

Chapter 5

Summary and Implications

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5.0 Introduction

Right from obtaining independence it is the cherished goal of the Indian government to provide equal opportunities for education. Several steps were taken in this endeavour and one of such steps is providing quality teacher education programme. Various education committees and commissions have focused on this aspect and stressed on a need to strengthen the teacher education programmes from all aspects to give out quality output that could take care of the social goals of Indian education. A teacher with clear understanding of the changing expectations of the society towards educational opportunities is the need of the hour.

Teacher education is an important aspect of the entire educational system. It has to represent the aspirations of the nation in all its aspects. Curriculum has to represent the national values and social goals of our country and all the cultural, social, traditional aspects of the Indian society are to be made known to the teacher. Recent changes in science and technology, information and communication technology inventions leading to knowledge explosion, several issues like population explosion, environmental concerns, human rights abuse has brought in different areas of interest in to teacher education scenario. But time and again various commissions and committees have expressed their dismay for not achieving this goal of representing the social context in its education programme that ultimately is affecting the quality of out put.

Universalization of elementary education emphasized on universal enrollment, universal access and universal retention as its goals. The present ambitious project 'Sarva Siksha Abhiyan' is proceeding with full strength to achieve the universalization of elementary education by the end of 2010. Once this aspect is achieved there is pressure on secondary education to take care of the further educational needs of the students coming with success from elementary level. This again puts pressure on the teacher education programme to train teachers to the required extent. To train up teachers with a proper attitude towards social goals of education, there is a need to train teacher educator with a proper focus towards this teacher education and its present needs.

5.1 Job-Profile of Teacher Educator

Broadly speaking teacher educator is a person providing training to teachers at pre-service and in-service levels. To produce quality teachers required for different reasons described above, the education and training of teacher educators is also important. As a key person involved with developing awareness, skills in student teachers regarding the changing aspirations and situations of our society the role of teacher educator in the teacher education programme assumed prime importance.

Teacher educator is not only concerned with teaching but also with designing materials for conducting different programmes during training period. They have to design various programmes innovatively and provide a supportive environment for student teachers to achieve the goals of teaching. They have to involve actively in the research to find ways to improve upon the present situation and to move into a prosperous future. They have to interact with different related people from surrounding community for this. They have to make student teachers to interact with their surroundings so as to grasp the reality and reflect it in their teaching. In a way, a teacher educator needs to be aware of all the things that are needed to be developed in a student teacher. They have to be aware of their social environment, school situations and problems and should actively involve with authorities to provide help in improving the situation. They have to inculcate all these qualities in their students to provide quality education at school level.

Curriculum Framework for Quality Teacher Education, 1996 has set the following objectives for teacher educator training programme as -

- To develop competencies and skills needed for preparation of teachers and teacher educators
- To enable them to organize competency-based and commitment oriented professional programmes
- To enable them to develop pedagogy relevant to the education of teacher educators
- To acquire an understanding of the needs and problems of teacher educators and teacher education institutions
- To develop skills related to management of teacher education institutions
- To develop competencies of curriculum development and preparation of learning and evaluation materials

- To enable teacher educators to acquire capabilities to organize in-service continuing education programmes
- To enable them to organize need-based and commitment oriented on the job training
- To develop competencies for evaluating educational programmes and teaching learning materials
- To develop the capacity of examination, analysis, interpretation, elaboration and communication of educational ideas
- To relate education and the national needs and develop critical awareness about Indian realities
- To enable them to understand the relationship between Indian ethos, modern technology and education
- To promote the global perspective of educational development with special reference to the developing countries.
- To enable them to undertake meaningful educational research.
- To develop the capacities to reinterpret Indian heritage, culture and values to meet the requirements of the present-day Indian society.
- To develop the capabilities for self-directed and life-long learning.
- To enable them to appreciate and adopt emerging communication technology and innovative practices in Indian context.

It further commented, “With the policy focus changing to quality and relevance of education; it is necessary that only those, who are professionally competent, committed and willing, are charged with the responsibility of preparing teachers for the nation. Teachers for various stages, levels and categories are prepared professionally by teacher educators. The quality and character of teachers therefore, would largely depend on the professional education of teacher educators”.

5.2 Present Scenario of M.Ed. Programme

At present the programme that is concerned with training of teacher educators in teacher education programme is M.Ed. Preparation of teacher educator at this level to train future teachers at various teacher education institutions is not conducted uniformly.

Entrance into this programme is generally based on the merit obtained in B. Ed. which is considered as a secondary teacher education programme. But we need teacher

educators to prepare teachers at various levels starting from primary or even pre-primary to higher secondary. How to judge the ability of the candidate to prepare teachers at various levels with a training process that is not in tune with different levels teacher education programme is a question. The various admission procedures through out the country are –

- a. Admission on the basis of merit obtained in B. Ed.
- b. Through entrance test
- c. Centralized M.Ed. test at national level

Most of the times the entrance test, tests a candidate's language ability (writing and communication skills in English) as a selection criterion. On the whole there is no centralized process of admission to this course all over the country. Different admission procedures giving emphasis to different aspects are leading to different quality outputs.

There is no uniform curriculum (theory and practical) and its transaction all over the country. This is resulting in different quality outputs at the end of the training period. Programmes run by different institutions are not giving equal importance to teaching and research training. A programme without proper emphasis on conducting dissertation, seminars etc. is going to give out teacher educators without proper knowledge about research. When the system is expecting a teacher educator with proper understanding of the problems of education system and ability to search for solutions for those problems, programmes of the above kind result in severe lack in the quality. Absence of proper emphasis on practical aspects of the training, not strengthening curriculum according to present needs and absence of proper recruitment process are some of the issues affecting the quality of the programme adversely.

The teacher educator training programme needs to be more professional in tune with the different teacher education programmes for various levels of education like PTC, B.Ed. etc., When programmes are designed and offered focusing on a particular level (for eg. M.Ed. (Primary Education) offered by RIEs) recruitment preferences are to be maintained accordingly. Although issues surrounding the programme are many, the present study focuses on some important factors that could be considered for testing a candidate's ability during the admission time. The very focus on admission process is to select a candidate with adequate potential for the training programme. Once the

abilities of the candidates are known, it is easier for institutions to admit genuine candidates.

5.3 Variables Relevant in Selection of Candidates to Teacher Educator Training Programme

Role of the teacher is changing very rapidly in the present days of LPG model. Emphasis on providing quality education to children is main concern now. On one hand there is emphasis on active learning, experiential learning process and on the other the fast changing working environments, employment scenario, selection procedures are pointing towards importance of developing creative thinking, critical thinking, decision making, awareness about problems and solutions and values – ethics of working environment in children from school days itself.

Development of all these aspects in child in school is the primary responsibility of the teacher. For this teacher also needs training through pre-service and in-service programmes. There is a need to design proper curriculum and related transaction procedures according to the present needs. At this juncture, the role of the teacher educator is important. Because being the trainer of future teachers, one can expect from teacher educator a capacity to design proper training programme in tune with the needs of the present day schools. To attain this capacity teacher educator also needs good training with proper emphasis on quality teaching and research.

All the above mentioned situations are emphasizing on certain factors to be inherent in teacher educator like proper research aptitude, awareness about changing educational management practices, knowledge of technology and its use in teaching learning environment, competency in life skills, professional management, adjustment capacities in working environment - in addition to content mastery and teaching abilities related to the field. Some related factors are explained below.

5.3.1 Research Aptitude

It is the natural inclination of a person towards research. Particular to this context it is the ability to think in different ways to find solutions to educational problems. A general understanding about this concept includes a person's capacity to find a problem and to find solutions suitable to the situation of that problem and possessing skills to explain a problem, defend questions raised logically, analytically and ability to

present the findings before learned persons. Research is needed to improve upon the present situations so that a proper future context could be created. Research is a continuous process always aiming at achieving better results than the previous attempts. So this aspect of education needs to be included in the curriculum at graduation level itself, so that students will be able to develop proper aptitude, attitude and interest in the problems related to their respective field.

Particular to teacher education, research must be conducted in all aspects like, school situations and problems; policy and administrative issues; classroom issues like management; evaluation procedures; examination reforms and future aspects. Proper research related to all the issues of education system will enhance the awareness of people and helps in finding different innovative practices to overcome the problems. So there is a need to inculcate the researching ability in students of teacher education at least from the master's level programme. There is a need to expose students towards practical aspects of conducting researches using different research methods, techniques to develop proper awareness. If the natural inclination of students towards this aspect is measured from admission level itself, it could be honed to proper levels through practical exposure during training programme.

5.3.2 Educational Management Aptitude

Management is an important aspect of any system to work efficiently and effectively. Education as a sub system of society needs efficient and effective management practices to achieve its goals. Traditional views of management are associated with looking for a leader at top level of hierarchy giving commands and leading a group of persons at different lower levels. In educational scenario also this holds true, with principal taking the lead in all matters related to school functioning. For the last two decades researches in educational management area have been giving serious thought about decentralized management practice through sharing leadership. It is providing leadership training to people involved at various levels of functioning in a school. This facilitates effective functioning with decision making process being divided among a group thus avoiding burden and accountability on one person and leading to co-operative and co-coordinating working environments. Principal is identified as the key person at school to promote this leadership among various levels of the system. In Indian situation, provision for decentralized management practices through

constitutional amendments to strengthen grass root level panchayat raj administration, made people think about providing some decision making roles to teachers in school's functioning, to achieve the goals of UEE. Globalization and information explosion, scientific inventions have brought rapid changes in the functioning of the system, on employment scenario, job requirements and changing roles of teacher in the present day multicultural class rooms.

World wide this concept of shared leadership is still evolving. Many barriers like bureaucracy, rigid attitude of administration at higher level, policy decisions, and resistance to change on part of participants due to burdens involved in the process are adversely affecting the process of bringing in suitable methods of training to develop this concept in teachers. To maintain in this complex scenario, teacher needs a capacity to lead oneself successfully in different situations by taking lead sometimes and sharing leadership at other times. Even though the present Indian education system is not giving serious thought to these aspects of teacher leadership, there is a need to inculcate these qualities, values in student teachers keeping in view the fast changing world scenario. Testing this aptitude at admission level will help in proper designing of curriculum and train the candidate regarding the evolving concept of shared leadership aspect.

5.3.3 Techno-Pedagogic Competencies

Tremendous improvements in science and technological fields have brought in the ICT aspects into education field. Invention of PC, Internet and World Wide Web has brought in revolutions in knowledge management, access and possession areas. The field of education has been witnessing the impact of these effects through use of computers in teaching and other purposes. Integration of technology into teaching, training, and access, empowerment to users at various levels in the system, knowledge about technical subject matter, teaching principles and technological aspects are some points related to this concept. A person's awareness about these points and ability to find ways to tackle different issues related to ICT integration decides his/her competency in using ICT in education. With explosion of gadgets and improved access to knowledge and information, due exposure given to students, the teaching learning process is no more limited to traditional way of giving and taking knowledge. Teacher has to be a facilitator, guide in making students find different ways to acquire

knowledge on their own. For this teacher has to be aware of different situations, software/hardware available and useful in teaching, availability of infrastructure, proper integration of technology and teaching to make students become techno savvy. Keeping in view the importance of ICT in education in the present times, there is a need to test the competency of candidate regarding this matter.

5.3.4 Living Competencies

Democratic ideas emerging after Second World War led to the development of liberal education aspects where education is provided to all irrespective of caste, creed, and gender. It is not the privilege of few as in past. Social goals of Indian education system reflect this aspect by taking up the challenge of universalization of education as one of its goals. This has brought in diversity in many respects to classrooms that resulted in development of conflicts of many kinds. This necessitates on part of teacher and students to develop adjustment capacity to deal with the situation effectively. Rapidly changing social order due to liberalization, privatization and globalization is bringing in conflicts of many kinds into day to day situations. This needs awareness and understanding of the situation and acting accordingly using one's thinking ability which is nothing but life skills that are needed to survive amicably in the times of conflict. Prevalence of dreaded diseases like HIV/AIDS in younger generation, human abuse and trafficking mostly affecting younger generation also compel formal education system to think of adopting 'life skills education programmes' for students to be aware of the situation. Not only life skills, there is a need to make students understand various values, ethics to be practiced related to their day to day life situations. In the times of life long and continuous learning practices, one needs to be aware of the professional aspects related to their working environment. If a candidate's competency and knowledge about these aspects is known, proper curriculum and teaching learning experiences could be developed in training programme according to the present needs.

5.3.5 Adjustment Capacity

The complexities of present day life on human existence led to the serious thought on adjustment capacity of an individual. To sustain life in the social context where there is confluence of different cultures, traditions, regions and languages, a person has to

possess adjustment mentality to lead peaceful life with prosperity. This adjustment is with surroundings, profession, persons in contact for various reasons. Education must help a person to develop this capacity through providing experiential learning. Considering all the above mentioned situations and changes coming into the system, it is advisable to test a candidate's adjustment capacity to cope with present day complex life patterns.

5.3.6 Teacher Education Disciplinary Profile

A person coming to the post graduate level programme in teacher education is coming with a preliminary understanding of the various issues related to the system. The level of comprehension in a person decides the inclination of the person towards the programme and his/her achievement levels in the programme to some extent. Main components of teacher educator training programmes deals with different foundational aspects like philosophy, sociology, psychology and history, basing on which education system of a particular society is decided. Not only this with changing times many new subjects, issues and problems arise related to social and other aspects that need to be properly represented in the curriculum to maintain quality. A primary understanding is provided in lower levels about all these aspects, by checking this level we can test the candidate's suitability to the programme.

Various views expressed by Teacher Education Curriculum Framework (1996) about teacher educators suggest that teacher educator be a person with proper content and research knowledge for problem solution and disseminating the research findings through teaching and other methods. Checking for the above mentioned aspects at the entrance level itself will help in providing quality input to the programme. To find out which group of above factors are effective in finding the ability of the teacher educator, relative predictivity studies will be conducted with respect to overall competency of the candidate in the training programme, by employing regression analysis techniques. Basing on these values one can design proper selection procedures for the candidates.

5.4 Research Trends Emerging Through Review of Related Literature

Predictive validity studies were conducted to compare efficiency of older test form with newer test form of Medical College Admission Test (Essex, 1980); to predict job performance by testing specific aptitudes (Hunter, 1983); predicting success by race (Deborah, 1988); adjusting college grades to improve SAT's predictive validity (Keller, 1994); to find relationship between counseling services and maladjustment scale use (Stewart, 1996); empirical validity of GRE as predictor of performance of Psychology graduates (Sternberg, 1997); predicting academic success basing on social and personal influences (Cubeta, 2001); to predict career specialty through person matching (Hartung, 2005) in general education areas. Related to school education areas predictive validity studies were conducted on aspects like – correlation of GT scores of ASVAB and overall academic performance (Harris, 1974); predicting success of DPST and HERS as predictors of later school success (Mann, 1984); establishing GSRT's reliability as a predictor of school achievement (Banerji, 1991, Sibley, 2001). In particular to teacher education area studies were conducted related to – predicting student teacher effectiveness using microteaching, role-play and values conflict discussion (Butcher, 1972); establishing SAT scores and grade point averages as possible predictors of NTE (Pratt, 1979); to predict grades in student teaching by developing predictive equations (Twa, 1980); to assess relationship between MBTI and NTE scores (Pratt, 1981); using Human Relations Incident (HRI) validity to select best applicants for pre-service teacher education (Mamchur, 1984); to seek effective predictors at entry and exist stages for student teaching success (Ostald, 1987); to find validity of communication skills and GK tests of NTE as predictors of student performance (Wakeford, 1988); to identify the characteresitics of minority students who take the General Knowledge Test of the National Teachers Examination (NTE) Core Battery, (Richard, 1990); to validate the predictiveness of different factors of different tests against student program success (Riggs, 1990); to ensure the validity of NTE tests of GK and Communication skills as entrance requirements of teacher education programs (Williams, 1990); to predict academic achievement basing on attitude, aptitude, participation and human values of student teachers (Diwan, 1992); whether criterion specificity is positively related to the predictive validity of the selection measure (Riggs, 1992); develop a computer

based selection test for admission into B. Ed. (Mishra, 1993); Predicting educational eligibility of Teacher Educator students (Goel, 2001); improving visual and verbal literacy skills (Whitener, 2002) and to decide admission into doctoral program basing on reference information provided by applicant (Young, 2005);

Various studies on admission area concentrated on - Utility of tests variables of different admission test for selection of proper teacher candidates (Wheat, 1963); predictive validity of admission criteria for masters students in reading (Heritage, 1977); recruitment and retention of quality students into teacher education (Marshall, 1988); a new approach to admission - proficiency based admission standards (Clark, 1996); analysis of selection procedure for admission into polytechnics of M.P. (Khatri, 1998); to find relationship between psychological and social status with entrance test performance of B. Ed. students (Kumari, 1999); to study the relationship among teacher candidate admission, practice teaching and teacher preparation (Catherine, 2005); to study the effectiveness of new teachers' induction practices of a selected Missouri Publish school district (Kosek, 2006); effect of technology on teacher induction process (Tedford, 2007); study of admission process in terms of demographics and success in program (Borwn, 2007).

Studies conducted on teacher trainees area were - synthesis of research on teacher educator characteristics (Troyer, 1986); reasons given by students to enter teacher education programs and their selected characteristics (Marso, 1986); knowing expectations of students from teacher education to define teacher education (Rancifer, 1992); comparative study of teacher affective attributes to assess teacher quality uniformly (Marso, 1995); to know the academic, personal and family characteristics of persistent and non-persistent teacher candidates (Marso, 1996); preparing teachers to be multiculturally competent (Chang, 2006); to understand relationship between subject teachers' characteristics and students' marks in those relative subjects (Geeta, 2006); perceptions of pre-service and in-service teachers on the importance, relevance and application of research skills and knowledge to teaching (Ruth, 1995); to determine value of teacher education research to policy making (Barbara, 2002); developing a framework of variables to determine vitality of research to effective teaching (Protheroe, 2004); effects of instruction on self-assessed research knowledge, ability and interest (Stamov, 2006); effects of continuous engagement with research on teacher educators' professional practices and students' learning

(Tanner, 2009); identifying promising approaches to update technology knowledge of teachers in order to provide their students with technological knowledge of current work field (Wonacott, 1983); teachers' views on technology in the contemporary society (Fleming, 1989); to provide standards for technology use for pre-service and in-service teachers and to meet needs of teacher educators (Peck, 2003); to develop new technology infusion program for tomorrow's teachers (Rowley, 2005); to prepare future teachers to infuse technology in classrooms (Christensen, 2007); to evolve a critical theory of educational technology (Okan, 2007); developing a life skills curriculum for teacher educators to prepare student teachers to deal with children with disabilities in classrooms (Brolin, 1982); to decide on competencies needed by economics teachers and teacher educators for professional growth (Letitia, 1982); to study adjustment problems of professional and non-professional course students in relation to their self-concept and anxiety (Dalal, 1999); mobilizing adult educators' inner resources and social emotional aptitude to achieve good relationships with their co-workers and with children in their care (Seligson, 2001); identifying professional, academic identities that help persons becoming a teacher educator in new settings (Harrison, 2008); to understand evolution in development of teacher educators over three periods of their professional life (Merav, 2008); helping students to formulate goals and plans related to career and occupational decision making (Dunn, 1980); retraining of teacher educators for reforms in schools and higher education (Richard, 1986); impact of state imposed rules and regulations on teacher education performance (Williford, 1993); relationship between institutional performance with teacher morale and organizational climate (Ameta, 1996); studying attitudes of pre-service teachers about their participation in a field-based education program partnership (Nath, 1997); to study characteristics of teacher educators teaching at different levels (Kaur, 2001); comparing job satisfaction of teacher educators with values, attitudes towards teaching and teacher effectiveness (Singh, 2002); teacher effectiveness and job satisfaction of teacher educators in Haryana (Kaur, 2004); to develop research based teacher education programme to work with English language learners with different needs (Judith, 2005); job satisfaction, experience and freezing in teacher educators (Kumar, 2006); to study the attitudes of educators towards the relative importance of mastery of subject matter and matters of teaching skills in teacher education programs (Beck, 1984); to compare CMEE and Praxis I Academic Skills Assessment to select a successor to NTE (Morton, 1994).

Studies on teacher education area were concentrating on developing a competency based teacher education program (Robert, 1975); flexibility of social contexts on teachers to aim for solving contextual problems (Apple, 1987); describing an existing pool of educators (Zewill, 1992); using journals to describe education (Lerner, 1993); to develop a teacher attitude scale and its application at B. Ed. level (Mahajan, 1993); appraisal of teacher training in Andhra Pradesh Primary Education Project (Anuradha, 1995); evolving of professionals in working environment in a teacher education program (Rothenberg, 1996); survey of legislative and administrative actions related to a quality and standards to be maintained in teacher education (Inuj, 1997); constructivism based course material development to develop teachers for tomorrow (Damon 1997); study on innovations, issues and problems in teacher education in Bihar (George, 1999); to study the outcomes of rewarding excellence from award winning teachers (Dinham, 2002); effect of learning inputs of teacher education programs on teaching effectiveness (Goel, 2002); a collaborative partnership to redesign teacher preparation program, (Lara, 2002); development and problems of graduate level teacher training (Richaria, 2002); conformity of teacher education institutions to NCTE norms (Singh, 2002); study of teacher education institutions of different levels with special reference to NPE, 1986 (Choudhary, 2003); effective strategies for educating and training US teachers (Allen, 2003); relationship between cost of education and the institutional effectiveness of college of education (Mullick, 2005); designing a specific master's program to develop accomplished teaching (Ahern, 2007);

Survey method was employed for most of the studies. Investigator prepared tools like questionnaires rating scales, personal data sheet, checklist etc. used. Some specified tools include, a rating scale to measure Institutional Effectiveness by Pandya, an Inventory to measure Traditional Cost incurred by students by Wakpainjan, teacher effectiveness scale by kumar, and Mutha (1985), Job satisfaction Scale by Kumar and Mutha (1976), FICS by Flanders (1970), OCQD developed by Malpin and Craft; Teacher Morale Inventory (TMI) by Dekthawals MSU Baroda; the institutional performance Scale developed by Ameta, self-concept scale developed by Dutt & Chadda; Adjustment Inventory for College Students developed by Dr. A.K. P. Sinha and Dr. R.P. singh; Anxiety Scale – SCAT (Sinha's Comprehensive Anxiety Test) Constructed and Standardized by Dr. A.K.P. Sinha and Dr. L.N.K. Sinha, job

satisfaction scale by Singh and Sharma, Professional and Educational Interest by Sundaram, Verbal Test of Creativity Thinking by Baquer Mehdi, Attitude towards Teaching Scale by Sundaram, Personal Value Questionnaire by Sherry and Verma, Ahluwalia, Teacher Attitude Inventory and Teacher Effectiveness Scale by P. Kumar and Mutha, Teacher Educators Freezing Scale developed by N.P. Bhokta and Munesh Kumar, Teacher Educators Job Satisfaction Questionnaire developed by N.P. Bhokta and Munesh Kumar, Human Values Test and personal information blanks by Diwan, teachers' attitude inventory by S. P. Ahluwalia, Teaching aptitude test developed by Jaiprakash and R.P. Shrivastav, Mehdi's Verbal Measure of Creative Thinking, Raven's Standard Progressive Matrices, Group Test of General Mental Ability by Tandon, Verbal Test Creative Thinking by Mehdi, Self-concept Questionnaire by Saraswat, Socio-Economic Status Scale by Kulkshetra and investigator prepared purposive tests were used for data collection.

Data analysis techniques employed were – multiple regression, regression analysis, ANOVA, correlation, t-test, W2 estimate, mean, median, kurtosis, CR, percentage, skewness, central tendency, regression analysis, standard deviation, t-test, Spearman's product moment correlation, three way ANOVA, Content analysis, Mean, S.D. Pearson's Product Moment correlation were the data analysis techniques employed.

5.5 Implications of Review of Related Literature for the Present Study

Studies mostly concentrated on predicting the success of the candidate in the overall programme or a part of programme. Most of the studies used standard admission test scores and examination scores of candidates to decide on the predictivity. Qualitative factors like aptitude, attitude, human values etc. were also considered. Activities like role play, microteaching etc. was also considered to understand the predictivity. Attempts were also there to develop standardized tests for admission by conducting predictive validity tests on specific selected variables. Studies also concentrated on finding out the effectiveness of admission procedures, psychological and social factors influence on academic and vocational success, influence of race and counseling services on performance and adjustment of candidates to specific situations. However, the present study attempted to test the quality of candidate basing on self-constructed tests and comparing the scores to their overall scores in the

teacher training programme. Here the emphasis was to understand the potential combination of factors that could identify the quality of candidate to the optimum level.

Studies on admission processes tested the effectiveness of different variables in relation to quantitative and qualitative characters. Even psychological status and social status relation to selection of candidates was studied. Technology effect on induction process, and retention of candidates in programme through channelizing admission process was also focused. Policy making practices were also tried to be improved through redesigning admission standards, effect of demographics on selection was also focused. However, the present study is focusing on testing the effectiveness of a group of factors on quality of candidate in order to suggest formulation of proper admission procedures.

Studies on teacher education areas were concentrated on developing appropriate programmes relevant to contextual needs and employment needs. Studies were also attempted to study the characteristics of candidates in order to improve them further. Studies on management of teacher education focused on new trends like collaborative partnership, conformity to norms, problems of students. Effectiveness of research programs, financial aspects, and comparison of teacher programmes was also attempted. Development of relevant materials, improving the process occupied part of study. However the present study attempted to touch admission process of teacher educator training program, that too suggesting including tests on certain selected factors in order to improve the efficiency of the programme.

Studies focused on reasons for students entering into teacher education programmes, understanding the characteristics of teacher educators, relationship between teacher effectiveness and students' achievement. Importance of research on teaching, policy making, and process of teaching were focused in studies. Integration of technology into teacher education programmes through developing awareness, attitudes and interests in teacher formed another important area of studies. Developing life-skills programme for teacher educators to deal with students with disabilities, to understand the adjustment patterns of teachers to different settings, evolution of professional characters over a period of time occupied some important areas of studies. Job

satisfaction, conformity to rules and regulations, impact of state rules and regulations on quality of the programmes, dealing with disabled students in classroom situations occupied another aspect of studies on teacher educators. Overall the studies focus was on improving the situations according to the contextual needs. The present study attempted to study the innate and natural feelings of students towards these situations. This attempt is to plan admission and process procedures later in a planned way.

5.6 Rationale of the Study

The present century is marked by several changes in social, cultural, traditional values and life styles of the people. These changes need to be represented in the educational system to accommodate people to them. This has definite repercussions on the teacher education programmes at all levels including teacher educator training programme. Democratic views of providing equal opportunities to all for education, LPG model prevailing in the changing world order, emphasis on quality output, research on psychology of learning, importance given to learners in teaching learning process, changing roles of teachers, interdisciplinary content, active learning approaches being given importance, emphasis on human rights, secularism in education, new emerging content areas like HIV/AIDS, disaster management, human rights education, life skills and value education etc. are some of the emerging areas that teacher education programme needs to internalize at all levels of its training.

These expectations are emphasizing on developing certain qualities in people aspiring for teacher education. Because parents still expect formal education system and teachers to develop the future citizens of the society with required talents to survive peacefully, amicably in the changing world order. Globalization, science & technological inventions have changed the life styles of the people and social fabric of the Indian society. Explosion of knowledge due to rapid inventions and expansions in information and communication technology have brought in new insights for teaching learning process. Changing employment situations, working environments, job requirements emphasizing on developing new qualities in students like adjustment, time management etc. Teacher should be aware of all these changes and their affects on peoples' life so that they can train students accordingly. Ultimately it is the duty of teacher educators to take care of training needs of teachers so that they can work according to the changing situations of the school.

Decentralizing management practices adopted in educational organizations to achieve the goals of universalization of education have also brought in changes in roles of teachers as curriculum planners, transactors of curriculum, decision makers etc. To deal effectively with these situations teachers need training. Changes are expected to be brought at grass root levels now. So there is emphasis on bottom up model of development from administrative point of view. To achieve the goals of continuous and life long learning non formal education sector is being given importance. All these aspects need inputs in teacher education programmes.

In this age of democratization and humanization under the universal declaration of human rights, education is one of the human rights. India has been making efforts for Sarva Siksha Abhiyan for realizing education for all. We need many teachers. For teacher education, corresponding teacher education institutions are required. Now the question is how to produce the human resource? to supply the manpower needs of teacher education institutions. How to induct genuine candidates into the M.Ed. programme? What should be the criteria? and their relative weightage for admission into the M.Ed. programme.

All the above mentioned needs have implications for pre-service training programmes. To develop teachers with desired qualities, a quality teacher educator training programme is also needed. In this connection, the opinions expressed by National Curriculum Framework on Teacher Education are more relevant. Various researches conducted on suitability of teacher education programmes and admission procedures are pointing out to aspects like less concentration on teacher educator training, absence of a proper admission procedure and absence of proper understanding on different criteria that are important in selection of candidates to the programme.

In the present study, certain factors are selected taking into consideration some present needs of the programme, namely, research aptitude, educational management aptitude, techno-pedagogic competencies, living competencies, adjustment capacity, and teacher education disciplinary profile. The intention of the study is to find out which combination of factors is important in judging the quality and ability of a student for admission into M.Ed. programme. In addition to the several factors that

are tested at present in various admission tests for the programme, these factors when tested in desired combination will improve the relevance of the tests for admission and help in selecting a right candidate with proper attitude of the present needs.

5.7 Statement of the Problem

Relative Predictivity of Some Selected Variables for Admission into M.Ed. Programme

5.8 Operational Definitions of the Terms used

Research Aptitude: Research Aptitude is the present natural ability for conducting research, which ensures research proficiency on experience under suitable conditions.

Educational Management Aptitude: Educational Management Aptitude is constituted of the present innate abilities for educational management, which can be developed as higher abilities for educational management.

Techno-Pedagogic Competencies: Techno-pedagogic Competencies are the competencies on principles of technology and principles of teaching and that of their integration contextually.

Living Competencies: Living Competencies are comprised of life skills, values, ethics and professionalism.

Adjustment Capacity: Adjustment Capacity in the context of the present study is the capacity of educational adjustment, health adjustment, social adjustment, home adjustment and emotional adjustment.

Teacher Education Disciplinary Profile: Teacher Educational Disciplinary Profile is the profile related to the teacher education program at the first level of graduation cutting across core courses, special areas, practical work and teaching proficiency.

Teacher Education Proficiency: The overall score obtained in the M.Ed. Programme cutting across core courses, special areas, seminar and dissertation by a M.Ed. Student would be a measure of Teacher Education proficiency.

5.9 Delimitation of the Present Study

Various factors considered for the study are delimited to, Research Aptitude, Educational Management Aptitude, Techno-Pedagogic Competencies, Living Competencies, Adjustment Capacity and Teacher Education Disciplinary Profile.

5.10 Objectives

1. To construct tests on
 - i. Research Aptitude,
 - ii. Educational Management Aptitude,
 - iii. Techno-Pedagogic Competencies,
 - iv. Living Competencies,
 - v. Teacher Education Disciplinary Profile and
 - vi. Adjustment Capacity.
2. To study the relative predictivity of
 - Research Aptitude,
 - Educational Management Aptitude,
 - Techno Pedagogic Competencies,
 - Living Competencies,
 - Teacher Education Disciplinary Profile And
 - Adjustment Capacitywith respect to Teacher Education Proficiency.

5.11 Methodology

It is a descriptive study wherein an attempt was made by the investigator to describe the status of candidates on the selected variables and to study the relative predictivity of these variables with respect to Teacher Education Proficiency represented by the M.Ed. at-end scores, the criterion variable.

5.12 Population

Population for the study comprised of all the M.Ed. students in India in the academic year 2008-2009.

5.13 Sample

Sample for the study was constituted of all the M.Ed. students (361) of the academic year 2008-2009 of the selected 19 institutions from all over India.

5.14 Tools and Techniques Employed

Tests were constructed by the investigator on – Research Aptitude, Techno-Pedagogic Competencies, Educational Management Aptitude, Living Competencies, Adjustment Capacity and Teacher Education Disciplinary Profile. The tests were shown to experts in the respective fields to ensure content validity and to develop final form of the test, on each criterion.

5.15 Data Collection

All the above mentioned tests were administered on the sample students during the academic year 2008-2009. The final M.Ed. achievement scores of the sample students were gathered from the respective institutions at the end of year.

5.16 Data Analysis

Regression equations were worked out by the investigator between the independent variables – Research Aptitude, Educational Management Aptitude, Techno-Pedagogic Competencies, Living Competencies And Teacher Education Disciplinary Profile and the criterion variable, namely, Teacher Education Proficiency, institution-wise and overall.

5.17 Findings of the Study

1. None of the six independent variables was found to be a significant predictor of Teacher Education Proficiency in Northern, Eastern and Southern regions of India.
2. Research Aptitude, Educational Management Aptitude, Adjustment Capacity and Teacher Education Disciplinary Profile were found to be significant predictors of Teacher Education Proficiency in the Western Region out of the six variables considered for the study. Research Aptitude, Adjustment Capacity and Teacher Education Disciplinary Profile were found to contribute

positively; where as Educational Management Aptitude was found to contribute inversely.

3. In all the four regions intercept variable, that is, the contribution due to all the other variables not considered for the study, was found to be significant.
4. Regression equations involving one variable revealed -
 - a. As an independent variable, Educational Management Aptitude considered individually, was found to be non-significant, whereas the other five variables, namely, Research Aptitude, Techno-Pedagogic Competencies, Living Competencies, Adjustment Capacity and Teacher Education Disciplinary Profile were found to be significant predictors individually at 0.01 level.
 - b. Intercepting variables were found to be significant with respect to the predictivity of six variables individually.
5. Regression equations involving two variables have shown different results as follows:
 - i. Of all the combinations involving two variables, Educational Management Aptitude was found to be non-significant in all combinations.
 - ii. Research Aptitude was found to be significant in equation,

$$Y = RA*(0.3) + EMA*(0.08) + 64.$$
 - iii. Techno-Pedagogic Competencies was found to be significant in all combinations except in combination with Teacher Education Disciplinary Profile, $Y = TPC*(0.17) + EP*(0.13) + 59.$
 - iv. Teacher Education Disciplinary Profile was found to be significant in all the combinations.
 - v. Living Competencies was found to be non-significant in all combinations except in combinations

$$Y = RA*(16.2) + LC*(0.27) + 63 \quad \text{and}$$

$$Y = EMA*(-0.09) + LC*(0.34) + 65 \quad \text{and}$$

$$Y = LC*(0.21) + AC*(0.22) + 64.$$
 - vi. Adjustment Capacity was found to be non-significant in all combinations, except in combinations,

$$Y = RA*(0.2) + AC*(0.33) + 63 \quad \text{and}$$

$$Y = EMA*(-0.03) + AC*(0.40) + 65.$$

- vii. All the equations involving two variables showed at least one variable significant and nowhere equations with both the variables showing significant values were found.
 - viii. All the equations showed significant interception variable.
6. Regression equations involving three variable combinations have shown the following results:
- i. In the entire combinations interception variable was found to be significant.
 - ii. Research Aptitude was found to be non-significant in all combinations.
 - iii. Techno-Pedagogic Competencies was found to be significant in all the combinations except, in combinations,

$$Y = RA*(-0.009) + TPC*(0.17) + EP*(0.13) + 59$$

$$Y = TPC*(0.14) + LC*(0.04) + EP*(0.12) + 59 \quad \text{and}$$

$$Y = TPC*(0.15) + AC*(0.08) + EP*(0.12) + 59.$$
 - iv. Teacher Education Disciplinary Profile was found to be significant in all combinations where it was involved.
 - v. Adjustment Capacity was found to be non-significant in all, except in combinations, $Y = RA*(0.21) + EMA*(-0.08) + AC*(0.36) + 63$.
 - vi. Living Competencies was found to be non-significant in all except in

$$Y = RA*(0.19) + EMA*(-0.14) + LC*(0.31) + 64 \text{ and}$$

$$Y = EMA*(-0.16) + LC*(0.25) + AC*(0.24) + 65.$$
 - vii. Educational Management Aptitude was significant in equations,

$$Y = EMA*(-0.31) + LC*(0.16) + EP*(0.17) + 60 \text{ and}$$

$$Y = EMA*(-0.30) + AC*(0.19) + EP*(0.18) + 60$$
 in all other combinations it was found to be non-significant.
 - viii. Equations,

$$Y = TPC*(0.30) + EMA*(-0.19) + LC*(0.20) + 64, \text{ and}$$

$$Y = TPC*(0.33) + EMA*(-0.17) + AC*(0.25) + 64$$
 showed two significant variables, namely, Techno-Pedagogic Competencies, Living Competencies and Techno-Pedagogic Competencies and Adjustment Capacity
 - ix. All variables were found to be significant in the equation,

$$Y = \text{EMA}*(-0.34) + \text{LC}*(0.19) + \text{EP}*(0.16) + 60 \quad \text{and}$$

$$Y = \text{TPC}*(0.22) + \text{EMA}*(-0.31) + \text{EP}*(0.15) + 61$$

- x. No variable was found to be significant in equation,

$$Y = \text{RA}*(0.13) + \text{LC}*(0.18) + \text{AC}*(0.20) + 62$$

7. Regression equations involving four variables revealed the following scenario.

- i. In the entire combinations Research Aptitude and Adjustment Capacity were found to be non-significant.

- ii. Techno-Pedagogic Competencies was found to be significant in all except in

$$Y = \text{RA}*(-0.02) + \text{TPC}*(0.15) + \text{LC}*(0.05) + \text{EP}*(0.12) + 59 \quad \text{and}$$

$$Y = \text{RA}*(-0.02) + \text{TPC}*(0.15) + \text{AC}*(0.08) + \text{EP}*(0.12) + 59.$$

- iii. Teacher Education Disciplinary Profile was found to be significant in all the combinations wherever it was involved.

- iv. Educational Management Aptitude was found to be significant along with Teacher Education Disciplinary Profile, in equations,

$$Y = \text{RA}*(0.03) + \text{TPC}*(0.21) + \text{EMA}*(-0.32) + \text{EP}*(0.15) + 60$$

$$Y = \text{RA}*(0.06) + \text{EMA}*(-0.35) + \text{LC}*(0.18) + \text{EP}*(0.16) + 59$$

$$Y = \text{RA}*(0.08) + \text{EMA}*(-0.32) + \text{AC}*(0.20) + \text{EP}*(0.16) + 59$$

$$Y = \text{TPC}*(0.17) + \text{EMA}*(-0.36) + \text{LC}*(0.12) + \text{EP}*(0.15) + 60$$

$$Y = \text{TPC}*(0.19) + \text{EMA}*(-0.35) + \text{AC}*(0.15) + \text{EP}*(0.15) + 60 \quad \text{and}$$

$$Y = \text{EMA}*(-0.36) + \text{LC}*(0.14) + \text{AC}*(0.14) + \text{EP}*(0.16) + 60.$$

- v. Living Competencies was found to be significant in the equation,

$$Y = \text{RA}*(0.16) + \text{EMA}*(-0.19) + \text{LC}*(0.23) + \text{AC}*(0.23) + 63.$$

- vi. The equation

$$Y = \text{RA}*(0.03) + \text{TPC}*(0.21) + \text{EMA}*(-0.32) + \text{EP}*(0.15) + 60$$

had shown most number of variables (three) to be significant, namely, Techno-Pedagogic Competencies, Educational Management Aptitude and Teacher Education Disciplinary Profile.

- vii. Interception variable was found to be significant in all the combinations.

8. Regression equations involving five variable combinations have shown the following results.

- i. Techno-Pedagogic Competencies was found to be significant in the equation,

$$Y = RA*(0.08) + TPC*(0.26) + EMA*(-0.24) + LC*(0.14) + AC*(0.17) + 63.$$

- ii. Educational Management Aptitude was found to be significant along with Teacher Education Disciplinary Profile in four equations,

$$Y = RA*(0.02) + TPC*(0.18) + EMA*(-0.35) + AC*(0.15) + EP*(0.15) + 60$$

$$Y = RA*(0.02) + TPC*(0.17) + EMA*(-0.37) + LC*(0.12) + EP*(0.14) + 60$$

$$Y = RA*(0.05) + EMA*(-0.37) + LC*(0.13) + AC*(0.13) + EP*(0.16) + 60 \quad \text{and}$$

$$Y = TPC*(0.16) + EMA*(-0.38) + LC*(0.09) + AC*(0.11) + EP*(0.14) + 60.$$

- iii. Teacher Education Disciplinary Profile was found to be significant in all the combinations in which it was involved.
- iv. Research Aptitude was found to be non-significant along with Adjustment Capacity and Living Competencies in all equations.
- v. Interception variable was found to be significant in all the combinations.

9. All India level regression equation has shown significant values for Educational Management Aptitude and Teacher Education Disciplinary Profile at 0.01 level along with interception variable. Teacher Education Disciplinary Profile was found to be a significant positive predictor, whereas Educational Management Aptitude has been found to be correlating with the variable predicted, inversely. Research Aptitude, Techno-Pedagogic Competencies, Adjustment Capacity and Living Competencies were found to be non-significant.

5.18 Implications of the Present Study

- i. Research Aptitude, Educational Management Aptitude, Adjustment Capacity and Teacher Education Disciplinary Profile have been found to be significant predictors of Teacher Education Proficiency in the Western Region, wherein, Research Aptitude, Adjustment Capacity and Teacher Educational Disciplinary Profile have been found to be predicting positively significantly and Educational Management Aptitude negatively. Living Competencies and Techno-Pedagogic Competencies have not been found to be significant predictors. There is a need to explore how the Teacher Education has failed to correlate significantly with these variables. Also there is a need to find out how Educational Management Aptitude has been found contributing inversely.

- ii. None of the six independent variables has been found to be significant predictors of Teacher Education Proficiency in the Northern, Eastern and Southern Regions. There is a need to strengthen Teacher Education in these areas.
- iii. Teacher Education Disciplinary Profile and Educational Management Aptitude have been found to be the significant predictors of Teacher Education Proficiency at all India level, wherein, Teacher Education Disciplinary Profile has been found correlating significantly positively and Educational Management Aptitude significantly negatively. The other four variables were found to be non-significant, namely, Adjustment Capacity, Techno-Pedagogic Competencies, Living Competencies and Research Aptitude. There is a need to find out the causes of no correlation, low correlation, inverse correlation, as well as, positive correlation.
- iv. Techno-Pedagogic Competencies was found to be significant in most of the stepwise regression equations, indicating a positive attitude of teachers towards use of technology. Efforts need to be there in educational areas to integrate this variable appropriately.
- v. A continuous significant value for Teacher Education Disciplinary Profile is an encouraging situation indicating positive attitude towards obtaining Teacher Education. There is a need to work out strategies to enhance the beta coefficient values against Teacher Education Disciplinary Profile.
- vi. Less number of significant combinations for Living Competencies and Adjustment Capacity are indicating towards a dire need of Wholistic Teacher Education.
- vii. Research Aptitude which needs to be inherent component of a teacher educator was found to be non-significant, except in one region, i.e. Western region. This situation needs to be given serious emphasis if teacher education programmes are expected to respond to problems of education.

5.19 Suggestions for further Research

- i. There is a need to conduct studies on relative predictivity of various variables for admission into the different levels of Teacher Education Programme.

- ii. There is a need to explore why the correlations between predicting variables and the predicted variable have been found to be varying.
- iii. There is a need to conduct studies to identify the quality indicators of Teacher Education.
- iv. There is a need to establish the characteristics of various tools and techniques being employed for Teacher Education.
- v. Research should be conducted on admission criteria into various programmes of Teacher Education.

5.20 Conclusion

There is a wide variation in the predictors of Teacher Education Proficiency in India, region wise. The Western Region has been doing well in the areas of Research Aptitude, Adjustment Capacity and Teacher Education Disciplinary Profile. Educational Management Aptitude though, prominent in Western Region has been found to have inverse relation with Teacher Education Proficiency. The Northern region, Eastern region and Southern region have been found to be relatively weaker on the indicators of Teacher Education Quality.

There is a need to realize wholistic teacher education sustaining sensitivity to basic necessities, such as, adjustment, living competencies, management, educational profile and research aptitude for identification and addressing the problems of day to day life and techno-pedagogic competencies for sustaining and developing the knowledge base in the age of globalization of the knowledge society.