate a particular role and try to develop an identity with the actual classroom environment. Thus the whole teaching programmes become a training in role perception and role-playing.*

The actual school teaching takes place in the neighbouring schools under the supervision of the college teachers. Due to the factors such as high number of trainees, high number of practice schools to be covered within a short time, scattered location of schools, the supervision is often not effective. Meaningful feedback to all the teacher trainees cannot be ensured. In view of this situation the involvement of trained and experienced teachers in the practicing schools are suggested for helping the supervision of practice teaching. The idea is supported by 83.33% of the teacher educators by keeping the opinion in the positive direction, 53% of the trained teachers were also in favour of the same. It may be suggested that the institution may in collaboration with the schools involve competent, experienced and qualified teachers for the supervi-

sion of the practice teaching for providing timely and effective feedback and not for the purpose of evaluation and assessment.

5:8 DURATION OF THE PRACTICE TEACHING

The duration of the practice teaching is found to be not in uniform in different institutions having the same course. It varies from two weeks to three months, with two to five hours per week whereas the required number of lessons is no less than thirty in each of the teaching specialisation subjects for B.Ed. and five lessons for all the four teaching subjects for UGTT and JTTI. To ensure quality of feedback and qualitative teaching experience, practice teaching should be spread for a minimum duration of two months. It can be concluded that the present curriculum as a whole is found to be relevant with exceptions to strengthen the areas such as conducting practical works and practice teaching duration and conducting more seminar and assignments.

5:9 EDUCATIONAL TECHNOLOGY

The implication of educational technology both hardware and software technology are expensive in nature. At present, the teacher education institutions mostly
depend on the traditional teaching aids except for a few exceptions where there were few hardware technological aids. These hardware were not used much due to various constraints in the local situation such as power failures, non-availability of relevant hardware accessories, films etc.

In view of the financial constraints within the whole system, the institutions were encouraged to prepare improvised teaching aids from the locally available low cost materials. Accordingly 80% of the teacher education institutions have provisions for preparing teaching learning materials within the course.

A little over half (54.16%) of the teacher educators indicated on the availability of teaching aids in the institution. However, 14.25% trained teachers suggested to equip the institution with the latest and relevant teaching aids.

As high as 85.39% of the headmasters found that their teachers were using teaching aids in the classroom which indicate the effectiveness of the preparation of the low cost teaching aids in the training institution.

Preparation of the teaching aids and models from the locally available materials may be made a compulsory practical work for all the teacher trainees to enrich the teaching learning process making it more
meaningful. Besides, the hardware technology should be provided to the institutions adequately to keep up the standard of teacher education.

5:10 SCIENCE LABORATORY FACILITIES

The role of science and technical education in the life of a nation is immense. No nation can exist without it. "It is the key to the national prosperity and glory. There is a positive co-relation between economic prosperity and advancement of science and technical education."* Education in science and technology should be up-to-date as well as up to the marks.

A fairly high percentage (79.16%) of the teacher educators reported to have science laboratories in the institutions but poorly equipped. Hence, most of the laboratories in the institutions remained unable to conduct the necessary experiments. Besides, they were also not properly maintained.

In view of the importance of a sound science education in the modern age, well equipped science laboratories should be organised in all the teacher training

institutions where the laboratories are already existing, and establish new science laboratories in the institution where there is no laboratory.

5 : 11 EVALUATION OF THE TEACHER TRAINEES

The system of evaluation should be made valid, scientific, objective and reliable. "Evaluation is continuous and comprehensive, reliable and valid, evidences of progress should be collected at appropriate time intervals."* Internal assessment for both theory and practice should be developed.

As high as 66.66% of the teacher educators are satisfied with the present mode of evaluation of theoretical papers which is still serving the purpose. However, 20% of the teacher educators and 11.90% of the trained teachers are of the opinion that the ratio of assessment for internal and external be 40% and 60%.

Regarding practice teaching and practical works 33.33% of the teacher educators suggested for 50% of the grade to be given by the teacher educators under whom they were studying; as one shot affair by the external board of examiner is unjustified to grade a teacher trainee's annual work.

Op.cit Page-18*
Staff appraisal is a necessary part of staff development. The importance of professional competence and staff-appraisal training and development continue to be the major challenges that authorities, teachers and teacher association have to face up to. "In the self appraisal process the staff engage in evaluating both the system and their own self evaluations. In a more philosophical sense know-thy-self and it consisted with the view of teachers as self-aware, self-critical thinking professionals."*

Staff evaluation is a necessary process for the professional satisfaction of the members. "Performance evaluation can and does serve a multitude of purposes, only one of which is instructional improvement."**

Only one institution of teacher education practise the staff assessment monthly out of which 70.83% of the teacher educators expressed satisfaction with the practice.

"The purpose of an appraisal system is to develop personal and institutional effectiveness. It

* Erskine S. : Staff appraisal and teaching as a career in Scotland. Educational Management & Administration Vol.18, No.1 (1990)

is one of the means of moving to the goal of an organisation which is committed to worthwhile innovation and achievement of the highest possible quality of educational provision. It should not be seen as a negative means of assessment nor a way of checking upon people."

Quarterly self-assessment may be uniformly adopted in all the teacher training institutions for creating awareness of one's own professional responsibilities.

5 : 13 PHYSICAL FACILITIES

(a) The physical facilities have a profound effect on the whole outlook of the programme. Out of the five teacher education institutions four institutions have buildings for the classes as well as hostel facilities for the trainees. However, the number of hostel accommodation is far below the required numbers of accommodations. The buildings for the JTTIs were pretty old which required major repair and replacement. Tuensang JTI does not have a building of its own; it is run in a rented building with no hostel facilities. It is found that building for the institutions were in very pitiable conditions as such that 46.90% of the trained teachers suggested to improve the hostel facilities. Private
buildings were hired for the hostels which were not designed originally for hostels nor the location suitable for the institutions so as to create conducive environment for healthy living and academic interaction.

(b) All the teacher education institutions have quarters for the staff. As high as 80% of teacher educators were provided with accommodation facilities.

It is observed that there is a need of improving the basic facilities of life such as accommodation, so as to enable the teacher trainees to complete the course successfully and effectively and the teacher educators to render their best service.

5:14 LIBRARY

Library is the heart of an institution. A good library is an asset to an institution. It plays a very significant role in the creation of academic environment and enhancement of teaching learning process. It is found that except one institution all the libraries were understocked. It has been suggested by 52.38% of the trained teachers to have a good library as a requirement for the successful and meaningful completion of the course. Educational journals need to be added to the library. In view of the need expressed for better equipping of libraries, it can be stated that the existing library facilities need to be enriched.
TEACHING SPECIALIZATION

It has been observed that a very limited scope for teaching specialization is provided in the institutions. So high as 30% of the teacher educators and 35% of the trained teachers suggested for the enrichment of the teaching specialization facilities. Due to fast explosion of knowledge in the modern scientific age there is need for teaching specialization in different areas to cater to the changing need of time. Accordingly, as many as 8 teaching specialization is included in the B.Ed. curriculum under NEHU. In view of its importance more facilities should be provided by strengthening the staff strength. Teacher educators should be sent for acquiring special courses to other institutions in the interest of the college.

PROFESSIONAL DEVELOPMENT

Awareness of professional growth in a broader sense covers besides in-service training the "Variety of other opportunities that allow individual teachers to develop their own potentials to the full. This extends to the membership of local or national working groups, as they are concerned with curricular development, national examination or other informal training experiences within
the school."*

All the teacher education institutions have the provision for the professional growth such as study facilities both short course in-service programmes and research studies, and the organisation of teachers' associations. Three out of five institutions have formed teachers' association with the objective to uphold their professional integrity. The study facilities for teacher educators in the secondary teacher training institutions are given for study leave with full pay on seniority basis. Whereas others are provided the normal study leave provisions.

The participation of the teacher educators in other institutions or programmes outside the college programmes such as seminar as participants and resource personnel had been 50% whereas in case of trained school teachers it was 37.29%.

There is strong school teachers' association at the state level which endeavours to maintain, professional integrity as well as protects and fights for the welfare of the members of the association. There is also a Teacher Educators' Association at the lone

B.Ed College for the welfare of the members of the association. It can be concluded that a minimum facility and structural provision for the professional growth is prevalent. However, there is a need for greater involvement in the local and national working groups to keep in touch with emerging trends in the country and in order to understand their own role in the national context. Therefore, more facilities for the professional growth such as seminars, conferences, visiting professorship should be facilitated. Teacher educators need exposure by attending the programmes organised at important national institutions.

**5 : 17 IN-SERVICE EDUCATION**

Pre-service and in-service components of the teachers preparation programme, are inseparable from each other. "In-service education and training of teachers soar high on the educational horizon as the most significant means to meet all pious expectations of the new policy of education to improve the quality of education."*

A sizeably large number (50%) of the teacher educators could attend in-service programmes within the last five years, whereas only 31.86% of the

trained teachers in the school attended in-service programme within the same duration.

A study conducted covering a total population of 1445 trained and untrained teachers revealed that only 20.76% of the teachers attended in-service programmes within last five years; for a duration of three to ten days organised by State Council of Educational Research and Training, National Council of Educational Research and Training and Directorate of School Education.

A study conducted in 66 schools only 25.75% conducted in-service programme within the school; in the areas such as science teaching, new policy on education, pedagogical orientation, personality development and methodology of teaching.

Three out of five teacher education institutions conducted in-service programme within the institution for one to two times in an academic year.

Although the in-service training exposed to teacher educators is satisfactory, to some extent yet school teachers exposition to different in-service courses is far below the satisfactory level.

Reasons for the low participation in the in-service programme is due to the lack of adequate facilities and transportations. Hence, proper accommodation should be provided in the training centres. In-service
programmes by SCERT have been decentralised lately at the district levels. There is an urgent need of the functioning of DIETs at the district levels for conducting meaningful research as well as conducting effective in-service programmes for the teachers in the state.

5:18 INNOVATIONS & RESEARCH

Education is dynamic and not static. Innovative practices make the learning process more effective and meaningful. It is found that only 12.50% of teacher educators were involved in the innovative practices in the institution. Considering the impact of innovative practices in the system; incentive should be given to the teachers who are creative and initiative in the innovative programmes.

It is observed that the innovative practices such as micro-teaching and programmed learning had been introduced since 1978 in the B.Ed College. Micro-teaching is one of the most recent and important innovations in the teacher education programme. It is a specific teacher training technique through which teacher trainee practises one skill at a time, thus before starting practice teaching in a simulated situation, the student-teachers under the supervision of teacher educators, practise a set of required teaching skills.
This was also incorporated to both the UGTT and JTTI courses as technique of teacher training. However, programmed learning is kept only as an item of practical work in B.Ed course. Research on teacher education at the post graduate level have been conducted in the areas such as teacher education in Nagaland, development of different teaching skills relating to teaching of different subjects at the school level. However, no fresh attempts on the research of the teacher education at the Ph.D level has been taken up since 1984 on the study of problems faced by high school teachers and their attitudes towards teaching profession.

The methods of teaching in the teacher education institution were found to be 75% traditional. Lecture method dominated; followed by giving of notes by the teacher educators in the classrooms. Seminars, tests and assignments were conducted occasionally. Demonstration classes were given by the subject lecturers before practice teaching. There is lack of adequate and relevant text books, journals and teaching aids in the institution. Notes given by the teacher educators in the classroom.
are in practice by 60% of the teacher educators. From the above findings it can be concluded that the method of teaching is traditional in practice and instructional materials are inadequate.

5 : 20 TEACHER EDUCATION PROGRAMME FOR COLLEGE AND UNIVERSITY LEVELS.

There is no regular programme of teacher education for College and University levels. The Academic Staff College, North Eastern Hill University, Shillong organised programme of teacher education for the teachers under the affiliated colleges. Orientation programmes for a duration of three weeks on pedagogy in general were organised for all the teachers irrespective of the disciplines. Refresher courses for a duration of four weeks on different subject contents such as Zoology, Botany, Chemistry, Political Science and Khasi language were organised at different settings.

Department of Education NEHU, Kohima Campus; organised a refresher course for the teachers of Mizoram, Nagaland and Meghalaya in 1985 at Kohima on education. Department of English NEHU Kohima Campus also organised refresher course on the teaching of English for the teachers in Nagaland.
The Academic Staff College under NEHU has been closed down due to the financial constraints. There will be only one Academic Staff College for the whole of the North-Eastern Region at Guwahati, which will cover the teacher education programmes at the higher levels including Nagaland.