CHAPTER VI

FINDINGS AND CONCLUSIONS

This chapter deals with the findings and conclusions that emerged out of the analysis and interpretation of data collected through Questionnaires, Interview schedules and Observation schedules regarding the effectiveness of in-service training programmes for primary teachers and Headmasters organised by DIETs. The objectives of the study were:

1. To examine the functions of DIETs in the area of primary education with reference to DIET guideline in the present context.
2. To study the infrastructural facilities available and utilised in the DIETs.
3. To study the in-service training programmes organised by DIETs with special reference to
   a. Need assessment
   b. Planning and implementation
   c. Training techniques and strategies
   d. Monitoring and Evaluation
4. To enumerate the effectiveness of In-service Training Programmes conducted by each faculty of DIET.
5. To find out the follow-up activities organized by DIETs as a part of the in-service programmes.

6. To identify the problems and hindrances in organising in-service training programmes for teachers and Headmasters by DIETs.

7. To ascertain the influence of in-service training programme in classroom practice of the teacher.

8. To study the influence of the training programmes of Headmasters in the area of planning and management in schools.

9. To suggest measures for the improvement of in-service training programmes of DIETs based on the study.

6.1 THE FUNCTIONS OF DIET

In the present study the functions of DIET were analysed in terms of primary education with special reference to in-service training, resource support and action research.

The DIET guideline proposes to conduct in-service teacher training programmes with the duration of 3 to 5 weeks. It is expected to cover the whole teacher population in every 5 year cycle. It also proposes regular academic meeting of teachers and training through Audio-Visual media. The data collected from six districts showed that on an average of 4727 teachers were trained per year during the period
of study. The faculty wise reports reveal that IFIC faculty covered 73.36 per cent of the teacher population. But in the case of CMDE faculty the coverage was only 60.66%. The variation in the coverage indicates the lack of co-ordination in organising teacher training programme.

Duration of courses organized by various faculties was also varied. IFIC faculty organized training from 10 to 21 days for teachers. But other faculties organized courses for 5 to 14 days. The faculty wise variation in the duration of courses and the coverage of teacher population influence the quality of in-service training.

The rate of teacher participation in the in-service programmes was not up to the expected level. In a batch of in-service course 30 to 40 participants were expected to be admitted. But the data collected showed that an average of 26 teachers were only admitted. It resulted in the waste of resources. There were three reasons for the poor attendance of teachers- (1) lack of administrative power to DIETs for giving compulsory directions to the school authorities (2) lack of motivation among teachers (3) lack of long term planning and maintaining of data bank regarding the teachers working in various schools.

The second major function of DIETs is resource support. This is to be done by conducting periodic meetings and seminars.
publication of journals and newsletters, production of pamphlets and brochures, production of audio-visual aids, systematic school visits etc. In the present study it revealed that four out of six districts conducted more than three seminars during the year 1997-98. In this period DIET Ernakulam did not conduct any seminar.

All DIET faculty members responded that they were extending resource support to schools, but the teachers (44.47%) did not agree with the opinion. The critical ratio (5.29) of the opinion from both sides showed significant difference.

The critical ratio in the opinion of faculty members of DIET and teachers showed significant difference regarding Teachers handbook (3.43), Workbook for students (4.76), Model lesson plan (3.97), Video cassette (5.10), Audio cassette (3.54), Question bank (3.39), Low cost teaching aids (3.97), Newsletter (5.18) and Journal (4.38). The difference in the opinion of teachers and faculty members of DIETs is notable.

That means there was no systematic arrangement in DIETs for extending the resource support to the schools.

The third important function of DIET is conducting of Action Research. During the period of study only four out of six DIETs conducted action researches. Only 10 faculty members responded that
they conducted action research. Twenty per cent of the DIET faculty members utilised the result of action research for further development.

6.2 INFRASTRUCTURAL FACILITIES

Regarding the infrastructural facilities there was a gap between the facilities proposed in the DIET guideline and their availability in DIETs. The facilities available in all DIETs were Library, Physical science laboratory, Natural science laboratory and Sports and games room, Reading room, Educational technology display room, Computer room, Administrative block and Auditorium. The facilities not available in and DIET were Visual-arts room, Performing arts room and Language laboratory. But the utilisation of the available facilities was not satisfactory. Only 77.8% of the libraries were effectively used. 5.6% of the sports rooms were utilised for training purposes according to the DIET faculty members. The utilisation of computer facility (22.2%) was also not up to the expected level.

The facilities which were not in working condition were also identified eg.. 42% of physical science laboratory, 33.37% of educational technology room 33.37% of computer laboratory, 44.4% of sports rooms, 46.7% of work experience facility, 50% of physical education rooms were not in working condition.

The infrastructural facilities available for in-service training at the time of observation were Blackboard (100%), Furniture
(91.67%). Models (63.3%). Overhead projector and Transparency (63.3%) and Charts (60%). The available facilities were effectively used in training.

The present study showed that there was sufficient number of academic staff during the period of study.

6.3 PLANNING AND ADMINISTRATION OF IN-SERVICE TRAINING

The DIET guideline gives due importance to the assessment of training needs. The present study revealed that various methods were used to assess the training needs by DIET faculty members. There was no uniformity or comprehensiveness in assessment of training needs. Fifty per cent of the DIET faculty members responded that they assessed training needs by sending questionnaires prior to the training programme. Other methods used were listening the needs in the first session of training (77.74%), feedback received at the end of the training programme (33.336%), visiting schools and discussion with teachers (39.9%), and field study (36%). Five out of six DIET did not discuss the training needs in the Programme Advisory Committees of DIETs. The importance given to need assessment by DIET was not sufficient.

In the planning of in-service training, importance was given to the objectives of curriculum revision (94.44%) by DIET faculties.
Second importance was given to assessed needs (68.89%) and new learning techniques (61.11%). The government policy (50%) and content of textbooks (50%) were also considered in the planning of in-service training.

As an initial work of implementing the in-service training, DIETs gave importance to select Resource persons (94.44%) and preparation of time schedule for training programme (86.11%). Importance given to the preparation of training methods (72.22%), and preparation of training modules (52.78%) were not adequate. While reviewing the process of planning and implementation of in-service training, it is clear that there was no systematic approach. This has affected the quality of in-service training programmes.

The training techniques and strategies adopted by DIET were reviewed. According to the opinion of the faculty members the techniques adopted commonly in teacher training programmes were reading handouts and notes (75%), clearing doubts (66.67%), written works related to the content area (63.33%), asking Questions (53.33%) and Discussions with teachers (51.67%). The techniques which were more relevant to teacher training were more or less neglected eg... doing practical work (16.67%) handling learning aids (20%), sharing classroom experience (25%) and presenting creative writing (26.67%)
were not practiced adequately. The level of those activities was also not up to the mark (below 50%).

According to the opinion of the faculty members of DIETs, the techniques and strategies used for sharing knowledge were Lecture method (100%). Question answer method (78.08%) and Group discussion (68.24%). But in observation of training Lecture method (100%) and Question answer method (66.67%) were used effectively.

According to the opinion of faculty members of DIETs, the techniques used for developing attitude were lecture (55.66%). Debate (50%) and Field trip (55.66%). In observation, schedule (training) it was found that no effective techniques were used in training for developing attitudes.

In the opinion of faculty members of DIETs, the strategies and techniques used for developing skills were Apprenticeship (88.89%). Field trip (86.11%). Workshop (83.33%) and Demonstration (72.22%). In the observation of training, it was found that the only technique used for developing skills was workshop (50%).

6.4 MONITORING AND EVALUATION OF TRAINING PROGRAMMES

Monitoring and Evaluation have very much importance in every developmental process. The commonly used methods of course evaluation were daily report and oral presentation at the end of training.
The critical ratio of the opinion of teachers and DIET faculty members was 1.41 in daily report and 1.15 in oral presentation at the end of training. There was no significant difference in the case of the above evaluation methods. The difference of opinion was high in the case of Questions after each session (3.56) and evaluation sheet at the end of training (2.78). In the case of evaluating the training achievement significant difference was seen in the opinion of teachers and DIET faculty members (2.82).

**Follow up activities**

The sustainability of training achievement depends upon the follow up activities. The present study revealed that follow up work was the weakest link of DIET functioning. Even though the DIET faculty members were of opinion that they were doing follow up works, the teachers were not in agreement with them.

**6.5 Effectiveness of In-Service Training Programmes**

In the present study the effectiveness of in-service training programmes conducted by each faculty was analysed by using three parameters- (1) Mode of presentation (2) Practicability (3) Development of teaching competency. The findings regarding the effectiveness in these aspects are stated as follows.
In-Service Programmes Field Interaction and Innovation Coordination (IFIC)

The IFIC faculty was expected to cover 35 topics. In actual practice only 25 topics were covered in 50 percent and above in training programmes. The least covered area included the concept of action research, which was very important in strengthening of primary education. The topics like multi-grade teaching and special education which are important in primary schools were not included in most of the training programmes (above 75% of training programmes).

The analysis regarding mode of presentation, practicability and development of teaching competency reveals that 29 topics out of 35 covered in training programmes were effective (excellent + satisfactory = above 50%). The topics found effective in all respects were:

1) Action research
2) Activity oriented Approach
3) Compensatory education
4) Concept of minimum levels of learning
5) Concept of operation blackboard programme
6) Concept of pre-requisite
7) Continuous and comprehensive Evaluation
8) Educational Technology
9) Environmental based approach
10) Health Education
11) Integrated approach
12) Learner centred approach
13) Modern Educational Psychology
14) Objective based Instruction
15) Planning of lesson (preparation of lesson plan)
16) Preparation of low cost teaching aids
17) Presentation of Demonstration classes
18) Process oriented approach
19) Role of projects in the learning.
20) Role of Society in Education
21) Role of work experience in Education
22) Special education
23) Teaching of Basic Science (Environmental Science I)
24) Teaching of English
25) Teaching of Hindi
26) Teaching of Mathematics
27) Teaching of mother tongue
28) Teaching of Social science (Environmental Science II)
29) Value education
Curriculum Metody Development & Evaluation (CMDE)

The CMDE faculty is expected to cover 19 topics in their training programme. The study on topics taken up in the training programmes revealed that 15 topics were introduced above 50% of the training programmes. That means all important topics coming under this faculty were covered in their training programme.

The effectiveness of training programme in terms of presentation, practicability in the classroom and development of teaching competency (excellent + satisfactory - above 50%) revealed that the following 18 topics were covered effectively. The topics found effective were:

1) Activity based evaluation
2) Aims and objectives of evaluation
3) Analysis of existing curriculum
4) Analysis of text books
5) Continuous and comprehensive evaluation
6) Core curriculum
7) Diagnosis and Remediation
8) Formative evaluation
9) Hidden curriculum
10) Importance of co-curricular activities
11) National Curriculum framework
12) Preparation of lesson plan
13) Preparation of question bank
14) Preparation of teacher's handbook
15) Preparation of work book
16) Summative Evaluation
17) Tools and Techniques of evaluation related to non-cognitive domain
18) Tools and Techniques of Evaluation relative to cognitive domain

Work Experience (WE)

The WE faculty has 13 topics to cover in their in-service training programmes. The study reveals that 8 topics were covered above 50% in the training programmes. The topics which were not properly covered included preparation of handwritten magazine and wall newspaper which was more important in primary schools to develop creative ability of children.

The effectiveness of training in various areas under this faculty showed that all the topics except preparation of year plan for work experience programme have achieved its goal. The effective topics were:

1) Formation of work experience club
2) Identification of locally relevant work experience area and it's training
3) Implementation of the concept of 'Learning by Doing' in teaching
4) Importance of work experience in Education
5) Organisation of work experience fair
6) Planning and implementation of hobbies related to work experience
7) Planning and implementation of school hygienic programme
8) Practicing of different kinds of craft work
9) Preparation of co-curricular activities
10) Preparation of handwritten magazine and wall newspaper
11) Preparation of low cost teaching aids
12) Preparation of work experience kit
13) Preparation of year plan for work experience programme

Educational Technology (ET)

In E.T faculty training was extended to 17 topics to achieve the goal. The present study revealed that seven major topics were not taken above 50% in the training programmes. The basic elements in educational technology were neglected due to the avoidance of important topics. Micro teaching, Programmed instruction, Instruction
using puppetry. Preparation of audio-video lessons. Team teaching. Integrated teaching and Multigrade teaching were considered as the base of Education Technology practicable in primary schools. The avoidance of these topic in in-service training adversely affect the quality of training programme.

The effectiveness of topics (excellent + satisfactory = above 50%) taken was studied using the parameters of presentation, practicability and development of teaching competency. This showed that the training was effective for the topics taken. The following topics achieved the goal whenever they were taken up in the training programme. Those topics were:

1) Computer assisted instruction
2) Concept of educational technology
3) Dramatisation as a teaching learning strategy
4) Instruction using audio-visual aids
5) Integrated learning
6) Micro teaching
7) Models of teaching
8) Multigrade teaching
9) Need and importance of educational technology
10) Preparation of handwritten magazine, wall newspaper.
11) Programmed instruction
12) Role play as a teaching learning strategy

13) Team teaching

Planning and Management (P&M)

There are 17 topics expected to be trained in P & M training programmes. Among these topics, 13 were taken above 50% in the training programmes.

The study on effectiveness (excellent + satisfactory = above 50%) based on the presentation of each topic, practicability and development of planning and management competency of training reveals the following topics had achieved the goal:

1) Academic management
2) Action research
3) Conflict management
4) Institutional planning
5) Leadership quality
6) Motivational management
7) Office management
8) Organisation of school complex
9) Personnel management
10) Problems and remediation in primary education.
11) Pupils' welfare activities
12) Relation between school and society
13) School Management

6.6 THE PROBLEMS AND HINDRANCES IN ORGANISING IN-SERVICE TRAINING

The present study reveals that there were administrative problems and academic problems in the organisation of in-service training. The investigator identified seven administrative problems and five academic problems from the opinion of DIET faculty members. The major problems seen from administrative side were. (1) Inadequate funding. (2) inadequate participation of teachers and (3) lack of cooperation from Educational Officers. were reported by above 50 percent of DIET faculty members.

The major academic problems identified were non availability of lab facilities and lack of academic freedom. The first one can be treated as a part of infrastructural facility which has to be modified. Proper laboratory experience was needed for primary teachers to develop their career.

6.7 INFLUENCE OF IN-SERVICE TRAINING IN CLASSROOM PRACTICES

The present study showed that the in-service training influenced teachers in providing provision for answering. group activities. correcting mistakes. creative writing. drawing pictures.
observation, comparison, classification, generalisation and problem solving.

The levels of various teacher competencies were also analysed. The present study proved that the in-service training influenced in developing teacher competencies. The trained teachers achieved competencies like arranging the classrooms for activities, utilization of the facilities outside the class for learning, handling audio-visual aids, administering learning activities in work experience, participation of pupils in learning activities, conducting of multi-level learning activities and introduction of interesting learning activities. Better performance was shown by the non-practising teachers in conducting immediate feedback and reinforcement, conducting diagnosis and remediation and in conducting formative evaluation only.

In classroom practices, the in-service training given to teachers by various DIET faculties had positive effect.

6.8 INFLUENCE OF IN-SERVICE TRAINING IN PLANNING AND MANAGEMENT

The areas in which the in-service training given to Headmasters in planning and management were: (1) maintaining of school year plan, (2) monthly plan, (3) lesson plan, (4) PTA minutes, MPTA minutes, staff meeting minutes, supervision diary, inspection diary, lab register and progress report. The in-service training has no
considerable influence in the areas like maintaining of time table, library records, inspection diary, maintaining of mid-day meals records, and records related to financial dealing and records related to pupils and staff.

The positive influence of in-service training can be seen in the functioning of school assembly, library, reading room, laboratory, science club, environmental club, farmers club, literary club, and action research.

Headmasters who attended the in-service training showed better performance in the areas of school functioning such as Hygiene/neatness of school surroundings, farming, work experience programme, systematic arrangement of office, sharing of responsibilities, interaction of Headmasters with staff, interaction of Headmasters with pupil and interaction of Headmasters with parents.

In-service training in Planning and Management for Headmasters was found fruitful for keeping healthy school environment.

6.9 SUGGESTIONS FOR STRENGTHENING OF IN-SERVICE TRAINING CONDUCTED BY DIETs

The suggestions made by DIET faculty members throw light on the present weakness of DIETs both in academic and administrative areas. These include (1) The infrastructure facilities available in DIETs were inadequate for the proper functioning of an in-service training
institution. (2) Faculty improvement in DIET can be possible by providing timely training in various developing areas of education to faculty members. (3) In the field of information technology, a thorough knowledge and working experience is needed for DIET faculty members. It will help to update the training techniques also. (4) It needs technician for handling laboratories. work experience and educational technology. (5) As a scientific approach, it is better to provide training to DIET faculty members in those areas for developing and updating their professional skills. (6) Action research is one of the areas which need more training to DIET faculty members for developing professional skill. (7) As an academic institution DIETs must be given more functional autonomy. The failure in ensuring proper participation of teachers in training programmes can be avoided with its autonomy. DIETs have to undertake many programmes according to the demands arisen from educational field. Regularisation of utilised funds and other resources can be possible if it has autonomy in this regard. (8) To ensure the influence of training in the schools, it is needed to strengthen follow-up work by monitoring the school functioning. In this regard a monitoring cell has to be constituted. For the smooth functioning of this cell facilities for conveyance and other things must be provided. The monitoring cell can be constituted with educational officers. DIET faculty members, representatives of local body members, HM's and
teachers. The observations made as a part of monitoring can be further utilised for decentralised planning of in service courses. (9) As education is a social activity, DIETs are expected to organise their programmes with the support and collaboration of local body members, educational officers, NGOs and other agencies.

6.10. PRESENT STATUS OF DIETs

The data collected and analysed for the present study was up to the year 1998. After this period some changes have taken place in the functioning of DIETs. It was mainly because of the revision of primary school curriculum. The changes were also seen in the availability of infrastructural facilities.

Library facilities of the DIETs were updated by providing books and reference materials. A new post of Librarian was created and posted to all DIETs. The Staff Strength of the facilities were maintained by filling the posts of Lectures and Senior Lecturers. Tele-conference facility was implemented in all DIETs.

Periodic training programmes were launched by all facilities to familiarise the revised Curriculum. Textbook, improved transaction strategies and evaluation techniques to primary school teachers. Two to ten days training programmes were organised by each faculty during this period. Separate training was given to Upper Primary school teachers who were handling particular subjects.
Importance was given in organising one day cluster meeting in every month for sharing classroom experiences and planning.

As a part of resource support, activity banks and evaluation tools were developed by all DIETs and supplied to schools. Familiarisation programmes for the evaluation tools were also conducted. Resource materials were developed by the DIETs with the participation of teachers. A constant interaction with schools was established by this way.

To find out solution to the problems related with the implementation at revised curriculum, each DIET conducted 2 to 5 action research during this period. The topics of action research were closely related to the curricular objectives.

In the case of primary Schools, Block level monitoring team was organised in the year 2000. The team includes two primary school teacher, AEO and one DIET faculty member. The team visited primary schools regularly to monitor the functions.

The techniques and strategies for in-service teacher training were also improved during the period. The techniques introduced during this period were seminars, workshops, group discussions and brainstorming sessions.

The mode of evaluation of training programme was strengthened. All the activities in the in-service training was
documented by the participants. This was reviewed for findings out the effect of training programme. Regular feedback sessions were also introduced in all training programmes.

The method of need assessment was also changed. Workshops were organised to find out the training needs from the field. The faculty members visited the schools and collected information regarding the training needs. Teachers and faculty members have participated in these workshops to finalise the training needs.

6.11 SUGGESTIONS EMERGING OUT OF THE STUDY

(1) There is an urgent need for restructuring the role and function of DIETs. In order to strengthen the academic activities of the primary schools of a district, DIET must be provided with statutory powers. To place the DIETs in the administrative field, the role of AEO’s, DEO’s and DDE’s have to be redefined.

(2) A strict check in quality of faculty members is needed. For example, in the faculties of E.T. WE and P &M, the faculty members must possess adequate qualification in the respective field. The present faculty members will have to undergo in-service training programmes in their respective field. The new faculty members selected in future must have necessary qualification and experience.
(3) Guest faculty members may be appointed from primary schools. Adult education centres and TTIs to strengthen the link between the resource centre and primary schools. Experts can be selected from technical fields such as polytechnics, production centres and other related areas as guest lecturers.

(4) Libraries have to be modernised by providing new books, journals and computer facilities with internet.

(5) Certain changes have to be carried out in the DIET guideline by considering the present developments in technology. In the guideline the specification of computer is noted. But such a specification is now outdated. Computer with modem facilities is needed now. It is also specified that 10 acres of land is needed as campus area of a DIET. In a thickly populated State like Kerala, it is not practicable. This needs drastic change.

(6) In-service teacher training will be effective only if it is arranged on residential basis. In a residential training more topics can be covered within a short span of time. For attitudinal change and behavioural change, it is essential to undergo a residential training programme. The duration of training programme may be extended from 2 to 3 weeks. All teachers must undergo such an intensive training programme once in 5 years of service. Short term training programmes can also be conducted at various centres.
other than DIET. Subject wise training can be conducted in this way.

(7) Assistance (financial and technical) may be provided to teachers for conducting action research. The faculty members themselves should conduct action research. Special training is needed to engage in action research for teachers and faculty members. Institutions like SCERT can monitor the action research in DIETs and DIETs can monitor the action research of school teachers. A committee can be constituted with the participation of University experts, faculty members of SCERT and experts from other institutions for this purpose. Funds can be mobilised for action research from University Grants Commission (UGC), Indian Council for Social Science Research (ICSSR), National Council for Teacher Education (NCTE), National and International Non-governmental agencies like PRIA. UNESCO. UNICEF. World Bank etc.

(8) The opinion of teachers showed that the in-service training they received was effective. But in the classroom observation it was seen that there was no considerable difference in the classroom practices between trained and untrained teachers. The output of training was not practiced in classroom. So the process of monitoring has to be strengthened.
(9) The Journal and Newsletter of DIETs should be redesigned according to the needs of the field. The report of action research must be published in DIET Journal. The research reports from inside and outside the State can be included in the Journal. Monthly programmes of DIETs, reports and research abstracts may be published in the Newsletter. The publication and distribution of both newsletter and journal may be regularised.

(10) Tele-conference facilities available in DIETs must be utilised properly. It can be extended to selected schools in all educational sub-districts under the DIET.

(11) A State level monitoring cell for DIETs may be constituted to monitor the activities of all DIETs. This committee may be constituted with statutory powers. The team shall visit all DIETs thrice in a year. This committee must be constituted with the Chairmanship of Education Secretary. The committee should include Director of Public Instruction, Director of SCERT, Director of SIET, Head of the departments of education from universities, experts in the field of education, representatives from local bodies, teacher organisation, non-governmental organisations and research institutions.

(12) External evaluation of the functions of DIET may be conducted by SCERT and NCERT in every year.
(13) A monthly monitoring and review committee may be formed in each DIET for monthly evaluation of the functioning of DIETs. Experts may be invited to get suggestions and guidance.

(14) Documentation and dissemination facilities may be provided to maintain a data bank regarding the educational system of the district. It can be utilised for planning and budgetary purpose.

(15) The Programme Advisory Committee (PAC) of DIETs must be redesigned with the participation of representatives of headmasters, teachers, voluntary workers, educational activists and representatives of nearby universities and technical institutions. This committee must meet at least three times a year.

(16) In the light of the projects launched by Government of India like District Primary Education Programme (DPEP), and Sarva Siksha Abhiyan (SSA), the DIETs can delegate its duties in in-service training with other bodies like Block Resource Centre (BRC) and Cluster Resource Centre (CRC). DIETs can conduct long-term residential courses for Resource persons who have to act as trainers in BRCs. These resource persons shall conduct block level long-term courses. CRCs can conduct short-term courses. More attention may be given to researches, planning and monitoring of in-service training programmes by DIETs. DIET can monitor and co-ordinate programmes at district level which will promote sustainability of training achievement.

(17) Educational programmes conducted by various agencies like Social Welfare Department, local self-government etc. can be co-ordinated and monitored by the DIETs.

(18) Inter-DIET collaboration (State level and inter-State level) may help in promoting in-service training programmes.
The present system of having seven faculties has been found irrelevant. Two major faculties can play the role of the seven faculties—Faculty of training and Faculty of research and development.

The faculty of research and development will have the following duties: (1) Need assessment for in-service training of primary teachers and adult and continuing education centres. (2) Conduct and monitoring of action research in the fields of primary education and adult education. (3) Material production to support primary schools and adult and continuing education centre. (4) Providing inputs for both in-service training and pre-service training. (5) Documentation and resource mobilisation. This faculty must be provided with social researchers, subject experts in Malayalam, English, Hindi, History, Geography, Economics, Botany, Zoology, Physics, Chemistry and Mathematics, Management experts, experts in the field of education technology and work experience and publication officers.

The faculty of Training has to be designed for conducting in-service and pre-service training in the fields of primary, pre-primary and adult/continuous education. This faculty must be provided with experts in educational technology and work experience and management experts.
**Suggested Staff Pattern of DIET**

- **PA to Principal, Financial Officer, Account Officer, Computer Operator, Clerical Staff**

**Head of the faculty of Training**

**Head of the Faculty-Research Documentation & Dissemination**

### Units

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#### Academic Staff

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- **Clerical Staff- 2**
- **Peon - 1**
- **FTM - 1**
- **Librarian - 1**
- **Asst. Librarian- 1**
6.12 SUGGESTIONS FOR FURTHER RESEARCH

In the present study, the research focuses on the effectiveness of the in-service training programmes for primary teachers and headmasters organised by DIETs. The investigator feels that the present study should be extended further. The following specific suggestions are made for further research.

1) The effectiveness of training conducted by other faculties of DIETs viz. Pre-service Teacher Education (PSTE) and District resource Unit (DRU).

2) The effectiveness of in-service training programmes for secondary and higher secondary teachers conducted by various educational agencies.

3) A cost effective study of the programmes of DIETs.

4) A comparative study of the functions of DIETs in various States of India.

5) On-line training package for effective in-service training of teachers.

6) The possibility of interactive approach in in-service training programme through electronic media.

7) Administrative problems and possibilities of primary schools in Kerala.

8) Role played by SCERT in quality improvement of school education in Kerala.

9) Co-ordination and sustainability of academic and administrative agencies of school education in Kerala.
BIBLIOGRAPHY