CHAPTER 4

TOOL CONSTRUCTION
CHAPTER IV

TOOL CONSTRUCTION

CONTENTS

Tool – I

Teacher Professional Involvement Inventory

I. Introduction 74
II. Rational for the Tool 76
III. Preparation of Draft Tool 80
IV. Scoring Procedure 96
V. Establishing Validity 96
   V.A What is Validity 96
   V.B. Theoretical Validity 97
   V.C. Content Validity 97
   V.D. Item Validity 98
VI. Establishing Reliability 100

Tool – II

I. Change Proneness Inventory 101
II. Validity and Reliability of the Inventory 102

Tool – III

I. Self- concept Inventory 103
II. Validity and Reliability of the Inventory 104

Tool – IV

I. Attitude Towards Teaching Inventory 105
II. Validity and Reliability of the Inventory 106

Tool – V

I. Teacher Role Perception Scale 106
II. Validity and Reliability of the Inventory 109

References 111
CHAPTER -IV
TOOL CONSTRUCTION

TOOL- 1

Teacher Professional Involvement Inventory
(For studying Primary School Teachers)

I. INTRODUCTION

The quality of education is associated with the quality of teachers. It is a universal truth that the success of entire educational gamut lies on the shoulders of the teacher.

The advice of Satya Sai Baba sounds most meaningful,

"Of all professions, yours is the noblest, the most difficult and most important resolve today to sacrifice everything you have for the sake of the pure-hearted children who rely on you for guidance." (p.11)

The teachers are regarded as the torch-bearers of society and hold a key post in the educational system. Teacher performance is the most crucial input in the field of education. Teacher competence, motivation, and the conditions of work impinge directly on teacher’s performance. He has to create a congenial environment for the acceleration of teaching learning process towards the right direction so that the targeted goals may be realized.

According to G.R.Sharma (1994),

"The teacher is the single most important factor for the success of any educational programme" (p.122).

The quality of any educational system depends to a large measure on securing well-prepared and adequately-equipped teachers, steeped in learning.
strong in character, with high ideas and devoted to the spread of knowledge. The teachers should be eminent not only intellectually, but also spiritually as giant lamps to light the young minds. A good teacher is one who maintains harmonious relationship with students and extends it beyond the realms of the conventional classroom. He should mould his students’ moral, aesthetic and intellectual personality.

3 The International Conference on Education held at Geneva in 1996 discussed the ways and means to strengthen the role of teachers in the changing world.

“The role of the primary school teacher as an agent of social change is all the more important for the well being of future generations. With all the advances in educational and information technologies, it is neither possible nor desirable to replace the teacher. The best way of attracting competent persons to teaching profession is to enhance the status of teaching community and provide suitable working conditions”.(p.21)

Teaching, in its true sense, is not mere instruction but an attempt to influence the behaviour of pupils. In this task the most important thing is the personal example of the teacher, which commands the respect of the pupils, parents, colleagues and the community at large. The teacher’s dedication towards the profession influences the general public. 4 According to Burton,(2001)

“Teaching is the stimulation, guidance, direction and encouragement of learning.”(p.59)

5 The National Council of Teacher Education has declared theoretically, a teacher must have the following traits to become successful as well as an effective teacher.

a) Leadership skills
b) Managerial skills
c) Adequate knowledge of child psychology
d) Entrepreneurial skills
e) Resource allocation skills
f) Competency in the teaching
g) Politeness in behaviour
h) Mastery over the subject matter
i) Associating the teaching with the teaching aids required as per nature of topic and subject.
j) Skills of introspection
k) Adopting the child centred approaches
l) Allowing the democratic climate in the classroom
m) Good public relations
n) Conducting written/ oral/ quiz test well in time to ensure the achievements of the children. (P11.)

The NCERT expected the teachers to perform their professional activities in five major areas

i. Teacher in relation to pupils
ii. Teacher in relation to parents / guardians
iii. Teacher in relation to society and the nation
iv. Teacher in relation to profession, colleagues and other professional organizations.
v. Teacher in relation to management and administration (p.8)

The teacher, in order to get recognition, should have academic and professional competence of higher order. The competence is not to be measured by the number of degrees and certificates he holds, but by his mastery of the subject he teaches and the methods he employs. As a teacher he should love his profession and develop the right type of attitude and zeal towards the profession.

II. RATIONAL FOR THE TOOL

7 According to Jangira N.K and Ajit Singh 1982,

“Teaching can be analysed in terms of teacher behaviour at least at three levels namely component-teaching skills, component-teaching behaviour comprising the component skill and atomistic teaching behaviours.” (p.14 &15.)
Teaching involves interaction. Teaching will become more effective if teachers stimulate and motivate learners and guide them to develop their capabilities, skills, attitudes, and knowledge. The National Policy on education-stressed in the in-service teacher education package the following dimensions namely,

i. Education for equality

ii. Universalisation of elementary education.

iii. Common structure of education


v. Minimum level of learning.

vi. Child centered education.

vii. Value education.

viii. Evaluation process

ix. Provision for facilities.

x. Community involvement.

xi. Teacher and teacher education.

Based on these dimensions the investigator selects the following areas for investigation

i. Academic activities

ii. Co-curricular activities

iii. Provision for academic activities

iv. Provision for co-curricular activities

v. Community activities

vi. Value education

vii. Equal opportunities in education.
Fig. No: 1 Components of Professional Involvement of Teacher.

- **Professional Involvement**
  - Academic Activities
  - Co-curricular Activities
  - Provision for Academic Activities
  - Provision for Co-curricular Activities
  - Community Activities
  - Value Education
  - Knowledge about Equal Opportunities in Education
For each dimension some themes are chosen by the investigator:

**I. Academic activities:**

1. Aims of primary education
2. Child-centered approach
3. Activity-based method
4. Primary education according to new education policy
5. Difficulties in achieving universalisation of primary education
6. Achievement in qualitative improvement in primary education
7. Feelings of primary teachers
8. Qualities a primary school teacher possesses
9. Remedial teaching
10. Using riddles during teaching
11. Teaching Languages
12. Teaching Poetry
13. Teaching Mathematics
14. Profound knowledge of physical, natural and social sciences
15. Teaching Life science
16. Imparting knowledge of life sciences to the students
17. Teaching Physical science
18. Teaching Social science
19. Values of teaching of social science
20. Environment approach
21. Idea about content
22. Liking of primary children
23. Simulation
24. Role play
25. Effective and interest of children
26. Joyful learning
27. Uses of Evaluation
28. Internal and continuous evaluation
29. Responsibilities of teachers.
2. Co-curricular activities:

1. Importance of co-curricular activities
2. Purpose of including work experience in co-curricular activities
3. Physical strength and team spirit
4. Importance of group activity
5. Committee system
6. Playground facilities
7. Facilities provided for sports/games
8. Art activities practiced in schools
9. Exhibitions
10. Extra curricular activities
11. Field trips/educational tours
12. Useful of field trips

3. Provision for academic activities:

1. Building facilities
2. Availability of books
3. Use of children’s encyclopedia
4. Effectiveness of teaching science
5. Aptitudes of science teachers
6. Facilities for learning mathematics
7. Aids used for teaching social studies
8. Maintenance of school campus
9. Training for the teachers
10. School complex scheme
11. Effectiveness of in-service training
12. Materials needed for art-centered activities

4. Provision for co-curricular activities:

1. Operation Black Board
2. Availability of learning related play materials
3. Availability of equipments related to games
4. Availability of musical instruments
5. **Community activities:**

1. Importance of community activities
2. Teacher working with community
3. Expectation of community
4. Community related performance
5. Steps for school improvement by the community
6. Mobilizing community resource

6. **Value education:**

1. Qualities to be inculcated in children
2. Aesthetic perception
3. Importance of value education in school curriculum
4. The core elements will cut across subject areas
5. Importance of general truths
6. Opinion about moral instruction
7. The qualities to be possessed by students.

7. **Equalization of educational opportunities:**

1. Educationally disadvantaged groups
2. Teachers' role in equalization of educational opportunities
3. Possibilities of educational opportunities
4. Importance of girls' education
5. Girl dropouts
6. Government role in girls' education
7. Steps still to be taken in girls' education
8. Teachers' role in women education.

**III. PREPARATION OF THE DRAFT TOOL**

Having thus identified the items related to the characteristics of each one of the seven dimensions, the investigator proceeded to prepare the items for the draft tool. The investigator identified 29 items relevant for academic activities, 12 items relevant for co-curricular activities, 12 items relevant for provision for academic activities, 4 items
relevant for provision for co-curricular activities, 8 items relevant for community activities, 7 items relevant for value education and 8 items relevant for knowledge about equal opportunities in education. Some statements are given under each item to assess the degree of professional involvement of primary school teachers.

DRAFT TOOL

TEACHER PROFESSIONAL INVOLVEMENT INVENTORY

Instruction:

The inventory consists of 80 items. Under each five or six responses are given. Read the items carefully and tick (√) the possible responses suitable for you. Kindly answer all the items given.

1. Aim of primary education is
   a. Developing confidence in the students to tackle problems
   b. Drawing out the inherent powers of the child.
   c. All round development of the powers of the child.
   d. Development of the body, mind and spirit of the child.
   e. Enabling the child to play his part justly, skill fully and with dignity.
   f. Differentiate the good from bad, the true from false etc.
   g. Improving quality in education.

2. Child-centered approach in primary education is the best method, because
   a. It allows the first generation learners to set their own pace.
   b. It gives supplementary remedial instruction.
   c. It increases the component of cognitive learning.
   d. It organizes skills through practice.
   e. It enables the child to acquire creative thinking and activities.
   f. It provides education for all.
   g. The child has more freedom to do what it likes.

3. Teaching through activity is the best method, because
   a. It develops the aptitude for self-learning amongst pupils.
   b. It develops problem-solving skills.
   c. It develops inquisitiveness and creativity of the child.
d. It develops self-learning involving acquisition of knowledge through observation

e. It stimulates curiosity and independent thinking.

f. It encourages children to produce useful things.

g. It develops confidence in children.

h. It gives meaning to what is learnt.

4. **Primary education according to New Educational Policy is**

a. An index of the general, social economic development of the country.

b. Helping children to shape themselves and the future of the nation.

c. Teacher in an educational institution provides effective teaching-learning experience.

d. Emphasis on improving the quality of education.

e. Teacher association should serve as a guide for professional conduct.

f. Involvement of teachers in social service.

g. Qualitative improvement of education.

5. **Difficulties in achieving Universalisation of primary education**

a. Illiteracy of the parents.

b. Poverty in family.

c. Unattractive curriculum and school climate.

d. Lack of aptitude towards learning.

e. Discouraging surroundings.

6. **Achievement in qualitative improvement in primary education is due to,**

a. The development of the innate abilities of the child.

b. Construction of proper tools for evaluation.

c. Acceptance of the modern trends in the field of education.

d. Deep knowledge of content and content enrichment.

e. Deep knowledge and objective of different subjects.

7. **Feelings of primary teachers are,**

a. Rigid and inappropriate timetables.

b. Subjects are not according to local needs.

c. Course of study is vague.

d. Content of subjects is vast.

e. Periods for different subjects are not evenly distributed.

8. **Qualities a primary school teacher should possess are / Teacher in a school,**

a. Should be very strict.

b. Should deeply concern about every child’s growth and development
c. Should strive for the healthy living of pupils.
d. Should be generous and patient.
e. Should be committed and self-disciplined.

9. For remedial teaching.
   a. Teacher should change his methodology / approach
   b. Peer group activity must be encouraged.
   c. Self-learning opportunities must be given.
   d. Individual attention to each child should be given.
   e. Create mixed grade / multigrade situation.

10. Reason for using riddles during teaching,
    a. Interesting to children.
    b. Useful in vocabulary building.
    c. Useful in creative thinking
    d. Useful in divergent and convergent thinking.
    e. Useful for group studying.

11. Teaching language should help,
    a. Develop abilities to communicate.
    b. Understand and make use of spoken and written communication.
    c. Develop reading readiness skills.
    d. In vocabulary skills, word-analysis skills and word- recognition skills.
    e. Develop language arts including hand writing, grammar and spelling skills.

12. In teaching poetry, importance is given to,
    a. Rhythm.
    b. Recitation with gesture and actions.
    c. Memorization.
    d. Rise and fall of tones.
    e. Understanding meanings.

13. Teaching mathematics should help,
    a. Develop the ability of the students to express their thoughts clearly, accurately and precisely.
    b. Enable them to systematically organize and interpret the data given.
    c. Help the students to reach correct conclusions common to all by taking recourse to accurate and logical reasoning.
    d. Inculcate the capacity to analyse the problems discovering fundamental relationship between them.
e. Help the students to develop the power of original thinking and investigation.
f. Enable the students to accurately generalize special concept.

14. Profound knowledge of physical, natural and social sciences can be acquired mostly through,
   a. Observation.
   b. Self study.
   c. Experiments.
   d. Field trips.
   e. Studying various books.

15. Teaching of life science at primary level should,
   a. Arouse and maintain interest in nature and physical environment.
   b. Arouse love for nature and the habit of conserving nature and natural resources.
   c. Inculcate habit of observation, exploration, classification and systematic way of thinking.
   d. Develop manipulative powers and creative and inventive faculties.
   e. Inculcate habit of healthful living.

16. In imparting knowledge of life sciences to the students it is expected that they acquire the knowledge of,
   a. Natural phenomenon.
   b. Modern inventions of science.
   c. Manipulation of nature by man.
   d. Environment.

17. Teaching of physical science should help,
   a. Acquire the scientific knowledge helping pupils better understand the environment through numerous phenomena.
   b. In making the pupils understand the application of science in every day life.
   c. To remove superstitions and false believes from the minds of the pupils.
   d. The pupils to follow and interpret intelligently the scientific news and literature, which they come across in their day-to-day living.
   e. Pupils a lot to face new challenges intelligently and boldly.
   f. Scientific concepts and formulae.

18. Teaching of social science should,
   a. Enrich and develop the lives of pupils with their environment.
   b. Acquire knowledge and understanding.
   c. Train the desirable pattern of conduct.
d. Develop of right attitudes

e. Strengthen National and International integration.

19. Values of Teaching social science are,
   a. Knowledge with experience.
   b. Competence in tackling problems.
   c. Training in co-operation.
   d. Adjustability and flexibility.
   e. Development of the power of thinking and reasoning.

20. Environmental approach in the primary stage is important because,
   a. It develops in the pupils an awareness and understanding of their natural and social environment.
   b. It will give pupils opportunities to interact with environment.
   c. Competencies in environmental science can be easily achieved by this approach.
   d. It leads to integrated learning which suits the growth level of pupils at this stage.
   e. To Change the products the available in the surrounding areas where they are living.

21. The content (Text material) included at present is,
   a. According to the age and the grasping power of children.
   b. Suitable to achieve the required competencies.
   c. Modified according to the developments of different fields.
   d. Based on child-centered approach.
   e. Developing the various competencies of child.

22. Primary school children mostly like
   a. To play with their classmates.
   b. To be free with their teachers.
   c. To have fun in the class and play ground.
   d. To express their ideas.
   e. If the school surrounding is clean and bright.

23. Simulation is a desirable process in teaching learning situation, because
   a. Simulation is the nearest approach to the original situation.
   b. Students will have involvement in it.
   c. Observers are brought mentally to the actual place of occurrence of the matter related.
   d. Simulation increases attention and understanding.

24. Role-play is an important technique in primary education programme, because
   a. It gives meaning to the learner.
   b. It gives involvement in the role.
c. Students learn effectively.

d. It fore tells the future profession.

25. Children’s learning will be effective and interesting.
   a. If children are taught individually.
   b. If small group learning is permitted.
   c. If the small group consists of children of different ability and levels.
   d. If play way methods are adopted.
   e. If Children are allowed to interact among themselves.

   a. Creative approach.
   b. Play way techniques.
   c. Dance and music.
   d. Conducting quiz programme.
   e. Telling stories by teachers related to the content.

27. Evaluation is used for,
   a. Identifying the achievement of competences in students.
   b. For promotion purposes.
   c. Judging teachers concern over the students.
   d. Threatening the students and making them obey.
   e. Differentiating gifted students from slow learners.
   f. For remedial measures.

28. Evaluation should be internal and continuous, because
   a. For assessing attitudes and interests of students.
   b. Evaluation has to be adjusted to their previous experience.
   c. By making it possible for children to experience frequent successes.
   d. Continuously checking whether the expected levels of learning have been attained.
   e. Concerned with all aspects of pupils growth.

29. Teachers are responsible for,
   a. Good achievements of students.
   b. Poor achievements of students.
   c. Improving quality of life.
   d. Stream lining the student’s behaviour.
   e. improving study habits.
II. Co-curricular activities.

30. Co-curricular activities are important because they
   a. Provide ample scope for incidental learning.
   b. Help to pick up emotional maturity and psychomotor skills
   c. Help to build some kind of a balance among various developmental aspects of the child's personality
   d. Develop an increased amount of motivation among pupils for their active participation.

31. The purpose of including work experience in curricular activities is,
   a. Giving the future citizens a keen sense of personal worth.
   b. Increasing dignity and efficiency.
   c. Strengthening in them the desire for self-improvement and social service.
   d. Helping them understand difficult concepts in core subjects.
   e. Earning money after school education is over.
   f. Utilizing leisure time.

32. Physical strength and team spirit can be well developed through,
   b. Work experience.
   c. Teamwork.
   d. Yoga.
   e. Pyramids.
   f. Rhythmic movements.

33. Group activity is important because, it
   a. Develops interpersonal skills.
   b. Increases problem-solving ability.
   c. Improves oral communication skills.
   d. Develop critical thinking.
   e. Helps in activity preparations.

34. Committee systems follow in your school
   a. Cleanliness.
   b. Drinking water.
   c. Display board.
   d. Gardening.

35. Playground facilities in your school
   a. [1]
   b. [2]
c. More than 2.

36. Your institution provides facilities for conducting sports / games, such as
   a. Relays.
   b. Volley ball
   c. Foot ball
   d. Ring
   e. High jump.

37. Put tick mark against the art activities you practice in your school.
   a. Puppet shows
   b. Folk art performances.
   c. Creative drawing and painting exercises.
   d. Songs practice.
   e. Dancing.
   f. Making clay models.

38. Exhibitions are arranged in schools.
   a. Every year.
   b. Once in two years.
   c. Never.

39. Tick the activities you under take in your school.
   a. Craft centered activities.
   b. Campus cleaning.
   c. Student’s assembly.
   d. Gardening.
   e. Model making.

40. Field trip / educational tour in your school for
   a. 1 day
   b. 2 days
   c. 3 days
   d. More than three days.

41. Field trips are useful to,
   a. Get first hand experience.
   b. Clear the misconception of ideas.
   c. Develop co-operation.
   d. Know interest, habits, of the people in the society.
   e. Get awareness about nature.
III. Provision for Academic Activities.

42. The school has not good buildings due to
   a. Lack of government fund
   b. Lack of management / parent teacher association.
   c. Lack of interest among staff.

43. Put tick mark for the availability of books.

   Textbooks. Handbooks
   a. Tamil        Tamil
   b. English      English
   c. Mathematics  Mathematics
   d. Science      Science
   e. Environment / Environment /
      Social science Social science

44. Children's encyclopedia is used in primary school to
   a. Develop word power.
   b. Helpful to know root words.
   c. Can lead them towards self-study.
   d. Widen the knowledge in different fields.

45. In order to teach science effectively,
   a. Field trip is conducted.
   b. Simple experiments are given by learning by doing.
   c. Self-learning is provided.
   d. Learning through immediate surroundings is emphasized.
   e. Child is expected to develop certain concepts, skills, and attitudes.

46. Science teachers should have the aptitude towards,
   a. Preparation of two and three-dimensional teaching aids.
   b. Collection of models and real things.
   c. Doing simple experiments.
   d. Establishing scientific facts.

47. To facilitate learning of mathematics or to make learning more permanent,
   a. Real things are used.
   b. Teaching aids related to mathematics are used.
   c. Life oriented problems are given.
   d. Drill for mastery of skills is to be used.
e. Teachers are equipped with the skill of using materials in the teaching learning process.

48. For teaching social studies,
   a. Maps are essential.
   b. Globe should be used.
   c. Field study is important.
   d. Knowledge of children's literature in the form of biographies and stories.
   e. Teacher should provide activities like quiz, dramatization of an event.

49. To maintain school campus neatly and properly,
   a. Financial support is essential.
   b. Developing awareness among children about the important of neatness.
   c. Students should be trained to clean the campus.
   d. Developing group interactive behaviour among children for campus cleaning.

50. Teachers should have training in
   a. Puppet show
   b. Using musical instruments
   c. Preparing teaching aids out of waste materials
   d. Model making
   e. Team teaching

51. School complex scheme is good because it is
   a. Able to solve the day to day professional problems
   b. Able to make teaching effective by facilitating the exchange of ideas
   c. Helpful in evolving academic leadership
   d. Possible to arrange exhibitions on science SUPW etc.
   e. Encouraging teachers meeting, work shops, demonstration of lessons to raise the quality of education.

52. In-service training is effective because it
   a. Promotes qualitative improvements in primary education
   b. Motivates self-directed learning for professional enrichment.
   c. Trains teachers to prepare improvised aids
   d. Has been corroborated and strengthened by the findings of several experimental studies.
   e. Is useful to renew and upgrade when the curriculum change

53. In order to do art centred activities the materials need are
   a. Clay and sand
   b. Color papers and color magazines
c. Empty boxes and tailor cuttings
d. Flowers and leaves
e. Rags and fibers

IV. Provision for Co-curricular activities

54. Operation black board is considered significant because it
   a. Aims at the substantial improvement in facilities in primary education
   b. Provides at least two reasonably large rooms that are usable in all weathers.
   c. Makes available essential teaching and learning materials like science kit, tool kit, mini toolkit, and mathematics kit.
   d. Recommends for the provision of separate toilets for boys and girls.
   e. Provides for at least two teachers, one of them a woman in every primary school.

55. Learning related play materials, which should be available in a school, are
   a. Wisdom blocks
   b. Bird and animal puzzles
   c. Toys
   d. Beads
   e. Pictures

56. Equipments related to games, which should be available, are
   a. Skipping rope
   b. Balls - Foot ball, volley ball, rubber balls
   c. Air pump
   d. Ring
   e. Swing rope with tyre.

57. Musical instruments, which should be available in the schools are
   a. Dholak or Tabla
   b. Harmonium
   c. Manjira

V. Community activities

58. Importance of community activities in primary education is
   a. Planning and organization of school activities
   b. Conducting functions in schools
   c. Help in providing physical facilities and maintenance of school buildings
   d. Help in maintaining a congenial atmosphere in the school.
   e. Help in enhancing regular attendance of children and their retention.
59. Child should be permitted to take part in community activities because
   a. It is the right of the child
   b. It socializes the child
   c. It makes the child understand its responsibility in society
   d. Every child likes it
   e. It takes the child in the right way

60. Teachers working with the community will
   a. Identify themselves with the community
   b. Appreciate the problems of the community, to the community will bring them nearer
   c. Give positive suggestion to the parents about the child, which will be appreciated by both
   d. Get the support of the elder members of the community, which is useful.
   e. Attend social, religious and other functions organized by the local community.
   f. Enable them to establish rapport with the community
   g. Make them a guide and helper to the community

61. Community expect a teacher to be,
   a. An agent of social transformation
   b. Facilitator of learning
   c. A model to children
   d. Embodiment of good qualities
   e. A guide to society
   f. A taskmaster
   g. Punishment giver

62. Community related performances of teachers
   a. Are essential for effective functioning of the school
   b. Provide various resources, personal as well as material continuously
   c. Help teachers to contribute in constructive work undertaken by the community
   d. Result in the two-way co-operation between the teachers and the community, which may go a long way in developing a strong link between performance and competency

63. Steps could be followed by teachers for school improvement with the help of community by
   a. Holding regular meetings with parents / guardians to develop a better understanding
   b. Meeting opinion-makers of the community
   c. Inviting parents/guardians to school to see its regular programmes
   d. Making parents aware of the incentives schemes available for those attending school
64. Important aspects in which a school can help the community are,
   a. A center for learning every one in the community
   b. Meetings and functions can be organized in the school
   c. Providing playground and library facilities.
   d. Parents may be invited to acknowledge the performance of their children in school functions.

65. Mobilizing community resources for school improvement is possible through the survey of,
   a. Socio-economic status of the community.
   b. Composition of social schools
   c. Human resources.
   d. Village functionaries
   e. Reasons for non-attendance of students.

VI. Value Education

66. Qualities to be inculcated in children are
   a. Co-operative behaviour with in the family
   b. Co-operative behaviour with the school community
   c. To be always honest and simple
   d. To respect others feelings and ideas
   e. To develop tolerance towards cost, religion and languages

67. Aesthetic perception should be developed in children so that
   a. A sense of love towards nature can be developed
   b. Creativity will be developed
   c. The child can appreciate literary works
   d. The mind of the child may be broadened
   e. Religious impulses are respected.

68. Importance of value education in school curriculum is
   a. To develop the social, moral, aesthetic and spiritual sides of child’s personality.
   b. To bring about desirable changes of behaviour in the learner.
   c. To develop creativity, commitment to human values, social justice, national cohesions and scientific temper.
   d. To develop awareness to protect the environment.
69. The core-elements, which will cut across subject areas, will be designed to promote the values such as
   a. Our common cultural heritage
   b. Egalitarianism, Democracy and Socialism
   c. Equality of the sexes
   d. Protection of the environment
   e. Removal of social barriers
   f. Observance of the small family norm
   g. Scientific temper

70. The general truths taught through value education are
   a. Developing a sensitivity to values
   b. Ability to choose the right values in accordance with one's conception of the highest ideals of life
   c. Influenced by a complex network of environmental factors-home, peer group and community.
   d. It calls in to play all human faculties- knowing, feeling and doing.
   e. It should match the developmental stage of the individual.

71. Teacher's opinion about moral instruction is,
   a. It is none other than religious instruction
   b. It should be taught separately
   c. Ethical teachings of religion form a part of moral instruction
   d. It is useful to blend and teach moral instructions along with other subjects.

72. In order to be a good citizen the students should have the following qualities,
   a. Scientific attitude
   b. Saving habit
   c. Patriotism
   d. Love towards others mother tongue and religion
   e. Co-operative tendency
   f. Friendliness
   g. Fearlessness

VII. Equalization of education

73. Educationally disadvantaged groups are
   a. Schedule castes and schedule tribes
   b. Children in slum areas
c. Children in remote areas
d. Girls belonging to poor families

74. Teachers’ role in equalization of educational opportunities
   a. Provides and ensures non-discrimination between the children of SC, ST and other communities
   b. By avoiding the use of cast names during roll call or gathering information about them
   c. Teachers should lead all the children equally to participate in the curricular and co-curricular activities
   d. Frequent meetings between teachers and parents of deprived groups and motivating them for the education of girls
   e. Teachers should suggest to illiterate parents the advantages gained by attending functional literacy classes

75. Educational opportunities are possible by,
   a. Teachers conducting lessons on healthy habits, personal and environmental cleanliness and eating habits
   b. Helping in improving the pronunciation of words
   c. Introducing initial concepts of mathematics
   d. The school providing some remedial education programmes for SC and ST students
   e. Provision of outdoor games and activities, co-curricular activities also helps in the retention

76. Girls education is important because,
   a. They can have confidence and self-reliance
   b. They can also educate their children / their family
   c. They can understand the merits of nuclear family
   d. They can use modern conveniences to make life happier
   e. Gender equality is possible only through girls’ education

77. More girls drop out of school than boys, because
   a. Parents still considered girls a burden on the family
   b. Girls are still considered items of property which can be disposed of at the will of men
   c. Some religions and castes come in the way of educating girls
   d. Girls are still considered inferior to the opposite sex
   e. In some families girls are compelled to work and earn for the family

78. Government role in girls’ education
   a. The national educational system will play a positive role in investing women with power
   b. Women’s studies will be promoted as part of various courses and educational institutions
c. Elementary schools will be provided with special support services and effective monitoring
d. In primary schools 50% of teachers should be women
e. In some areas girls schools should be started

79. Steps still to be taken for girls’ education are,
   a. Flexible school timings to suit girls
   b. Availability of alternate schooling facilities
   c. Providing educational incentives
   d. Assuring incentives for schools with high enrollment of girls

80. Teachers’ role in women education
   a. Differential treatment is given to girls to be removed
   b. Girls should be allowed to act as class leaders/group leaders
   c. Healthy competition for the development of personality of both sexes
   d. Treat both boys and girls to contribute in curricular and co-curricular activities
   e. Locate the reasons for girls’ dropout and educate them to continue the study.

IV. SCROING PROCEDURE

The respondents were instructed to complete, each one of the statements by choosing maximum possible responses by putting a tick (✓) against the responses, which were selected. The score for each response was awarded 1 mark.

V. ESTABLISHING VALIDITY

V.A. What is validity

8Lindquist (1951) has defined validity
   “As the accuracy with which it measures that which is intended to measure or as the degree to which it approaches infallibility in measuring what it purports to measure.”[p.213].

9According to Norman E. Gronlund and Robert L. Linn (1990),
   “Validity refers to the appropriateness of the interpretation of the results of a test or evaluation instrument for a given group of individuals, and not to the instrument itself” [p.48].
V.B. Theoretical validity

The investigator after having gone through a range of studies related to professional involvements (Mohapatra.J.K, 1998; Govinda.R, and Varghese .N.V 1991, Mrs.ChopraR.K. 2000; Gupta, U.1981; Ram Mohan Babu, V.1992) and National Policy on Education - Implication for Teachers (Programme of Mass Orientation for School Teachers In service Teacher Education Package Vol I : For Primary School Teachers 1988.) formalized that professional involvement was the sum total of inside and outside performance of the teachers. Then the investigator making use of these literatures and books identified the relevant characteristics about academic activities, co-curricular activities, provision for academic and co-curricular activities, community activities, value education and equal opportunity in education.

Then the investigator converted the distinct characters of each dimensions into respective themes to form the basis for structuring items, which would reveal the presence or absence of teacher professional involvement in the case of the target teacher. It enabled the investigator to structure valid items capable of assessing professional involvement of teachers under each dimension. Therefore, it may be said that the prepared draft tool was theoretically valid.

V.C. Content validity

The Teacher Professional Involvement Inventory was given to the following experts in the field of education.

i. Mr. S.Vallinayagam, Principal, D.V.D Training Institute, Kottar, Nagercoil.

ii. Mr. R. Daniel Swami Nathan, Senior Lecturer, DIET, Theerur.
iii. Mr. A. Subraminia Pillai, Senior Lecturer, DIET, Theerur

iv. Mr. A. Renga Swami, Lecturer, DIET, Theerur.

Based on their suggestions some items were modified. Thus, the content validity was established.

**V.D. Item Validity**

For establishing the validity of each one of the dimensions for assessing the impact of the primary teachers a pilot study was undertaken.

**Pilot Study:**

For the purpose of the pilot study, the multiple copies of the draft tool were taken. Then, the investigator randomly took a sample of 64 primary school teachers from the schools as detailed in the table.

**Table- 4.1**

*Distribution of the sample for the pilot study.*

<table>
<thead>
<tr>
<th>S. No</th>
<th>Name of the school</th>
<th>Nature of school</th>
<th>Locality of the school</th>
<th>No. of teachers</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Lutheran Primary School, Ganesapuram</td>
<td>Aided</td>
<td>Urban</td>
<td>8</td>
</tr>
<tr>
<td>2</td>
<td>Govt. Primary School, Allenkottai</td>
<td>Government</td>
<td>Rural</td>
<td>8</td>
</tr>
<tr>
<td>3</td>
<td>St. Mary's Middle School, Pillaithoppu</td>
<td>Aided</td>
<td>Rural</td>
<td>8</td>
</tr>
<tr>
<td>4</td>
<td>Govt. Middle School, Krishnankoil</td>
<td>Government</td>
<td>Urban</td>
<td>8</td>
</tr>
<tr>
<td>5</td>
<td>Govt. High School, Ezaharam, Nagercoil</td>
<td>Government</td>
<td>Urban</td>
<td>8</td>
</tr>
<tr>
<td>6</td>
<td>St. Michel High School, Rajakkamangalam Thurai</td>
<td>Aided</td>
<td>Rural</td>
<td>8</td>
</tr>
<tr>
<td>7</td>
<td>Govt. Higher Secondary School, Ammandivilai</td>
<td>Government</td>
<td>Rural</td>
<td>8</td>
</tr>
<tr>
<td>8</td>
<td>D.V.D. Higher Secondary School, Nagercoil</td>
<td>Aided</td>
<td>Urban</td>
<td>8</td>
</tr>
</tbody>
</table>
Thereafter, the tool was administered to the sample of teachers personally by the investigator. After the administration of the tool, the responses were scored on the basis of the scoring procedure formed. Then the data thus collected were subjected to suitable statistical analysis for establishing the validity of the items.

Frequency can be used to evaluate and calculate the responses by percentage. From the above evaluation the following items are having low score (percentage). So they should be deleted in the final tool.

**Table – 4.2**

*Deleted Items of the tool*

<table>
<thead>
<tr>
<th>Q.No</th>
<th>Deleted item</th>
<th>Frequency (No of responses)</th>
<th>Percentage value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>f</td>
<td>2</td>
<td>3.3</td>
</tr>
<tr>
<td>2</td>
<td>f</td>
<td>3</td>
<td>5.0</td>
</tr>
<tr>
<td></td>
<td>f</td>
<td>3</td>
<td>3.3</td>
</tr>
<tr>
<td>3</td>
<td>a</td>
<td>4</td>
<td>6.6</td>
</tr>
<tr>
<td></td>
<td>g</td>
<td>5</td>
<td>8.3</td>
</tr>
<tr>
<td></td>
<td>h</td>
<td>4</td>
<td>6.6</td>
</tr>
<tr>
<td>4</td>
<td>f</td>
<td>1</td>
<td>1.6</td>
</tr>
<tr>
<td>5</td>
<td>e</td>
<td>2</td>
<td>3.3</td>
</tr>
<tr>
<td>8</td>
<td>a</td>
<td>1</td>
<td>1.6</td>
</tr>
<tr>
<td>12</td>
<td>e</td>
<td>3</td>
<td>5.0</td>
</tr>
<tr>
<td>13</td>
<td>f</td>
<td>2</td>
<td>3.3</td>
</tr>
<tr>
<td>14</td>
<td>b</td>
<td>5</td>
<td>8.3</td>
</tr>
<tr>
<td>29</td>
<td>all</td>
<td>3</td>
<td>5.0</td>
</tr>
<tr>
<td>33</td>
<td>all</td>
<td>2</td>
<td>3.3</td>
</tr>
<tr>
<td>58</td>
<td>all</td>
<td>4</td>
<td>6.6</td>
</tr>
<tr>
<td>59</td>
<td>a</td>
<td>1</td>
<td>1.6</td>
</tr>
<tr>
<td>60</td>
<td>e</td>
<td>3</td>
<td>5.0</td>
</tr>
<tr>
<td>68</td>
<td>g</td>
<td>2</td>
<td>3.3</td>
</tr>
<tr>
<td>71</td>
<td>a</td>
<td>4</td>
<td>6.6</td>
</tr>
<tr>
<td>72</td>
<td>all</td>
<td>5</td>
<td>8.3</td>
</tr>
<tr>
<td>74</td>
<td>all</td>
<td>4</td>
<td>6.6</td>
</tr>
</tbody>
</table>
VI. ESTABLISHING RELIABILITY

According to Anastasi (1968) reliability refers to

"The consistency of scores obtained by the same individuals when re-examined with test on different occasions, or with different sets of equivalent items, or under other variable examining conditions."[p.55].

The scores of the sixty-four teachers on Teacher Professional Involvement Inventory were retained for the purpose of computing reliability. It was considered as the first administration and then after an interval of fifteen days to the same set, the Teacher Professional Involvement Inventory (TPII) was administered second time. The responses were scored and the correlation co-efficient was computed dimension wise and for the complete tool.

Table – 4.3

<table>
<thead>
<tr>
<th>Sl.No</th>
<th>Category</th>
<th>Correlation value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Academic activities</td>
<td>0.96</td>
</tr>
<tr>
<td>2.</td>
<td>Co-curricular activities</td>
<td>0.85</td>
</tr>
<tr>
<td>3.</td>
<td>Provision for academic activities</td>
<td>0.93</td>
</tr>
<tr>
<td>4.</td>
<td>Provision for co-curricular activities</td>
<td>0.75</td>
</tr>
<tr>
<td>5.</td>
<td>Community activities</td>
<td>0.93</td>
</tr>
<tr>
<td>6.</td>
<td>Value Education</td>
<td>0.92</td>
</tr>
<tr>
<td>7.</td>
<td>Equal opportunities in education</td>
<td>0.87</td>
</tr>
</tbody>
</table>

S - means Significant

The table shows that the tool is reliable enough for data collection.
TOOL - II

1. CHANGE PRONENESS INVENTORY

The meaning of Change proneness is largely hidden in the two words themselves. Proneness means inclination or readiness or likelihood. Thus change proneness means the personal commitment of an individual towards change manifested by his open-mindedness, flexibility, efforts to know of innovations and experimental attitude.

Innovations are the basis of change. An attempt to adopt an innovation from an external source passes through three basic stages, namely the installation, the implementation and the institutionalization.

Mukhopadhyay (1981) made an attempt to construct a tool to measure change proneness after locating and analyzing the available tools in this connection. The search in the literature revealed only one tool in existence that could measure the change proneness of teachers and principals- the tool is known as Miller’s Change proneness inventory.

In order to develop the inventory it was essential that the personal commitment be analyzed to further smaller components. To specify the components Mukhopadhyay sought the help of experts comprising school teachers, researchers and experts in research innovation and change process to define a change-prone teacher. After anglicizing the definitions, it was found that a change-prone teacher is open minded, eager to know, ready to make efforts, reviews his own actions periodically, communicates ideas to others and has experimental attitude.

After these specifications were made, items in question form on each component were developed separately. The total number of items developed in the first draft was
54, common to both teachers and principals, and 19 on principal’s administrative aspect. The experts consulted earlier to see whether the items could really measure the components they were meant for subjected these items to scrutinization. After the scrutiny the number of items left for the final draft was 33 common to teachers and principals and 12 for principal’s administrative behaviour. Each item was provided with a five-point scale where each question could be answered from “Always” to “Never” through frequently, sometimes and seldom. This draft was tried out with a small sample of ten teachers. Minor modifications of language of items were made on the basis of the tryout and the final draft was ready.

The investigator used Mukhopadhyay change proneness inventory for his investigation. This inventory comprises 45 statements. Out of there 45 statements, 33 are both for teachers and principals; and 12 for principals administrative behavior. All these items deal with innovations in all fields. The principal’s items deal with innovations with respect to administrative behaviour.

In the inventory each item is provided with a five-point scale where each question can be answered from “Always” to “Never”. For the response “Always”, the maximum of 5 marks, and for the response “Never” the minimum of 1 mark are given.

II. Validity and Reliability of the Inventory:

The questionnaire was subjected to content validity and face validity by giving this to the experts.

The reliability of the tool was established by Test- retest method. The sample of 64 primary school teachers were selected at random and administered the translated tool with an interval of fifteen days in between. Then the responses were scored and the
obtained two sets of scores were used for computing correlation co-efficient. The correlation co-efficient was 0.764, which is significant at 0.05 level.

**TOOL—III**

**I.SELF- CONCEPT INVENTORY**

According to Brown 1998,

"The self concept is a dynamic mental structure that motivates, interprets, organizes, mediates and regulates interpersonal and inter-personal behaviours and processes. The self-concept includes many components. Among them are your memories about yourself; beliefs about your traits, motives, values, and abilities; the ideal self that you would most like to become; the possible selves that you contemplate enacting; positive or negative evaluations of your self and beliefs about what others think of you." (p.574)

Traditionally the concept of the self has been emphasized for three reasons. First, our awareness of ourselves represents an important aspect of our phenomenological or subjective experience. Second, considerable research suggests that how we feel about ourselves influences our behaviour in many situations. Thirdly, the concept of the self is used to express the organized, integrated aspects of human personality functioning.

The self concept inventory entitled “The Way I Feel About Myself” used in this study are compiled by putting together important statements from ‘The Way I Feel About’ by Ellen.V.Piers and Dale.B.Harris (1965), the self-concept inventory developed by S.M.Moluri (1962), and the self-concept inventory developed by Jeline Davis (1962). The investigator changed many of the statements and added relevant data about teachers to study the influence of self-concept among them. There are 90 statements in the self-concept inventory consists of both positive and negative statements.

The nature of the items of self-concept inventory has been presented below


Table 4.4

<table>
<thead>
<tr>
<th>S.No</th>
<th>Nature of Items</th>
<th>Item Numbers</th>
<th>Score / Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Positive</td>
<td>1,2,3,6,7,8,9,10,11,12,13,16,18,19,20,21,23,28,34,37,39,41,44,45,46,48,50,51,54,57,58,59,60,64,67,68,69,72,74,75,76,79,82,83,85,86,87,89,90</td>
<td>1 Score for the response ‘yes’</td>
</tr>
<tr>
<td></td>
<td>Negative</td>
<td>4,5,14,15,17,22,24,25,26,27,29,30,31,32,35,36,38,40,42,43,47,49,52,53,55,56,61,62,63,65,66,70,71,73,77,78,80,81,84,88</td>
<td>1 Score for the response ‘No’</td>
</tr>
</tbody>
</table>

The scoring of the self-concept statements is as follows. The positive aspect with a ‘Yes’ and a negative aspect with a ‘No’ would each fetch one marks. Where as a positive aspect with a ‘No’ and negative aspect with a ‘Yes’ would each fetch zero mark.

II. Validity and Reliability of the Inventory:

The questionnaire was subjected to content validity and face validity by giving this to the experts.

The reliability of the tool was established by Test- retest method. The sample of 64 primary school teachers were selected at random and administered the translated tool with an interval of fifteen days in between. Then the responses were scored and the obtained two sets of scores were used for computing correlation co-efficient. The correlation co-efficient was 0.652, which is significant at 0.05 level.
TOOL - IV

I. ATTITUDE TOWARDS TEACHING INVENTORY

12 According to Sorenson (1977)

"An attitude is a particular feeling about something. It therefore involves a tendency
to behave in a certain way in situations which involve that something, whether
person, idea or object. It is partially rational and partially emotional and is acquired,
not inherent, in an individual". (p.593)

13 Allport (1954) defined attitude as,

"A mental and neutral state of readiness, organized through experience, extorting a
directive or dynamic influence upon the individual’s response to all objects and
situations with which it is related." (p.32)

Now attitudes are considered having three components thinking, feeling and
reacting. Most briefly defined the concept of attitude is "a like or a dislike that has
behavioral consequences. It can be thought of as consisting of three basic components: a
belief, an emotion and an action tendency.

The investigator used the scale attitude towards teaching profession prepared by
V.V.Katti and C.S.Banu. The scale consists of 40 statements with 5-point scale. The
scoring is Likert type summated ratings. A large number of multiple-choice type
statements usually with five alternatives such as strongly agree, agree, undecided,
disagree and strongly disagree concerning the object of attitude were collected by the
investigator. Such statements were administered to a group of subjects who responded
to each item by indicating which of the given five alternatives they agreed with. Every
responded item was scored with different weights. The weight ranged from 5 to 1. For
favourable statements a weight of 5 is given to ‘Strongly agree’, 4 to ‘Agree’ 3 to


'Undecided', 2 to 'Disagree', and 1 to 'Strongly disagree' and for the unfavourable statements the order of weights to be given was reversed so that 'Strongly agree' receives 1, 2 to 'Agree' 3 to 'Undecided', 4 to 'Disagree', and 5 to 'Strongly disagree'.

After the weight was given to items, a total score for each subject was found by adding the weights earned by him on each item. Thus his total score was obtained after the weights were summated over all the statements. Since a subject's response to each item may be considered as his rating of own attitudes on a 5-point scale and his total score is obtained after all these weights are summated, the method is known as the method of summated ratings.

The reliability coefficient of correlation under split-half method was found to be +0.76. Self-correlation of the scale in full length was found to be +0.96.

II. Validity and Reliability of the Inventory:

The questionnaire was subjected to content validity and face validity by giving this to the experts.

The reliability of the tool was established by Test-retest method. The sample of 64 primary school teachers were selected at random and administered the translated tool with an interval of fifteen days in between. Then the responses were scored and the obtained two sets of scores were used for computing correlation co-efficient. The correlation co-efficient was 0.629, which is significant at 0.05 level.

Tool: V

1. TEACHER ROLE PERCEPTION SCALE

The word 'teacher' seems to suggest that there is a person who can claim to know so much that he can guide others and actually tell in no uncertain terms what is
good for them, even if they think otherwise. Whatever the word may suggest, the role of a teacher is a much more modest one. A person is called a teacher because either by his avowed intention, or by the unusual opportunities he has had in the course of his life, or by character, he is in a position to perform three functions:

a. To create conditions favourable for others to learn.

b. To protect the learner against harmful frustrations he may encounter on his way to learning.

c. To transmit knowledge or the results of his experience to learners whenever he is sure that such knowledge will be properly understood by them.

Based on the approach of teaching there are three prototypes of teachers:

a) The Teacher- Compiler:

This group is made up of this teacher who has an analytical- synthetic mind, whose ability is grasp a lot of information and summarize what are grasped in a clear, systematic, orderly fashion. He is good at explaining, preparing notes and summaries, and writing books. He can make exquisite evaluations, after surveying a field of knowledge. His strength is clarity of thought and of diction. He is liked.

b) The Teacher- Counsellor:

The teacher whose main strength is his patience and ability to guide the limping student, to answer difficulties, to help the slow learner, to encourage the eager. He is a guide, and at times even a father. He is loved.

c) The Teacher- Inspirer:

The Inspiring teacher is a firebrand, restless mind with amazing intuitions. He knows the subject well; but he is far too often sorting things out in his mind to appear to
others orderly and consistent. His main strength, however, is that he can introduce old
topics in a new light, or open new vistas, or relate the seemingly disconnected topics
with ease and creative insights. **He is admired.**

It is learned from the above discussion that these aspects are followed in
teaching learning process. The investigator is more interested in classifying teachers
into the above heads. For this he used in his study, the questionnaire prepared and used
by Fr. Filella (1975), St.Xavier’s College, Bombay.

The questionnaire has 21 statements, among them - 2,3,7,8,10,15, and 17 measure
the perceptions of compilers. Items: 1,6,9,11,16,20, and 21 measure the perceptions of
counsellors and items: 4,5,12,13,14,18, and 19 measure the perception of Inspirers.

**Scoring:**

The respondent was asked to choose ‘7’ statements which were more characteristic
approach to teaching. Then the respondent was asked to choose again the most
characteristic statement among the seven statements. This is known as category 1, which
has ‘7’ scores. (SEVEN)

Then the respondent was asked to choose two statements, which were
considered as the second best characteristic approach to teaching, and it is known as
category 2, each statement has ‘6’ scores. (SIX)

Each item, in the remaining four items out of 7, has ‘5’ scores. (FIVE) Similarly
the respondent was asked to choose seven statements, which were the least
characteristic approach to teaching. Among these seven statements, the respondent was
instructed to choose the ‘least characteristic’ approach to teaching and it is known as
category ‘7’, which has only (one score). Again the respondent was asked to choose any ‘two’ statements which were considered as the ‘second least’ characteristic approach to teaching and known as category ‘6’ which are only ‘two’ scores. Then the remaining items in this group were known as category ‘5’ which has ‘three’ scores.

Finally the remaining seven statements were grouped together and each one was given four scores. As stated earlier, Fr. Filella developed this questionnaire and nothing was reported in his manual and so the questionnaire was subjected to content validity and face validity by giving this to the experts.

Test-retest method was adopted for testing the reliability coefficient of the questionnaire.

Compiler : \( r = 0.9618 \)

Counsellor : \( r = 0.9962 \)

Inspirer : \( r = 0.6036 \)

The reliability coefficient in these cases was high and there was correlation. Thus the validity and the reliability of the questionnaire were established.

II. Validity and Reliability of the Questionnaire:

The questionnaire was subjected to content validity and face validity by giving this to the experts. The reliability of the tool was established by Test-retest method. The sample of 64 primary school teachers was selected at random and administered the translated tool with an interval of fifteen days in between. Then the responses were scored and the obtained two sets of scores were used for computing correlation coefficient. The correlation coefficient was 0.764, which is significant at 0.05 levels.
Compiler : \( r = 0.618 \)

Counsellor : \( r = 0.734 \)

Inspirer : \( r = 0.936 \)

Having prepared the essential valid tools, the investigator worked out a design incorporating the dependent and independent variables with the other already available data collecting instruments; and the size and nature of the sample, on the basis of the global objectives and verifiable hypotheses.
REFERENCES


