CHAPTER VII
SUMMARY, CONCLUSIONS, RECOMMENDATIONS AND
SUGGESTIONS FOR FURTHER RESEARCH

During the six decades after Independence, teacher education has come a long way from its initial bleak structure to gain identity as a complex network of institutions and programmes. The expansion of pre-service teacher education in general and secondary teacher education in particular is quite impressive, if we look at the quantitative growth in terms of teacher education institutions. From a mere 10 secondary teacher training institutions in 1948, the number has increased to 6363 in 2010. But the rate of growth of secondary teacher education has been irregular after Independence, in the country in general and in Punjab in specific.

Moreover, many reports and articles on teacher education indicate that in the flush of enthusiasm for quantity, quality of teacher education has largely been sacrificed. There are a variety of institutions imparting secondary teacher education in Punjab, out of which some are run by the state government, others by the universities, some others are aided by the government but are managed by private managements, where as rest of the institutions are self-financed. But most of the self-financing institutions charge hefty fees as compared to the public institutions.

Further, it is intriguing to note that what type of people are coming forward to start self-financed teacher education courses or
institutions. Many surveys have revealed that the owners of these self-financed institutions come from the occupational groups such as advocates, teachers, politicians, businessman (timber merchants, scrap and hardware dealers), industrialists (steel, brick-kiln) builders/ colonizers, etc. (Singh, 2003)

It is further noted that some of the self-financed institutions in the country are not providing library, laboratory and other facilities such as play grounds and sports equipment etc. according to the norms and standards set by NCTE. Some of these institutions don’t even have the eligible Principals and lecturers. This situation leads to the deterioration of quality of secondary teacher education in the state. Also the information based on some news paper reports and personal communication in confidence with the stake holders and teachers reveals that the malpractices of commercialization cover a wide spectrum. These include the following:

(a) Auctioning of Management Quota seats.
(b) Getting money from non-attending students in lieu of marking them present.
(c) Charging higher annual and monthly fees.
(d) Charging hostel and mess fee higher than the market rates.
(e) Charging penalty for absenteeism.
(f) Pricing high publications – prospectus, magazines.
(g) Getting donations on, ‘as you please’ basis.
Charging high stationary items.

Moreover secondary teacher education is also suffering due to no proper agreement among the different agencies governing it; on the issue of minimum prescribed qualifications of teachers and Principals. Even NCTE has not remained firm on its stand. It has time and again altered the minimum qualifications for teacher educators.

Although there are a variety of institutions imparting secondary teacher education in India yet most of them are maladjusted and are out of step with the real needs of society. Even then more and more new self-financed secondary teacher education institutions continue to mushroom throughout the country. This problem is becoming more and more serious in India in general and in Punjab in particular. So it requires a deep investigation into the causes and consequences of this problem. Moreover, the quality of teacher education is deteriorating day by day. Student teachers are not at all professionally motivated to complete the course. Private entrepreneurs are establishing new private teacher education institutions for earning big profits and not for the sake of serving the cause of society. There is no unanimity and uniformity among the different institutions in the country regarding the minimum qualifications for teacher educators. Imbalance in demand and supply of teachers is also prevalent in most of the states. The secondary teacher education programme is not fulfilling the societal needs expected to be fulfilled by it. The state governments, NCTE,
UGC and universities have to rethink and redefine their roles. A detailed research needs to be done in this direction.

The present problems and handicaps, which secondary teacher education has been facing can be studied in its correct perspective by a retrospect into our secondary teacher education programme, which after Independence remained sporadic, unsystematic and without the realisation of its full concept and implications.

Though a considerable amount of research done in the recent past in this field has greatly enriched our knowledge both in regard to theoretical as well as practical aspects of teacher education, yet keeping in view the status of teacher education in India in general and in Punjab in particular, we have to analyze the disturbing trends available in the form of privatization, unequal opportunities, dilution of quality, mushroom growth of institutions, ills of commercialization, imbalance between demand and supply of teachers and consequently the expansion of teacher education without responding to the needs of society.

This scenario encouraged the investigator to take up the following stated problem for research:

**GROWTH AND DEVELOPMENT OF TEACHER EDUCATION IN PROGRAMME IN PUNJAB WITH REFERENCE TO Expansion, Quality and Societal Needs**

**7.1 OBJECTIVES OF THE STUDY:**

(i) To study the policy perspectives in secondary teacher education in India after independence.
(ii) To study the expansion pattern of secondary teacher education in India after independence.

(iii) To study the expansion pattern of secondary teacher education in Punjab after Independence.

(iv) To study the quality of secondary teacher education programme in Punjab.

(v) To study the views and perceptions of teacher trainees, parents, teacher educators and Principals about various issues related to the secondary teacher education vis-à-vis societal needs.

7.2 OPERATIONAL DEFINITIONS:

7.2.1 Growth and Development:

Growth and Development of teacher education in the context of present study refers to the increase in teacher education opportunities quantitatively as well as qualitatively. It includes various developments in the field of Secondary Teacher Education vis-à-vis changes in the policies of the Government on the basis of recommendations of reports of various commissions and committees and the plan documents.

7.2.2 Teacher Education Programme:

‘Teacher Education Programme’ denotes the Secondary Teacher Education Programme (B.Ed.) (one year regular, or two year through distance education or three year integrated) for
training of teachers to make them competent for teaching secondary classes in schools.

7.2.3 Expansion:

It connotes the expansion of Secondary Teacher Education in terms of increase in total number of secondary teacher education institutions, women’s institutions of secondary teacher education, Government and non-Government secondary teacher education institutions, student intake, percentage of women trainees and percentage of trained teachers in schools etc.

7.2.4 Quality:

Quality for the present study was operationally defined as the extrinsic quality of the Secondary Teacher Education Programme (B.Ed.), that was measured by a self-made Institutional Inventory based on Quality Norms and Standards set by NAAC, (2007) which include curriculum design and development, teaching learning and evaluation, research, consultancy and extension, infrastructure and learning resources, student support and progression, governance and leadership and innovative practices.

7.2.5 Societal Needs:

Societal Needs for the present study were defined as the sum total of the following factors:

(i) Quality of secondary teacher education in order to provide quality school education.
(ii) Equality of opportunities in secondary teacher education.

(iii) Social relevance of privatization of teacher education.

(iv) Establishment of a balance between demand and supply of teachers.

7.3 RESEARCH QUESTIONS TO BE ANSWERED:

(i) What have been the different policy perspectives in secondary teacher education in the country after independence?

(ii) What has been the expansion pattern of secondary teacher education after Independence at the national level in terms of increase in total number of secondary teacher education institutions, average enrolment per institution, women’s institutions of secondary teacher education, intake capacity of Government and non-Government institutions, percentage of women trainees, pupil-teacher ratio, percentage of trained teachers in schools and expenditure on education in relation to GDP?

(iii) What has been the expansion pattern of secondary teacher education after Independence in Punjab in terms of increase in number of institutions, turn out of students in education faculty in recent years in the state, students’ intake, number of teacher educators, number of SC students, number of teachers in schools, trained teachers, projected demand and
supply of teachers and location of planning of teacher education courses for future years?

(iv) What has been the extrinsic quality of secondary teacher education programme in Punjab on the basis of the indicators used by NAAC for the assessment and accreditation of secondary teacher education institutions?

(v) What are the views and perceptions of the pupil teachers, parents, teacher educators and Principals about various issues related to secondary teacher education vis-à-vis different societal needs?

7.4 **DELIMITATIONS OF THE STUDY**:

(i) The study was delimited to the general growth and development of secondary teacher education after Independence. But the analysis of secondary data was delimited to the data and material available in the secondary sources. Therefore in those cases where the detailed data is not available the analysis was based on the general overall trend shown by the available data.

(ii) The analysis of secondary sources of data about the growth and development of secondary teacher education at the national level was delimited to the diary of main events, increase in number of total institutions, Govt. and non-Govt. institutions, student intake, average enrolment per institution, pupil teacher ratio, number of women’s institutions, percentage of women teacher trainees and teachers, expenditure on teacher education and percentage of total trained teachers in the schools etc.

(iii) The analysis of secondary sources of data regarding growth and development of secondary teacher education in Punjab was delimited to the data regarding increase in number of institutions, turn out of the students in education faculty in recent years, student intake, percentage of trained teachers, teacher educators, SC students, projected demand and
supply of teachers and NCTE’s locational planning of teacher education courses at secondary stage.

(iv) The study of quality of Secondary Teacher Education Programme in Punjab was done about the extrinsic quality referring to the following aspects only:
   a. Curriculum Design and Development
   b. Teaching Learning and Evaluation
   c. Research, consultancy and Extension
   d. Infrastructure and Learning Resources
   e. Student Support and Progression
   f. Governance and Leadership
   g. Innovative Practices

(v) The views and perceptions towards various issues related to growth and development of secondary teacher education of only following groups were studied:
   a. Principals of secondary teacher education institutions
   b. Teacher educators working in secondary teacher education institutions.
   c. Secondary teacher trainees
   d. Parents of secondary teacher trainees

(vi) The views and perceptions of trainees, parents, teacher educators and Principals about different issues related to secondary teacher education were studied by following the qualitative approach.

7.5 METHODOLOGY:

Descriptive method of research was found to be most promising for the present research work as “It helps to explain educational phenomena in terms of the conditions or relationships that exist, opinions that are held by the students, teachers, parents and experts, processes that are going on, effects that are evident, or trends that are developing. Because of the apparent ease and directness of this method, a researcher can gather information in terms of individual’s opinion about some issue, by a simple questionnaire. At times, descriptive survey is the only means
through which opinions, attitudes, suggestions for improvement of educational practices and instruction, and other data can be obtained”. (Kaul, 2009: 105)

7.5.1 Design of the Study:

To study the growth and development of secondary teacher education at the national level and in Punjab the investigator adopted four different methodological approaches in descriptive research which resulted in dividing the present research work into following four parts:

(i) Policy Perspectives in secondary teacher education were studied on the basis of document analysis.

(ii) Analysis of secondary sources was done to study the expansion pattern of secondary teacher education at the national level as well as in Punjab.

(iii) Institutional Survey was conducted to study the quality of teacher education in Punjab.

(iv) In order to study the views and perceptions of the teacher trainees, parents, teacher educators and Principals about various issues related to secondary teacher education vis-à-vis societal needs interviews were conducted with the respondents.

7.5.2 Policy Perspectives:

The Policy perspectives in secondary teacher education were studied on the basis of reports of various commissions and
committees, five year plans, and other related documents. The implementation of the government policies vis-à-vis evolution of secondary teacher education was studied in detail. Needless to mention that the development of secondary teacher education in Punjab was studied in the broader context of development of secondary teacher education in the country.

7.5.3 Analysis of Secondary Sources:

The analysis of secondary sources was done to study the pattern of expansion of secondary teacher education at national level and in Punjab, based on secondary sources of data. For this purpose various documents of Punjab and Central Government and the study reports of various institutions and researchers were analyzed. The secondary data from all these sources was pooled up to study expansion pattern of secondary teacher education at the national level in terms of the following:

a. Diary of significant events in the field of secondary teacher education.

b. Expansion in number of institutions

c. Increase in average enrolment per institution.

d. Increase in intake

e. Increase in intake capacity of Government and Non Government institutions

f. Increase in women’s institutions of secondary teacher education.
g. Increase in percentage of trained teachers in the schools
h. Increase in percentage of women teachers in the schools
i. Pupil-teacher ratio.

Whereas the expansion pattern of secondary teacher education in Punjab was studied in terms of the following:
i. Increase in number of secondary teacher education institutions.

ii. Turn out of the students in education faculty in recent years in the state.

iii. Increase in total intake.

iv. Number of teachers at school stage in recent years.

v. Number of teacher educators

vi. Number of SC students

vii. Status of trained and untrained teachers

viii. Demand and supply of teachers

ix. Projected additional demand for secondary teachers

x. NCTE’s locational planning of teacher education courses at the secondary stage.

7.5.4 Institutional Survey:

To study the extrinsic quality of secondary teacher education programme (B.Ed.) in Punjab, institutional behaviour of 42 randomly selected secondary teacher education institutions of
different types was evaluated with the help of a self developed institutional inventory.

7.5.4.1. Sample:

In order to select a sample of these 42 secondary teacher education institutions out of all the University Managed, Government, Government Aided and Private Self-Financed Secondary Teacher Education Institutions of Punjab, the technique of stratified random sampling was employed. Out of each of the above four strata of institutions 25% sample with proportional allocation from the population was selected in the following manner.

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Type of Institutions</th>
<th>Total No. of Institutions</th>
<th>No. of Institutions Taken for study</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Government Institutions</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>2.</td>
<td>University Institutions</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>3.</td>
<td>Government Aided Institutions</td>
<td>15</td>
<td>4</td>
</tr>
<tr>
<td>4.</td>
<td>Self-Financed Institutions</td>
<td>145</td>
<td>36</td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td>166</td>
<td>42</td>
</tr>
</tbody>
</table>

(* Sample was selected according to the number of institutions existing in the state of Punjab on 31st March, 2009)

7.5.4.2. Development of the institutional inventory:

In order to evaluate the institutional behavior of the secondary teacher education institutions an institutional inventory was constructed and standardized by the investigator herself.

7.5.5 Study Of Views And Perceptions Of Respondents:

The views and perceptions of the respondents about the different issues related to secondary teacher education vis-à-vis
societal needs were studied by the method of research applied as follows.

7.5.5.1. **Sampling:**

To study the community response, the investigator used non-probability (purposive) method of sampling. The representative samples from the different groups of the respondents were selected. The Principals and teacher educators of various colleges of education and beneficiaries constituted the universe of the study. The detailed composition of the sample was as per the following table:

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Sampling Group</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Principals</td>
<td>50</td>
</tr>
<tr>
<td>2.</td>
<td>Teacher Educators</td>
<td>200</td>
</tr>
<tr>
<td>3.</td>
<td><strong>Beneficiaries</strong></td>
<td></td>
</tr>
<tr>
<td>a.</td>
<td>Teacher Trainees</td>
<td>400</td>
</tr>
<tr>
<td>b.</td>
<td>Parents</td>
<td>100</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>750</strong></td>
</tr>
</tbody>
</table>

7.5.5.2. **Development of interview schedules:**

In order to study the community response towards the growth and development of secondary teacher education in Punjab including the issues related to expansion, quality and societal needs, the following interview schedules were constructed and standardized by the investigator:

1. Interview schedule for Principals
2. Interview schedule for teacher educators.
3. Interview schedule for teacher trainees
4. Interview schedule for parents
These interview schedules focused on the issues related to expansion, quality and the following societal needs:

(i) To prepare quality teachers to provide quality school education to the children.

(ii) To provide equality of opportunity in teacher education to all sections of the society.

(iii) Whether to privatize or not to privatize teacher education with respect to national and societal goals.

(iv) To establish a balance between demand and supply of teachers.

7.5.6 Conduct Of The Study:

1. To study the policy perspectives of secondary teacher education, the reports of various education commissions and committees, five year plans and other policy documents were collected from various libraries, internet and other sources in order to study the policy perspective and implementation mechanism.

2. To study the trend analysis various documents related to teacher education were accessed and the document analysis was carried out to get the secondary data required for the study. For this purpose following documents were accessed to collect the secondary data:

   a. Economic surveys

   b. Statistical Abstracts of Punjab
c. Reports of Planning Commission of Government of India.
d. All India Educational surveys
e. Annual reports of Government of India.
f. Research journals, Magazines and Newspapers.
g. Policy documents and reports of various Education Commissions
h. NCTE Annual Reports
i. CABE Reports
j. Five year plan documents of Government of India.
k. Research reports of various researchers
l. Other reports and data available on the internet.
m. Text books on teacher education.

3. To conduct the institutional survey of forty two colleges of education selected for the study, self constructed ‘Institutional Inventory’ was made use of. The investigator personally visited these institutions to seek the detailed information regarding various aspects of quality.

4. To collect the views and perceptions of the respondents the investigator personally interviewed the various groups of subjects as stated in the sampling.

7.5.7 Analysis and Interpretation of Data:

1. Various documents and reports on secondary teacher education were scrutinized to cull out the theoretical and empirical observations with regard to policy perspectives.
2. The secondary data regarding expansion in number of institutions, average enrolment per institution, sanctioned strength, government and non-government institutions, women’s institutions, percentage of women teachers, percentage of trained teachers, financing pattern, projected additional demand for secondary teachers, demand and supply of teachers, pupil-teacher ratio, locational planning of teacher education etc. were analysed with the help of statistical tables, line graphs, bar charts and pie charts, etc. in order to study the trends and patterns of growth and development of secondary teacher education.

3. The technique of content analysis was made use of to analyse the data about extrinsic quality of the secondary teacher education programme in Punjab as well as the views and perceptions of different groups of people namely Principals, teacher educators and beneficiaries regarding the various issues related to expansion, quality and societal needs. Further, ‘percentage analysis’ of parameters of extrinsic quality and the views and perceptions given by the respondents was done and presented in the form of statistical tables. In order to show the results of this percentage analysis more vividly, pie charts and bar graphs were made use of, where ever necessary.
7.6 CONCLUSIONS:

On the basis of the perusal of policy documents, analysis of secondary data regarding different indicators of growth and development of secondary teacher education at the national level and in state of Punjab, institutional survey and the content analysis of the views and perceptions of the Principals, teacher educators, teacher trainees and parents about the growth and development of secondary teacher education vis-à-vis societal needs, the following conclusions have been drawn:

7.6.1 Growth And Development Of Secondary Teacher Education In India : Conclusions On The Basis Of Study Of Policy Perspectives

1. In the pre-Independence period although some efforts to train the secondary teachers were done by the Danish Missionaries and the British Government and the training colleges were started at Hooghely, Dacca, Gauhati, Calcutta, Madras, Bombay, Poona, Ahmedabad, Dharwar, Karachi, Allahabad, Jabalpur, Kurseong, Lahore, Rajahmundry, Sailkot, Mysore and New Delhi, etc. But all these training colleges were started in the big cities. No training college was established in small towns and rural areas of the country. A large number of trained teachers were required to teach the masses at the time of Independence, but the number of teachers getting training in the teacher education institutions was very small. Thus the proportion of untrained teachers at the time of Independence was very large.
2. After Independence Government of India took many steps to ease the situation. New training colleges were started and many commissions and committees were appointed by the Government to streamline and spread the secondary teacher education throughout the country. Establishment of NCERT (1961), its three Regional Colleges of Education (1963) at Ajmer, Bhubaneshwar and Mysore and NCTE (1973) have been the pillars of development of secondary teacher education in the country. Further the establishment of departments of education in various universities of the country also helped to spread the secondary teacher education.

3. Many of the recommendations made by various commissions and committees regarding secondary teacher education from time to time were implemented by the Government of India. It was realized by the Government of India that in order to increase the literacy rate and universalize school education, trained teachers were required in a large number. Thus after Independence in order to provide secondary teacher education a number of public institutions were established by the central as well as the state governments.

4. Various five year plans also laid stress on teacher education in the country. Outlays were ear marked for teacher education related programmes over different five year and annual plan periods. As a result of expansion of training facilities during the first five year plan the percentage of
trained teachers was estimated to rise by 6 percent in the case of secondary teachers. During the second five year plan period 30 training colleges were established and the proportion of trained teachers increased to 68 percent in the secondary schools. The third as well as the fourth five year plan also witnessed the increase in percentage of trained teachers. Fifth and sixth plans provided sufficient funds for the teacher training institutions whereas seventh five year plan helped in the development and strengthening of secondary teacher education in a big way as the use of mass media and science and technology was stressed to be used for training of teachers. Eighth five year plan witnessed an important development in the form of the statutory status given to the NCTE. It was also recommended that bulk of seats in teachers’ training colleges were to be reserved for rural women. Ninth plan gave impetus to the process of strengthening teacher education programme by upgrading the physical and academic infrastructure of NCTE, Departments of Education in the Universities, SCERTs, CTEs and IASEs. Tenth plan also, besides addressing the issue of quality, placed an exclusive emphasis on teacher education. Eleventh plan working group on teacher education recommended that teacher education had to emphasize the social, cultural, economic and political content of children.

5. As envisaged in the National Policy on Education (NPE), 1986 and its Programme of Action (PoA), a centrally sponsored
scheme of restructuring and reorganization of teacher education was launched in 1987 to create a sound institutional infrastructure for pre-service and in-service training of secondary school teachers and for provision of academic resource support to secondary schools. It was really a good scheme which boosted the development of secondary teacher education in the country. Since it included among its components: the setting up of Colleges of Teacher Education (CTEs) and Institutes of Advanced Studies in Education (IASE) and strengthening of the SCERTs. The revision of this scheme under the tenth plan also contributed a lot towards development of secondary teacher education in the country.

6. The establishment of NCTE in 1973 in the country has been a milestone in the journey of development of teacher education in India. In the year 1995 NCTE was conferred a statutory status with autonomy and accreditation powers. As per the provision of the NCTE Act 1993, Four Regional Committees for Northern, Southern, Eastern and Western Regions have also been set up at Jaipur, Bangalore, Bhubaneshwar and Bhopal respectively. NCTE has played a very significant role as a regulatory authority in the development of secondary teacher education in the country as it has undertaken many surveys and studies relating to various aspects of teacher education and has also laid down Standards and Norms for the Establishment and Organization of Secondary Teacher Education Institutions including the guidelines in respect of
minimum qualifications of teacher educators and principals, admission procedure and examinations, fees to be charged, performance appraisal system and norms and mechanisms for enforcing accountability on recognized institutions.

7. But after the adoption of neo-liberal policies by the Government of India in the early nineties private participation in higher education sector has continuously increased. It has also affected secondary teacher education, and a large number of private self-financed secondary teacher education institutions have mushroomed throughout the country with profit motive. This has further lead to many malpractices and commercialization of secondary teacher education.

7.6.2 Expansion At The National Level : Conclusions On The Basis Of Analysis Of Secondary Data

1. At the time of Independence there were only 10 secondary teacher education institutions in the country whereas the number of secondary teacher education institutions has reached 6363 in the year 2010. This number was only 633 up to 1995 but it increased more than ten times after that which shows a very fast growth of secondary teacher education in last fifteen years.

2. The comparison of sanctioned strength in Government and non-government institutions shows that in case of non-government institutions the growth rate has been much
higher as compared to the government institutions of secondary teacher education after Independence.

3. The secondary data also shows that CTEs (Colleges of Teacher Education) and IASEs (Institutes of Advanced Studies in Education) sponsored by the Central Government have not been evenly distributed over different states of the country. Many bigger states with comparatively larger number of districts like Bihar, Madhya Pradesh, Tamil Nadu and Uttar Pradesh have been given less number of CTE’s and IASE’s as compared to other states with comparatively smaller number of districts like Andhra Pradesh, Assam, Gujarat and Karnataka. Moreover the states of Arunachal Pradesh, Goa, Chattisgarh, Himachal Pradesh, Jammu and Kashmir, Jharkhand, Manipur, Meghalaya, Mizoram, Nagaland, Sikkim, Tripura, etc. do not have any IASE, whereas there is no CTE in Arunachal Pradesh, Goa, Haryana, Mizoram, Sikkim and Pondicherry.

4. The percentage of trained secondary teachers has increased at a very significant rate after Independence in various states of the country. According to the latest reports Punjab, Goa, Himachal Pradesh, Orissa, Karnataka and some other states have almost 100% trained secondary teachers.

5. The growth rate of girls’ secondary teacher education institutions has been lesser than that of the overall growth
rate of institutions of secondary teacher education in the country after Independence.

6. The pupil-teacher ratio for the middle as well as high / higher secondary schools has increased over the years after Independence. However, according to Seventh All India School Education Survey (7th AISES), it is ideal for high schools (30:1) but is little more than the ideal mark in case of upper primary (34:1) schools and higher secondary schools (35:1).

7. Moreover pupil teacher ratio at all levels i.e. primary, upper primary, secondary and higher secondary has been better in the urban areas as compared to the rural areas.

8. The bulk of government expenditure on teacher education is spent only on elementary teachers training institutions. The programme of secondary teachers training has not been given the priority it deserves, in the allocation of resources in the plan programmes.

7.6.3 Expansion In The State Of Punjab : Conclusions On The Basis Of Analysis Of Secondary Data

1. There were only two institutions of secondary teacher education in the Maha Punjab in 1947, of which the present smaller Punjab was a part. But the number of institutions of secondary teacher education increased to 165 in 2009 which was just 47 in the year 2005. Hence after 2005 there has
been a tremendous growth in secondary teacher education in the state.

2. There has been a proliferation of privately managed secondary teacher education institutions in Punjab. As compared to 145 self-financed secondary teacher education institutions there were only 4 government colleges of education, only 1 university department of education and 15 government-aided colleges of education in the state in 2009 providing secondary (B.Ed. face-to-face) teacher education. (NCTE, 2009)

3. Pass percentage in B.Ed. course in the state has been very high (about 94% from 2002 to 2005), whereas the pass percentage in M.Ed. course has been comparatively low i.e. (74.37% in 2002 to 78.48% in 2003).

4. The two CTEs and one IASE sanctioned in Punjab have not been able to adapt themselves to their new roles and responsibilities. It has been reported that all the three institutions are non-functional. It is a matter of great concern and the State Government needs to look into the matter if it has to make use of the facilities provided by Central Government for these institutions. No doubt, these institutions are continuing with their B.Ed. and M.Ed. programme as usual.
5. Punjab has achieved the target of 100% trained teachers in its government schools which is a significant achievement.

6. The out-turn in B.Ed. course, according to NCTE data, if taken at constant level, would be surplus upto 2015-16 but would fall short of the additional demand in 2016-17. Similar trend would continue if out-turn increased, based on annual growth rate.

7. The net demand for M.Ed. intake vis-à-vis teacher educators in 2007-08 was showing surplus. Hence, it could be concluded that the M.Ed. intake at 2007-08 level approved by NCTE to the state was adequate.

8. Allocation of teacher education courses does not meet the equity criteria for the different revenue districts of the state. Some revenue districts have low intake as compared to their proportionate share of population in comparison with other districts having higher intake but comparatively lesser population.

7.6.4 Quality Of Secondary Teacher Education In Punjab: Conclusions On The Basis Of Institutional Survey

1. There were still a significant number of secondary teacher education institutions in Punjab which did not have clearly stated vision, mission, values and objectives.
2. The proportion of secondary teacher educations institutions in Punjab which did not run any self-financed teacher education courses was very small.

3. The private self-financed institutions of secondary teacher education were overcharging the fees for B.Ed. course in comparison to the fees fixed by the Government of Punjab.

4. The faculty members of more than half of the institutions of secondary teacher education in Punjab did not participate in any curriculum development / revision process.

5. The teacher education programmes in modular form had not yet been introduced in the secondary teacher education institutions of Punjab.

6. The provision of assessment of teachers by students had not yet been introduced in the secondary teacher education institutions of Punjab.

7. Only a very small proportion of secondary teacher education institutions was having faculty exchange programmes or visiting faculty members.

8. The mechanism of obtaining feedback about various curricular aspects from students, alumni, academic peers and heads of practice teaching schools was very weak or was almost absent in most of the secondary teacher education institutions of Punjab.
9. In case of institutions affiliated to Panjab University, Chandigarh and Punjabi University, Patiala no major curriculum revision has been done in previous five years.

10. All the secondary teacher education institutions of Punjab developed and deployed action plans for effective implementation of the curriculum.

11. The pupil teachers in various secondary teacher education institutions of Punjab were being admitted to B.Ed. course without testing their teaching aptitude.

12. None of the institutions completed the working and teaching days prescribed by UGC counting from the date of last admission to start of preparatory holidays.

13. The proportion of female students in secondary teacher education institutions in Punjab was much more as compared to the male students.

14. Secondary teacher education institutions of Punjab were unable to draw students from other countries of the world.

15. The average unit cost of secondary teacher education course (B.Ed.) was found to be 25000/- with its maximum value at 30000/- and minimum value at 22000/-.

16. The students with highest percentage of marks preferred to be admitted to the institutions managed by Government of Punjab whereas the students with lowest percentage of marks
had to generally go to the self-financed colleges to pursue B.Ed. course.

17. A lack of planning had been found in the implementation of the curriculum in many secondary teacher education institutions in Punjab.

18. Some institutions of secondary teacher education in Punjab were not following the new norms of NCTE regarding completion of 40 practice teaching days in an academic session.

19. There was no well-planned and uniformly designed pre-practice teaching in the secondary teacher education institutions of Punjab.

20. There was no uniformity in the number of micro-teaching lessons delivered per subject by teacher trainees in the secondary teacher education institutions of Punjab.

21. Weightages given to internal and external evaluation of B.Ed. course by different universities of Punjab showed significant disparities.

22. Majority of the secondary teacher education institutions in Punjab conducted only one sessional or house test per paper.

23. In majority of the secondary teacher education institutions of Punjab pupil teachers prepared only one to two assignments for each theory paper.
24. Except for computers, the percentage of secondary teacher education institutions having access to other components of ICT like intranet, internet, software / courseware (CS), audio and video resources was very small in Punjab.

25. A small but sizeable portion of the secondary teacher education institutions in Punjab was still there which was not offering computer science as a subject.

26. The percentage of teacher educators having Ph.D. Degrees in the secondary teacher education institutions of Punjab was very small.

27. The research work on various research projects awarded by different funding agencies was going on in very few secondary teacher education institutions.

28. The institutions of secondary teacher education in Punjab were not providing any financial support to their research scholars.

29. No proper research projects were carried out by undergraduate students of education in the secondary teacher education institutions of Punjab.

30. Though majority of the secondary teacher education institutions had faculty members having publications in the national journals, yet the percentage of institutions having teacher educators with international publications was found to be very low.
31. The number of students who had presented papers at various seminars / conferences was very low as compared to the percentage of teachers having presented papers at state, national and international level.

32. Majority of the secondary teacher education institutions of Punjab were having working NSS units.

33. About half of the secondary teacher education institutions of Punjab did not organize any curricular / co-curricular meet in the preceding year.

34. Very few institutions of secondary teacher education in Punjab were providing any type of consultancy services.

35. Very few institutions of secondary teacher education in Punjab were having networking / linkages with the other institutions.

36. All the secondary teacher education institutions of Punjab were having built up area more than that prescribed by NCTE in its norms and standards.

37. Many institutions of secondary teacher education in Punjab were not having health and physical resource centres and mathematics laboratories.

38. In considerable number of institutions of secondary teacher education in Punjab, the number of available computer terminals was not sufficient.
39. Budget allocated by majority of the secondary teacher education institutions of Punjab for computers was not sufficient.

40. None of the surveyed secondary teacher education institutions was having 100% regular teacher educators.

41. Very few institutions of secondary teacher education in Punjab were having 100% non-teaching staff on regular and permanent basis.

42. A quite considerable number of secondary teacher education institutions in Punjab did not have the required number of teacher educators as per the recommendations of NCTE.

43. Majority of the institutions of secondary teacher education in Punjab were not providing the open access facility to the students in their libraries.

44. Though the number of titles and books available in the libraries of most of the secondary teacher education institutions of Punjab were found to be as per the recommendations of NCTE, yet the number and quality of journals and availability of photocoping and computers with internet facility were lacking in majority of the institutions.

45. A sizeable portion of the institutions did not allow the students to retain any book issued to them from the library during their annual examinations.
46. Majority of the institutions of secondary teacher education in Punjab were found to spend very low percentage of their budgets on the library.

47. The rate of retention in the secondary teacher education institutions of Punjab was found to be quite satisfactory.

48. Majority of the secondary teacher education institutions of Punjab did not have any tutor-ward or similar mentoring system.

49. Majority of the secondary teacher education institutions in Punjab did not provide any financial aid to financially weak non-SC / non-OBC students.

50. Secondary teacher education institutions of Punjab lacked health care services at their campuses.

51. Most of the secondary teacher education institutions of Punjab did not provide accommodation to their Principals, faculty and non-teaching staff.

52. Majority of the secondary teacher education institution of Punjab did not have proper hostel facility for the pupil teachers.

53. Majority of the institutions of secondary teacher education in the state did not have indoor sports facilities.

54. Majority of the secondary teacher education institutions of Punjab were providing transport facility to the students and teachers.
55. More than half of the secondary teacher education institutions of Punjab did not obtain any feedback from the pupil teachers.

56. Though all the institutions of secondary teacher education were found to participate in various cultural events at the inter college level yet percentage of institutions participating in the cultural events at the university level was very low.

57. Majority of the secondary teacher education institutions in Punjab did not have alumni associations.

58. More than half of the secondary teacher education institutions in the state were not publishing any college magazine.

59. Almost all the secondary teacher education institutions of Punjab regularly published their updated prospectus.

60. More than half of the secondary teacher education institutes in Punjab were not having IQACs or any other similar bodies / committees.

61. Teacher educators of majority of the secondary teacher education institutions in the state were not found to be attending the faculty improvement programmes organized by UGC / NCTE or any other recognized organization.

62. About half of the secondary teacher education institutions in Punjab did not organize any seminar / workshop / symposia
on curricular development teaching-learning, assessment in the preceding year.

63. Majority of the faculty of secondary teacher education institutions of Punjab were not found to attend any research development programme.

64. Majority of the institutions did not organize any invited / endowment lecture during the preceding academic session.

65. Majority of the secondary teacher education institutions in the Punjab did not assign any additional administrative work to the faculty.

66. Majority of the secondary teacher education institutions in Punjab were having internal as well as external audit mechanisms.

67. Majority of the secondary teacher education institution in Punjab did not have any Internal Quality Assurance Mechanism.

68. Majority of the secondary teacher education institutions of Punjab were not found to have any planned participation of the students in the quality enhancement of the institution.

69. However, all the secondary teacher education institutions in Punjab were found to follow the reservation policy of the Government of Punjab, while admitting the trainees for the secondary teachers’ training.
7.6.5 Growth And Development Of Secondary Teacher Education Vis-À-Vis Societal Needs: Conclusions On The Basis Of Views And Perceptions Of Principals, Teacher Educators, Teacher Trainees And Parents

1. The analysis of the contents of the responses of respondents led us to a clear cut conclusion that all respondents, i.e., Principals, teacher educators, teacher trainees, and the parents believed that teachers were the nation builders, social engineers, and makers of the history. All of them considered that the role of a teacher was very important in shaping the destiny of a nation.

2. The content analysis of the views and perceptions of respondents also revealed that an overwhelming majority of the respondents strongly opined that organization and management of secondary teacher education should be the responsibility of the Government.

3. A mixed response of the respondents was observed towards the causes behind the preference given to the teaching profession by the teacher trainees. More than one third of the respondents attributed it to its job market value, whereas little less than one third were of the opinion that it was a favourite course due to the affordability of the fees for B.Ed.
course. However a sizeable portion of the respondents also believed that it was because of the nobility of the teaching profession. Whereas a sizeable portion of the respondents was also there who believed that it was because of the high matrimonial value of the degree of B.Ed, especially for the girls.

4. The analysis of contents of the views and perceptions of the respondents about the status of general growth and development of secondary teacher education in India revealed that more than one third of the total respondents were convinced about the fact that there had been a tremendous growth and development of secondary teacher education in India. However about one fourth of the respondents termed it as ‘satisfactory’. Whereas little less than the same number of respondents viewed that privatization / commercialization / mushroom growth were ailing the system. Moreover a quite significant portion of the respondents labeled the general growth and development of secondary teacher education in India as ‘not well planned’ and a little percentage (only 1.33%) was also there who claimed that this growth and development was ‘slow’.

5. The content analysis also resulted in finding that majority of the respondents opined that Punjab Government had not played any positive role in the development of secondary
teacher education in the state. Whereas more than two fifth of the respondents did not agree with them.

6. The study of opinions expressed by the respondents also proved that an overwhelming majority of the Principals, teacher educators, teacher trainees and parents thought that NCTE had failed in its responsibility to properly plan and regulate the secondary teacher education programme.

7. The content analysis of opinions of the respondents also showed that a comfortable majority of the respondents strongly expressed that no single agency was responsible for the proliferation of secondary teacher education institutions, rather State Government, Affiliating Universities, NCTE and Union Government’s policy of liberalization towards profit oriented teacher education institutions were all responsible for the proliferation. Whereas there were sizeable portions of the respondents also who thought that different agencies out of the above were solely responsible for the proliferation of secondary teacher education institutions.

8. An overwhelming majority of the respondents was found to opine that the affiliating universities did not put any regular checks to ensure that the self-financed colleges of secondary teacher education followed the prescribed norms and standards.
9. The percentage analysis of the contents of the responses of the respondents also resulted in finding that majority of the respondents held the view that mushroom growth of privately managed secondary teacher education institutions contributed in widening the gap between demand and supply of secondary teachers. A large number of respondents recommended improvement in quality of education in these self-financing institutions.

10. The study of responses of the respondents further revealed that majority of the Principals and teacher educators believed that as a result of proliferation of secondary teacher education institutions, teacher education has become easily accessible to all. Whereas majority of the teacher trainees and parents of the trainees did not agree with this thesis.

11. Although there was a mixed response of the respondents to the question that how did they view the role of Punjab Government in issuing NOCs for the establishment of a large number of self-financed secondary teacher education institutions in the recent past. Yet the majority of them opined that either political interference at the ministerial level or corruption at the bureaucratic level was responsible for it. However there were a significant number of respondents also who opined that since Government had to spend no money on these institutions and it wanted to expand the facilities for
secondary teacher education in Punjab, therefore the Government had issued NOCs to these institutions.

12. The study of views and perceptions of the respondents also led us to the mixed results regarding the factors responsible for the proliferation of self-financing institutions. Most of the respondents held the view that more than one factors were responsible for the process of proliferation of the self-financing institutions of secondary teacher education. A simple majority declared huge profits for the managements as one of the major factors, whereas among other factors discussed by considerable number of respondents were: Government’s policy of liberalization and privatization, relaxation of rules for opening up of private institutions, problems with the already existing Government and Government-aided institutions and unemployment among the graduates in the country.

13. The study of opinions and perceptions of respondents also resulted in finding that they perceived proliferation of secondary teacher education institutions in Punjab in four different ways. Most of respondents viewed that proliferation was harmful as it lead to the deterioration of quality. Comparatively, little less percentage of respondents perceived that it was unwanted as it led to an imbalance between demand and supply. A considerable number of respondents
also viewed that proliferation was necessary as more and more teachers were required to achieve the goal of universalization of education. Further, a sizeable portion of the respondents also opined that expansion of educational facilities was a consequent outcome of socio-economic development.

14. The content analysis of views and perceptions of the respondents also resulted in ascertaining that majority of the Principals, teacher educators, teacher trainees and parents disagreed with the notion that teacher education would be helpful in serving the social cause of educating the masses when quality was being interpreted to mean ‘saleability’ or ‘marketability’.

15. The analysis further lead us to conclude that majority of the respondents opined that the quality of secondary teacher education in Punjab was not up to the mark. However more than one fourth of them were satisfied with the quality of secondary teacher education in Punjab.

16. Majority of the Principals and teacher educators were also dissatisfied with the role of NAAC-NCTE collaboration in ensuring the quality. Though one fourth of them were satisfied with the role of NAAC-NCTE collaboration and little less than one fourth of them believed that the role of NAAC-
NCTE collaboration in ensuring the quality of secondary teacher education was satisfactory to a small extent.

17. The analysis of the responses of the respondents also resulted in finding that a three fourth majority of the respondents was not satisfied with the quality of secondary teacher education provided in the private institutions. However considerable portions of the respondents were also there who were either partially satisfied or fully satisfied with the quality of teacher education being provided in the secondary teacher education institutions.

18. The respondents also gave a mixed response to the question regarding the admission procedure for secondary teacher education courses. Although an overwhelming majority was of the opinion that entrance test should be the sole criteria, yet a sizeable portion of the respondents believed that combined merit of both the marks in the entrance test as well as graduation should be considered for admission to teacher education course. There was another considerable portion of the respondents also which stressed that only marks in graduation should be the sole criteria for admissions to teacher education course.

19. The analysis further resulted in concluding that majority of the Principals, teacher educators, teacher trainees as well as parents did not favour the privatization of secondary teacher
education in the country. However a considerable portion of
more than one fourth of the respondents favoured it.

20. The study of views and perceptions of the respondents also
revealed that most of the Principals, teacher educators,
teacher trainees and parents opined that privatization of
secondary teacher education was bound to lead to
commercialization of teacher education.

21. Furthermore, the analysis also led us to the conclusion that a
comfortable majority of all the groups of respondents
perceived that the private self-financing secondary teacher
education institutions were not following the standards and
norms laid down by NCTE.

22. The analysis of the responses of the respondents also
resulted in finding that a three fourth majority of the
respondents were of the opinion that most of the self-
financing institutions of secondary teacher education did not
appoint properly qualified teacher educators on regular full
time basis.

23. After analyzing the responses of the respondents, it was also
ascertained that an overwhelming majority of them viewed
that the teacher educators working in the self-financing
institutions of secondary teacher education were not given
salaries and allowances according to the UGC pay scales.
24. Further, the respondents gave a mixed response to the question that whether the development of secondary teacher education in India in general and in Punjab in particular has been according to the societal needs. Though considerable portion of the total respondents were of the view that our teacher education has been planned according to our societal needs. Yet more than four fifth majority of them did not agree with the above notion. But a little percentage of the respondents was also there, who viewed that societal needs were not well defined or were subjective or changed with time.

25. The analysis further revealed that a good majority of all types of respondents felt that our teacher education curriculum had not been designed keeping in view our societal needs. However a sizeable portion of the respondents did not agree with them and opined that our teacher education curriculum was designed in accordance with our societal needs.

26. The percentage analysis done on the basis of contents of the responses of the respondents also resulted in finding that they gave a mixed response to the question about the policy of reservation for the underprivileged classes in secondary teacher education. About half of them outrightly favoured the reservation policy whereas more than one third of them opposed all types of reservation in the secondary teacher education course. However there were a considerable number
of respondents who favoured the policy of reservation with the condition that the creamy layer should be kept outside reservation.

27. Moreover, the analysis also showed that about two third majority of the subjects felt that we had not been able to train the number of teachers required according to the demographic trends in the state. However more than one third of the respondents opined that the state had been successful in training the secondary teachers according to the demographic trends.

28. Further, it was also found that more than two third majority of the respondents were dissatisfied with the proportion of rural students getting secondary teacher education and recommended to provide incentives to these students. A considerable number of respondents were also there who felt satisfied with the proportion of rural students’ participation in the secondary teacher education in Punjab. However there was also a sizeable section of the respondents who didn’t say anything about the issue.

29. It was also indicated by the content analysis of the opinions of the respondents that two third majority of the respondents disagreed with the notion that incentives were being provided to the secondary teacher trainees. However more than one fifth of the respondents opined that government and
government aided colleges provided such incentives. Further a sizeable portion of the respondents believed that the institutions of secondary teacher education provided such incentives.

30. Furthermore, there was a complete unanimity among the respondents belonging to all the groups that there was a big mismatch between demand and supply of secondary teachers. An overwhelming majority of the respondents believed that it was the lack of proper manpower planning on the part of the government, which was mainly responsible for the mismatch between demand and supply of secondary teachers.

7.7 POLICY IMPLICATIONS & RECOMMENDATIONS:

1. Although there has been a tremendous growth and development of secondary teacher education in the country, yet the secondary teacher education has neither been well planned nor systematically coordinated. The study shows that the expansion of secondary teacher education has been uneven through out the country. Moreover IASE’s, CTE’s and REC’s have also not been distributed logically over all the regions and states. Thus there is a need to replan and reorganise the secondary teacher education system in the whole country in order to have a balanced distribution of
quality institutions of secondary teacher education in all regions and states.

2. It has also been found through the present study that there is a huge imbalance between demand and supply of secondary teachers in some parts of the country, for example in Punjab. In order to achieve a balance between demand and supply of secondary teachers in these regions, two fold efforts should be initiated at the part of the Government. Firstly, the unplanned proliferation of private self-financing teacher education institutions should be checked and secondly the provisions for the smooth and speedy placements of the trained / secondary teachers through governments’ own public placement services should be done. In other words, the manpower planning in the field of secondary teacher education should be done properly.

3. Moreover, national estimation of requirement and establishment of training arrangements do not necessarily ensure teacher availability in areas where the need has remained unfulfilled for would ordinarily be beset with the problem of teacher shortages. Apart from locating institutions in places/ regions where shortage of trained teachers has continued to persist, there is need for incentives which will motivate teacher educators to take up positions in such areas.
4. A plan for the development of teacher education has necessarily to take into account the policies and programmes for expansion of educational facilities and the improvement of the quality of schooling. The tasks involved should be, among others, the identification for areas for which educational facilities have to be provided, school mapping to determine catchment areas, the teacher pupil ratios that are required for making teaching learning process efficient and effective, reduction in the incidence of repetition of grades and premature withdrawal from schools. With national data, realistic planning is not possible taking the entire country as a unit, there is need for planning for specific states and geographical regions. Districts or blocks should be the micro-units for planning educational development.

5. There is need for lengthening the duration of training. As the present study shows that the most of the institutions in Punjab could not complete even the number of working days and teaching days prescribed by the UGC and NCTE. Prospective teachers need updating of their academic knowledge, intensive preparation for practicing, exposure to the use of media and computers as supports to teaching learning process and adequate mastery of pedagogy. Above all, they need to develop commitment to their tasks and a professional outlook which must characterize teaching. These
can be ensured only when prospective teachers undergo, as is the case in respect of other professions, training of a sufficiently long duration.

6. NCTE has the statutory responsibility to ensure coordinated development of teacher education in the country. It must develop suitable mechanisms for this purpose. Its regional bodies should liaise with universities, State departments of education and teacher education institutions to effect constant up-gradation of standards. The criteria for establishment of institutions and their programmes must be well developed and enforced.

7. Admission to the secondary teacher education course should be on the basis of well-defined criteria, taking into consideration the merit and aptitude of students taking admission.

8. Mushroom growth of self-financed private institutions of secondary teacher education has been on the rise in the recent years. Most of these institutions have been established with the profit motive and are indulging in crass commercialization of teacher education. Thus, there is a dire need to improve the regulatory mechanism in order to put a check on the commercialization of secondary teacher education.
9. Due to proliferation of private self-financed institutions of secondary teacher education, the meaning of very concept of quality has also started changing. The owners of these institutions interpret quality in their own terms relating it to ‘saleability’ or ‘marketability’. The market values have deeply penetrated into the system of self financed institutions of secondary teacher education, the teachers who get training in these institutions never prove to be dedicated workers of the nation. In such a scenario Central Government and the State Governments should shoulder the responsibility to train, the secondary teachers needed for government schools.

10. For protection of interests of the under-privileged and economically backward students, the institutions should be asked to reserve seats (according to prescribed criteria) and make adequate provision for subsidizing the training of the meritorious in indigent circumstances.

11. The institutions should have adequate provisions for promoting academic and professional competence of its faculty. Among others, this requires encouragement and incentives for improving qualifications, participation in conferences, special training courses, facilities for preparation of professional papers etc.

12. With a view to promote professionalism among prospective teachers, institutions which can ensure adequate residential
facilities for the Principal and staff of the institution as well as hostel facilities for substantial proportion of its enrolment, should be encouraged.

13. Requirement of teachers for specific subjects Sciences, Mathematics, English language and so on need special consideration. In recent years, new subject areas of great significance have emerged viz. computers, media support, environmental and population education etc. Teachers are needed for these and other upcoming areas. The programmes of teacher education institutions need to be expanded to take care of the newly emerging areas.

14. There is need also for breaking down the isolation that exists at present between different “levels” of teacher education – for elementary school teachers and secondary / higher secondary school teachers. This could be attempted by bringing together different levels of training in one institutions such as comprehensive colleges of education and schools of education in the universities. Optimal utilization of the training facilities that have already been created has emerged in the analysis as an area of urgent attention.

15. There is also need to have an in-build system for continuous monitoring and evaluation of the State-managed colleges of education with a view to assessing their effectiveness in organizing programmes of qualitative improvement of
teachers and teacher educators. Such a system is necessary at, micro as well as macro levels.

16. These tasks can be accomplished only if teacher education is accorded a high priority in educational development and required resources are allocated to it. Analysis has indicated that in the existing allocation of resources for education, secondary teacher education is not given the priority that it deserves. In view of the fact that the quality of teachers decides, to a very considerable extent, the quality of education that is provided to children, there is a strong case for allocation of adequate resources for teacher education and especially secondary teacher education.

7.8 SUGGESTIONS FOR FURTHER RESEARCH:

1. The present research study was mainly focused on the growth and development of secondary teacher education in Punjab with reference to expansion, quality and societal needs. There is a need to replicate this study for the other states of India also, so that a national picture can emerge.

2. There are many types of institutions of secondary teacher education in the country. Some are funded by the Central Government, others by the State Governments, others are either Aided Private Colleges or Self-Financed Colleges of Education. A comparative study of the quality of education provided in these different type of colleges can be conducted

3. In the post-economic reforms period there has been a proliferation of professional institutions of different types in India. Therefore studies on growth and development of technical education, management education, law education, computer education etc. especially in the post-economic reforms period should also be conducted.
4. The present study has been focused only on the extrinsic aspects of quality of secondary teacher education in Punjab. A detailed study of intrinsic aspects of quality of secondary teacher education in the state should also be conducted.

5. In a situation, where different types of schools like navodaya vidayalyas, central schools, state government run schools, government aided schools, self-financed recognized English medium schools are following different curricula as well as different methods and techniques of teaching because of being affiliated to different school boards, there is a need for studying the limitations of present training of secondary teachers with respect to each of these types of schools.

6. An empirical study on the Role of NCTE and NAAC in ensuring the quality of education in the secondary teacher education institutions of the country can also be conducted.

7. In the present research, the study of expansion of secondary teacher education in the country as well as in the state of Punjab has been conducted on the basis of secondary data available in various secondary sources and during her research some anomalies in the secondary data have been noted by the investigator. Therefore there is a need to verify and update this data by conducting a primary survey of secondary teacher education in the state, as well as in the whole country.

8. Some private universities and institutions (e.g. Lovely Professional University of Punjab and BCM College of Education, Ludhiana) have signed MoU (Memoranda of Understanding) with some foreign collaborators to improve the quality of secondary teacher education. There is a need to evaluate this initiative and a critical study of the methods and techniques being borrowed from foreign institutions should also be conducted.

9. After the introduction of private initiative in the field of secondary teacher education, wide disparities in the fee structures of private and public institutions of secondary teacher education have been observed. In this context, a comparative study of the financing pattern and cost factors of secondary teacher education in the private and public institutions of secondary teacher education should be carried out.
10. Further research on demand and supply pattern of secondary teachers of different subjects should also be conducted in order to find the region-wise and state-wise trends so that efforts to balance the demand and supply of teachers can be initiated.

11. During conduct of the present study, the investigator noted that there is shortage of well qualified (NET, M.Phil. and Ph.D. qualified) faculty and Principals in the field of secondary teacher education. Thus research about demand and supply of Principals and teacher educators is also needed so that manpower planning in this field can help to solve the problem of shortage of faculty and principals.

12. The present study has been confined to the growth and development of secondary teacher education only. A similar study of growth and development of elementary teacher education may also be carried out.

13. In the present study, the views and perceptions of only teacher trainees, parents, teacher educators and Principals have been studied. A replicative study of the present research study may be conducted to study the views and perceptions of other groups of respondents like administrators, policy makers, intellectuals etc.

14. Besides there is need for critical studies relating to other different aspects of teacher education. Some of the areas which are crucial for the quantitative and qualitative development of teacher education are:

   a. Existing status of different type of teacher education like elementary teachers training, physical education teachers training etc.;

   b. Shortage of teachers of various categories region-wise, subject-wise, gender-wise, etc. Shortage of teachers in the newly emerging specialties like computer education, use of electronic media, guidance and counseling, etc;

   c. Methods of skill up-gradation of teachers; the role of specialized bodies like NCERT, SCERTs and DIETs;

   d. Working conditions of teachers;
e. Criteria for selection of teacher educators and for prospective teachers;

f. Criteria for establishment of teacher education institutions, the extent to which the criteria laid down are actually enforced;

g. Extent of unemployment among trained teachers;

h. Studies relating to the preparation of teachers through the distance mode of education, the quantitative, and financial aspects; and

i. Studies relating to financing of teacher education programmes can also be conducted in the following areas:

(i) The present status of financing on a regional, State and all India basis;

(ii) Norms of cost for different inputs in teacher education (region-specific, time-specific investigation); and

(iii) Projections of financial requirement for the maintenance and development of teacher education programme, keeping in view the emerging needs of specific areas/ regions for various categories of teachers.