CHAPTER-VI

SUMMARY AND CONCLUSION

This chapter presents a brief summary of the study, the findings, and conclusions that have been drawn from the findings, implications for teacher education and suggestions for further research in the field.

1.1 The Problem

a. The present study was undertaken with a view to develop objective reliable and valid scales to evaluate functioning of College of Teacher Education.

b. Aspects of the college considered

The following aspects were considered in the study.


1.2 Specific Objectives

The specific objectives of the study are:

i. To develop an objective, reliable and valid scale to evaluate 'College Plant';
ii. To develop an objective, reliable and valid scale to evaluate 'Management and Governance';

iii. To develop an objective, reliable and valid scale to evaluate 'Teaching Faculty';

iv. To develop an objective, reliable and valid scale to evaluate 'Planning and Evaluation';

v. To develop an objective, reliable and valid scale to evaluate 'Preservice Course';

vi. To develop an objective, reliable and valid scale to evaluate 'Inservice Programme';

vii. To develop an objective, reliable and valid scale to evaluate 'Extension and Resource Support to Secondary Schools, School Complexes and Individual Teachers';

viii. To develop an objective, reliable and valid scale to evaluate 'Innovations and Experiments';

ix. To develop an objective, reliable and valid scale to evaluate 'Training and Resource Support to New Areas of Education';

x. To develop an objective, reliable and valid scale to evaluate 'Support to Professional Bodies';

xi. To develop an objective, reliable and valid scale to evaluate 'Community Participation';

xii. To evaluate the entire tool in terms of its reliability and validity'

and

xiii. To use the set of scales to evaluate the functioning of Colleges of Teacher Education.
1.3 Scope of the study

The scope of the study was confined to Colleges of Teacher Education.

2.0 Development of the Scale

Scales were developed for all the eleven aspects considered for the study, following scientific procedure.

The Steps of procedure are briefly narrated in the following paragraphs.

2.1 Determination of important sub-aspects of each aspects

Important sub-aspects of each aspect were determined in consultation with a few principals of Colleges of Teachers Education, a few experts in teacher education and on the basis of review of related literature.

2.2 Writing of statements with reference to the sub-aspects

Under each sub-aspect a number of criterion statements were written.

2.3 Using of statements for preparing rating scales

Statements were used to prepare 5 and 3 point rating scales.

2.4 Writing of procedures to be followed in using the scales

The purpose of study was to prepare objective, reliable and valid scales. In order to make the scales really so, there was a need to use same commonly accepted procedures and guidelines to rate the scale. Hence exhaustive and objective manual of direction was prepared.
2.5 Screening of scales by a panel of judges

The draft thus prepared were sent to a panel of judges who are considered to be high level teacher educator to offer their valuable candid suggestions on the content, coverage, criteria statements, clarity of guidelines, etc., and to offer suggestions for the improvement of the scale.

2.6 Modification of scales

On the basis of suggestions offered by a panel of judges, scales were improved and procedures and guidelines were modified.

2.7 Tryout of the scales

Modified scales were given to a few Colleges of Teacher Education to find out the practical difficulties that the rater may come across in rating the scale. Further, each statement was examined for objectivity using the $\chi^2$ test.

2.8 Finalisation of the scales

Since the raters expressed that they did not experience any difficulty in rating the scales and all the criteria and corresponding guidelines were found to be objective, the modified scales were accepted as the final scales (See appendices 'B' and 'C' for the scales along with the guidelines).
3.0 Evaluation of Scales

Steps followed in the evaluation of scales are briefly given below.

3.1 Selection of Sample

As the total number of Colleges of Teacher Education in Karnataka is 10, all of them were considered for the collection of data.

3.2 Collection of Data

Data pertaining to eleven aspects of Colleges of Teachers Education were collected personally by visiting all the ten Colleges of Teacher Education in Karnataka State.

3.3 Determination of Inter-rater Reliability

Two raters (experienced teacher educators) independently rated all the 10 Colleges of Teacher Education on the basis of data gathered and following the guidelines given in the manual. This was done to ascertain the extent of agreement in the rating of two different raters.

3.3.1 Inter-rater Reliability for the Entire Tool

Product moment coefficient of correlation technique was used to compute inter rater reliability and it is found that the value obtained was 0.89 which is quite significant at 0.05 level. Therefore, the entire tool prepared has quite satisfactory inter-rater reliability.
3.3.2 Inter-rater reliability of Eleven Scales

The coefficient of correlation technique was used to determine the inter-rater reliability of each scale and it is found that all the seven scales have quite satisfactory inter-rater reliabilities.

Table - 6.1 Inter-rater reliabilities for the Eleven Aspects and the Entire Tool of the Colleges of Teacher Education (n=10)

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Aspects</th>
<th>r</th>
<th>Zr</th>
<th>Significant at 0.05 level</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>College Plant</td>
<td>0.655</td>
<td>0.79</td>
<td>Yes</td>
</tr>
<tr>
<td>2</td>
<td>Management and Governance</td>
<td>0.981</td>
<td>2.30</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Teaching Faculty</td>
<td>0.841</td>
<td>1.22</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Planning and Evaluation in CTE</td>
<td>0.945</td>
<td>1.78</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Pre service course</td>
<td>0.616</td>
<td>0.72</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>In service Programme</td>
<td>0.769</td>
<td>1.01</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Extension and Resource Support to secondary schools, school complex and individual teacher</td>
<td>0.945</td>
<td>1.78</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Innovation and Experiments</td>
<td>0.744</td>
<td>0.96</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Training and Resource Support to New areas of Education</td>
<td>0.941</td>
<td>1.75</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Support to Professional bodies</td>
<td>0.910</td>
<td>1.53</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>Community Participation</td>
<td>0.961</td>
<td>1.96</td>
<td></td>
</tr>
</tbody>
</table>

|        | ΣZr=15.80                                                              |       |     |                           |

The inter-rater reliability of the entire tool is 0.89.
3.3.3 Stability Reliabilities of the Eleven Scales and the Entire Tool

Using test and retest method the coefficient of stability reliabilities of the eleven scales have been computed.

The results are given in the following table:

Table - 6.2 Stability Reliability of the Eleven Aspects and the Entire Tool of the Colleges of Teacher Education (n=10)

<table>
<thead>
<tr>
<th>Sl. No</th>
<th>Aspects</th>
<th>r</th>
<th>Zr</th>
<th>Significant at 0.05 level</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>College Plant</td>
<td>0.660</td>
<td>0.79</td>
<td>Yes</td>
</tr>
<tr>
<td>2</td>
<td>Management and Governance</td>
<td>0.979</td>
<td>2.30</td>
<td>&quot;</td>
</tr>
<tr>
<td>3</td>
<td>Teaching Faculty</td>
<td>0.704</td>
<td>0.87</td>
<td>&quot;</td>
</tr>
<tr>
<td>4</td>
<td>Planning and Evaluation in CTE</td>
<td>0.938</td>
<td>1.74</td>
<td>&quot;</td>
</tr>
<tr>
<td>5</td>
<td>Pre service course</td>
<td>0.065</td>
<td>0.78</td>
<td>&quot;</td>
</tr>
<tr>
<td>6</td>
<td>In service Programme</td>
<td>0.705</td>
<td>0.89</td>
<td>&quot;</td>
</tr>
<tr>
<td>7</td>
<td>Extension and Resource Support to secondary schools, school complex and individual teacher</td>
<td>0.864</td>
<td>1.29</td>
<td>&quot;</td>
</tr>
<tr>
<td>8</td>
<td>Innovation and Experiments</td>
<td>0.673</td>
<td>0.81</td>
<td>&quot;</td>
</tr>
<tr>
<td>9</td>
<td>Training and Resource Support to New areas of Education</td>
<td>0.71</td>
<td>0.89</td>
<td>&quot;</td>
</tr>
<tr>
<td>10</td>
<td>Support to Professional bodies</td>
<td>0.625</td>
<td>0.74</td>
<td>&quot;</td>
</tr>
<tr>
<td>11</td>
<td>Community Participation</td>
<td>0.957</td>
<td>0.95</td>
<td>&quot;</td>
</tr>
</tbody>
</table>

\[ \Sigma z_r = 13.05 \]

The stability reliability of the entire tool is 0.83.
3.3.4 Consistency Reliabilities of the Eleven Scales and the Entire Tool

Using split-half method consistency reliabilities of the eleven scales and the entire tool were computed.

The results are given in the following table:

Table - 6.3 Consistency Reliabilities of the Eleven Scale and the Entire Tool

<table>
<thead>
<tr>
<th>Sl. No</th>
<th>Aspects</th>
<th>r</th>
<th>$z_r$</th>
<th>Significant at 0.05 level</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>College Plant</td>
<td>0.893</td>
<td>1.42</td>
<td>Yes</td>
</tr>
<tr>
<td>2</td>
<td>Management and Governance</td>
<td>0.702</td>
<td>0.87</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Teaching Faculty</td>
<td>0.798</td>
<td>1.07</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Planning and Evaluation in CTE</td>
<td>0.603</td>
<td>0.69</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Pre service course</td>
<td>0.750</td>
<td>0.97</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>In service Programme</td>
<td>0.839</td>
<td>1.19</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Extension and Resource Support to secondary schools, school complex and individual teacher</td>
<td>0.938</td>
<td>1.70</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Innovation and Experiments</td>
<td>0.605</td>
<td>0.69</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Training and Resource Support to New areas of Education</td>
<td>0.705</td>
<td>0.87</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Support to Professional bodies</td>
<td>0.792</td>
<td>1.07</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>Community Participation</td>
<td>0.630</td>
<td>0.74</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Σ$z_r$=11.28</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The consistency reliability of the entire tool is 0.64.
3.4 Determination of Validity

3.4.1 Content Validity

The final tool consisting of eleven scales, manual of directions were given to five experienced teacher educators and they were requested to go through them and give their candid opinion about the scale on 5-point scale.

From the opinion expressed by the teacher educators, it is evident that the scales, are objective and have content validity.

a. Practicability of the Tool

For this purpose opinion (1) scale (2) training in using the scale was prepared and an interview was conducted with a few experienced teacher educators.

It is found from their opinion that

i. there is no need for extensive / Intensive training for the users of the scale. A careful study of the manual helps the rater to use the scale objectively to evaluate the functioning of Colleges of Teachers Education

ii. functioning of Colleges of Teacher Education could be evaluated in a period of 4-5 days
5. Conclusions

i. Major findings

The major findings of the study on eleven aspects of ten CTEs is given below:

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Name of the CTE</th>
<th>College Plant</th>
<th>Management &amp; Governance</th>
<th>Teaching Faculty</th>
<th>Planning &amp; Evaluation</th>
<th>Preservice Course</th>
<th>In-service Course</th>
<th>Extension Resource Support</th>
<th>Innovations &amp; Experiment</th>
<th>Training &amp; Resource Support</th>
<th>Professional Bodies</th>
<th>Community Participation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Govt. CTE, Jamakhandi</td>
<td>Good</td>
<td>Very good</td>
<td>Very good</td>
<td>Good</td>
<td>Good</td>
<td>Good</td>
<td>Good</td>
<td>Very good</td>
<td>Very good</td>
<td>Good</td>
<td>Good</td>
</tr>
<tr>
<td>2.</td>
<td>MES CTE, Bangalore</td>
<td>Fair</td>
<td>Moderate</td>
<td>Moderate</td>
<td>Fair</td>
<td>Very good</td>
<td>Moderate</td>
<td>Fair</td>
<td>Moderate</td>
<td>Very poor</td>
<td>Moderate</td>
<td>Moderate</td>
</tr>
<tr>
<td>3.</td>
<td>Govt. CTE, Bangalore</td>
<td>Fair</td>
<td>Good</td>
<td>Fair</td>
<td>Good</td>
<td>Good</td>
<td>Good</td>
<td>Fair</td>
<td>Fair</td>
<td>Very poor</td>
<td>Good</td>
<td>Fair</td>
</tr>
<tr>
<td>4.</td>
<td>Vijay CTE, Bangalore</td>
<td>Fair</td>
<td>Fair</td>
<td>Good</td>
<td>Good</td>
<td>Fair</td>
<td>Good</td>
<td>Good</td>
<td>Very poor</td>
<td>Very good</td>
<td>Very good</td>
<td>Very good</td>
</tr>
<tr>
<td>5.</td>
<td>Kotturswamy CTE, Bellary</td>
<td>Moderate</td>
<td>Fair</td>
<td>Fair</td>
<td>Poor</td>
<td>Fair</td>
<td>Fair</td>
<td>Fair</td>
<td>Good</td>
<td>Excellent</td>
<td>Fair</td>
<td>Good</td>
</tr>
<tr>
<td>6.</td>
<td>Govt. CTE, Gulbarga</td>
<td>Very good</td>
<td>Fair</td>
<td>Good</td>
<td>Very good</td>
<td>Good</td>
<td>Good</td>
<td>Good</td>
<td>Very good</td>
<td>Good</td>
<td>Good</td>
<td>Good</td>
</tr>
<tr>
<td>7.</td>
<td>Govt. CTE, Mysore</td>
<td>Fair</td>
<td>Good</td>
<td>Fair</td>
<td>Good</td>
<td>Moderate</td>
<td>Fair</td>
<td>Fair</td>
<td>Fair</td>
<td>Very poor</td>
<td>Good</td>
<td>Good</td>
</tr>
<tr>
<td>8.</td>
<td>Govt. CTE, Mangalore</td>
<td>Moderate</td>
<td>Fair</td>
<td>Moderate</td>
<td>Fair</td>
<td>Poor</td>
<td>Moderate</td>
<td>Fair</td>
<td>Moderate</td>
<td>Very good</td>
<td>Fair</td>
<td>Poor</td>
</tr>
<tr>
<td>9.</td>
<td>Govt. CTE Belgaum</td>
<td>Very good</td>
<td>Very Good</td>
<td>Very good</td>
<td>Good</td>
<td>Fair</td>
<td>Fair</td>
<td>Good</td>
<td>Good</td>
<td>Good</td>
<td>Very good</td>
<td>Good</td>
</tr>
<tr>
<td>10.</td>
<td>CTE, Chikmagalur</td>
<td>Very good</td>
<td>Moderate</td>
<td>Good</td>
<td>Poor</td>
<td>Good</td>
<td>Very good</td>
<td>Fair</td>
<td>Good</td>
<td>Moderate</td>
<td>Fair</td>
<td>Good</td>
</tr>
</tbody>
</table>
Based on the findings of the study, the following conclusions could be drawn:

Firstly, the set of scales prepared by the investigator to evaluate functioning of Colleges of Teacher Education in Karnataka are objective, valid, reliable and practicable.

Secondly, the scales developed by the investigator will objectively classify Colleges of Teacher Education in relation to some standard of excellence.

6. Suggestions for Qualitative Improvement of CTEs

In the light of the results, the following suggestions may be given wherever necessary for the further improvements in certain aspects of Colleges of Teacher Education. The suggestions were only for the colleges classified as 'fair', 'poor' and 'very poor'. Further they are made on the scrutiny of the ratings of the teacher educators on statements pertaining to the aspects.

1. College of Teacher Education (Govt.), Jamakhandi

No suggestion is given to this college as it has fulfilled the norms satisfactorily.

2. MES Teachers' College, Bangalore

i. College Plant

The CTE is suggested to possess 3 more acres of land and 3 more additional rooms for all its purposes. At present it has 2 acres of land and 3 lecture halls.
ii. Management and Governance

There is a need to pay attention to tap financial assistance from various sources such as MHRD, UGC, NCERT, CSIR, ICHR, State Government and Central Government and adequate administrative staff members should be appointed. At present 50% of staff members are employed in the CTE.

iii. Teaching Faculty

Measures are to be taken to appoint additional teaching staff members to manage both pre service and in-service programmes.

iv. Planning and Evaluation

The CTE is required to undertake academic self-evaluation at the end of every academic year.

v. In-service Programme

The CTE is suggested to organize 7 to 8 subject-oriented courses and 14 to 16 short theme specific courses. It has organized 3 to 4 subject-oriented courses and 10 to 12 short theme specific courses.

vi. Extension and Resource Support

It is suggested to provide extension and resource support to the individual teachers always. Now it supports rarely.

vii. Innovations and Experiments

It is suggested to undertake individual and collective research work always. Now, sometimes research work is undertaken.
viii. Support to Professional Bodies

The CTE is required to seek the help always from the professional bodies to fulfil its purposes. Now the CTE is seeking the help rarely.

ix. Community Participation

The CTE is suggested to seek community support always to conduct certain programmes related to teacher preparation, Now it is seeks the support rarely.

3. College of Teacher Education (Govt.), Chitradurga

i. College Plant

The CTE is suggested to possess separate rooms for science, language and psychology laboratories. Now it has Science and Technology laboratories.

ii. Management and Governance

It is required to plan long term institutional planning for at least 75% of future needs. Now it has fulfilled only 25% of future needs.

iii. Teaching Faculty

Teacher educators are to be encouraged to undertake action research, under go in-service programmes and publish books always. Now teacher educators are encouraged rarely.

iv. Extension and Resource Support

It is suggested to provide Extension and Resource Support to School Complexes and Individual Teachers always.
v. Innovations and Experiments

Attention may be paid to publish educational news bulletins always. Now it is published rarely.

vi. Community Participation

It is suggested to invite community people always to provide information regarding various occupations to student teachers. Now invites the Community people rarely.

4. R.V. Teachers' College, Bangalore

i. College Plant

The CTE is suggested to posses 3 more acres of land, 3 more additional rooms and provision for 6 more types of games and sports.

ii. Management and Governance

It is suggested to appoint remaining 50% of administrative staff members to manage CTE. Now only 50% of the staff members manage the CTE.

5. Kotturswamy College of Education (CTE), Bellary

i. College Plant

It is suggested to provide 3 more additional rooms for laboratories and reading purposes.
ii. Teaching Faculty

It is suggested to appoint 50% of teaching staff members to run CTE.

iii. Planning and Evaluation

It is suggested to undertake academic self-evaluation at the end of every academic year.

iv. Preservice Course

The CTE is suggested to follow a new curriculum with all the thrust areas which have a bearing on teacher educators. Now its curriculum includes a few areas.

v. Extensions and Resource Support

It is suggested to provide extension and resource support to individual teachers always. Now support is provided rarely.

vi. Support to Professional Bodies

It is suggested to arrange informal meets of the professional bodies always at regular intervals. Now it arranges rarely.

6. College of Teacher Education (Govt.), Gulbarga

i. Management and Governance

It is suggested to appoint 50% additional administrative staff members to manage the CTE.
7. College of Teacher Education (Govt.), Mysore

i. College Plant

It is suggested to have 3 more additional administrative rooms and have 8000 more library books. Now it has 3000 books.

ii. Teaching Faculty

It is suggested to appoint duly qualified members to teach subject-oriented and theme specific courses.

Now the CTE has teachers to teach Educational subjects, Content-cum methodology and others Subjects.

iii. Preservice Courses

It is suggested to have in-built flexibility always in the curriculum of the CTE. Now the curriculum has in-built flexibility rarely.

iv. In-service Programme

It is suggested to tap and use financial assistance for in-service programmes from the sources like central govt. state govt. divisional / district / local bodies.

v. Extension and Resource Support

It is suggested to provide resource support to individual teachers always.
vi. Innovations and Experiments

It is suggested to encourage to publish educational news bulletins always.

vii. Training and Resource Support

It is suggested seek funds from NIEPA, UGC, ICSSR, NCERT, DPEP for specific research projects.

8. College of Teacher Education (Govt.), Mangalore

i. College Plant

It is suggested to have 2 more acres of land and student welfare facilities such as common rooms for girls and boys and a canteen.

ii. Management and Governance

It is suggested to tap funds from various sources like Central Government, MHRD, UGC, NCERT, CSIR, ICHR, etc.

iii. Teaching Faculty

It is suggested to appoint 13 more teaching staff members. Now only 9 members are managing the CTE.

iv. Planning and Evaluation

It is suggested prepare five year and annual institutional plans always. Now the plan is prepared few times
v. Preservice Course

It is suggested to have in-built flexibility in the curriculum for innovations and adjustments always.

vi. In-service Programme

It is suggested to enable every secondary school teachers to undergo a subject oriented in-service programme 5 times in five years. Now the teacher are made to under go subject oriented course once in five years.

vii. Extension and Resource Support

It is suggested to provide resource support to individual teachers always.

viii. Innovations and Experiments

It is suggested to organise seminars / workshops / symposia related to innovations and development to teaching and teaming materials always.

ix. Support to Professional Bodies

It is suggested to invite professionals to take part in Seminars / Workshops always.

x. Community Participation

It is suggested to arrange Parents Teachers Association meetings to discuss the problems related to preparation of student teachers always.
9. College of Teacher Education (Govt.), Belgaum

i. Preservice Course

It is suggested to meet the needs of the special areas like tribal and hilly tracks while devising selection procedure always.

ii. In-service Programme

It is suggested to organise decentralized in-service programmes to cover left out teachers in the district always.

10. MLMN College of Teacher Education, Chickmagalur

i. Management and Governance

It is suggested to make provision in the time-table of preservice and in-service programmes for tutorials, seminars, workshops, etc. Now there is provision for lectures.

ii. Planning and Evaluation

It is suggested to undertake academic self-evaluation at the end of every academic year always.

iii. Extension and Resource Support

It is suggested to provide resource support to secondary schools always.

iv. Support to Professional Bodies

It is suggested to build good relationship with professional bodies.
7. Implications

The findings have some important implications. They are:

i. The tool represents an overall picture of the Colleges of Teacher Education and their activities and is helpful for evaluating their functioning.

ii. Gives guidance to the CTE management, principal and teacher educators and to all concerned for the improvement of the CTEs.

iii. Fulfills the requirements of the academic as well as general aspects of the CTEs.

iv. Acts as a pivotal instrument in establishing and publishing the standards by which the ‘Accreditation Council’ to be set up as per NPE 1986, judges the quality of a College of Teacher Education.

v. Gives guidelines to UGC, University, LIC, NCERT, SCERT, NCTE and all those concerned for the improvement of teacher education programmes.

vi. Enables the financial agencies to judge, assign stars and to release grants accordingly.

vii. Helps in monitoring the upgradation of teacher education colleges into CTEs.

8. Suggestions for Further Research

While undertaking the study, a need for few specific research studies relating to the field was felt. The suggestions for such studies are enumerated below:
i. The study may be conducted at the national level and it may also be extended to selected States.

ii. The study may be conducted involving Regional Colleges of Education.

iii. An effort may be made to prepare Scales on the same lines pertaining to TTIrs, DIETs. Physical Education Colleges, Academic Staff Colleges and other professional and Technical and vocational courses.

iv. Norms- Region-wise, State-wise, Management-wise etc., be established with the use of the Scale developed.

v. A factorial study with relative efficiency of different scales in the prediction of quality of the CTEs be taken up.