CHAPTER III

Research Methodology and Data Collection

3.1 Introduction:

Man’s humanness finds its beautiful and holy realization in the education. The entire energy of human personality finds itself realized in the education. Education is a source of power that gives influential outlook to all the spheres of life gives them a solid foundation while inducing changes. Education is the only process that helps man in realizing his humanness and induces him to behave with other human beings as a true man. Human intelligence and soul find their upliftment though education.

School, is a temple of education. A teacher imparting education has to be dynamic, patient as well as kind hearted. A teacher should be committees to the mental make-up that today’s student will be a citizen for tomorrow and that he must assimilate with diverse elements of the society. He should mold the students by keeping it in mind that they are future pillars of the nation. It is the duty of a teacher to coordinate the activities to make our nation strong and progressive.

An education institute is an important center for fostering the emotional development of teacher. If environment available in an institute is positive its exerts good influences over the teacher and it helps in better development of the educational institute. If all the members and teachers in a educational institute share a report based on love, respect, affection every member and teacher would feel secure. If institutional environment is democracy oriented it helps in shaping up a better emotional intelligence.

It is seen that today education has made a student literati but not necessarily cultured. To correct this abnormally it is necessary that a teacher provides attention to a student’s emotional development through D.T.ed education.
3.2 Importance of Research.

In present research will be the benefit of all components of teaching learning. For personal development of knowledge intellect there can be tried different skills which affection teaching.

Pupil’s nature and thinking are modified by the medium of education. In which not only mistake for grantable because pupils future and his life is termed by education. Through this research. New condition, different age capacity and their comparison skill can be tried to arouse in together.

Emotional intellect is a part of teaching learning with this intellect it can be incised in persons life. Emotional intellect is important and usefully to duffel the aim of all physical mental emotional and spiritual level. Teacher should understand the pupils emotion and other skills in teaching learning process. That for firstly teacher should be capable in emotionally.

It is need to provide attention on pupils through academic education because it there is no development of emotion and if there is no control an emotional it effect on pupils and they sad on own self.

In education importance is given to quality and it is aim of all pupils on this point of view there is need of emotional intellect on nature principles them numerals quality.

We can express our emotions to anyone with emotional intellect. Who person have emotional intellect he realize how to laugh. He realizes the problem of other.

It in crises the well personality by containing the emotional intellectual study in curriculum.
It is must complimentary to develop pupil’s personality and teacher’s effective teaching by intellect and knowledge. For that emotional intellect is important to create effective teaching and input the human relationship.

3.3 Research Problem.

A study of Emotional Intelligence and their teaching effectiveness in D.T.Ed. college.

3.4 Variables of Research.

- Independent Variables.
  D.T.Ed. Teachers Emotional Intelligent

- Dependent Variables.
  Effective teaching education

3.5 Assumption of Research.

1. Investigation male and female teacher, Aided and unaided college, rural and urban D.T.Ed. college.
2. Comparison of male and female teacher, Aided and unaided college, rural and urban D.T.Ed. college.
3. Teaching effectiveness of male and female teacher, Aided and unaided college, rural and urban D.T.Ed. college.
4. Comparison teaching effectiveness of male and female teacher, Aided and unaided college, rural and urban D.T.Ed. college.
5. Tolerant compression of rural and urban, aided unaided, male and female D.T.Ed college teacher Emotional intelligence and his effectiveness teaching study.
3.6 Objective of Research.

1. Invention of true teacher’s emotional intelligent these teacher are of rural- city and grantable non -grantable graduate level.
2. Comparison of rural-city and grantable and non-grantable graduate teacher’s emotional intellect.
3. Invention of effective study of rural –city and grantable –non grantable graduate level teacher.
4. Comparison of effective study of rural-city and grantable non grantable graduate level teacher.
5. Tolerant compression of rural city and grantable –non-grantable graduate level teacher’s emotional intellect and his effective teaching study.

3.7 Hypothesis.

1. There is no significant differences between male and female teachers in their emotional intelligence.
2. These is no significant difference between rural and urban teachers score in their emotional intelligence
3. There is no significant differences between aided and unaided teachers in their emotional intelligences
4. There is no significant differences between male and female teacher teaching effectiveness in teachers education college.
5. There is no significant differences between rural and urban teachers in their teaching effectiveness
6. There is no significant differences between rural and urban teacher in their teaching effectiveness.
7. There is no significant co-relation between teachers emotional intelligence and teaching effectiveness in teacher education college. The apply superman a formula for examine the correlation its.

8. There is no significant co-relation between teachers emotional intelligence teaching effectiveness.

9. There is no significant co-relation between emotional intelligence and teaching effectiveness in rural areas.

10. There is no significant co-relation between teachers emotional intelligence and teaching effectiveness in urban areas.

11. There is no significant co-relation between teacher emotional intelligence and teaching effectiveness in aided teacher education college teachers.

12. There is no significant co-relation between teacher emotional intelligence and teaching effectiveness in unaided teachers education college.

3.8 Scope & limitation of Research.

In present research, researcher has thought about the college of Thana district and suburban Mumbai except other.

Research has been contained the grantable & non-grantable, Marathi colleges. There is no participation of grantable non-grantable residence, hostel, schools.

There is only the contain of Marathi medium colleges except Hindi, Urdu, Guajarati and English Medium.

3.9 Equipments of collation.

1. Emotional Intelligence measurement scale

2. Teaching effectiveness measurement scale
3.10 Types of Research:

Fundamental Research:

There are 3 types of research as fundamental Applied and Action research followed in the field of social science the use and advantage of these research for kind and the respected subjects problems at brad / big small and short level the various types of problems are show or included in the field of education at local school / college and big areas there for researcher investigator decided to take only one type for her/his present study.

1 – Fundamental Research.

Fundamental or basis research is very portal in the field of social science to do the deep study of selected problems at higher.

The Previously the basic research has used in a laboratory or other sterile environment sometimes with animals. The learning stats and condition may be establishing in the field of education and fin dent the factors are regents about its Example Condition and sitnalion for Childs learning to determine principles of reinforcement and their effect on learning.

The aim of research is to obtain and are the empirical data to formulate expound or evaluate theory it represents a rigorous and structured type or inlay sie the researcher carefully selected the samples in order to extend the fording beyond the Group stations and the develops theories by discovering proved generalities the main oysters of basic research. effectual aim is expand the frontiers of knowledge with ant regard to practical application the kindling may eventually apply to practical problems that have social value.

Progress in Educational practices has been related to progress in the discovery of general laws through psychological educational and sociological research.
Applied Research

The applied research use for solve the practical problems immediately According to traverse- applied research is cinder taken to solve an immediate practical probe, and goal to adding to scientific knowledge is secondary in this type of research researcher performed the relation to actual problem and under the conditions in which are found in practice the researcher solve their problem at the appetite level of complexity example – classroom teaching and learning Condition this approach is essential if the scientific changes in teaching practice are to be effected it should be pointed ant that applied research also used the scientific method of enquiry certainly the application are made from theory to help in the salutation of practical problems. We may be attempt to apply the theories of learning in the classroom . the basic research may depend upon open the findings of the applied research to complete its theoretical formulations A classroom learning experiment com throw same light on the learning theory.

Action Research

Action research is popular to solve practical problem. Action research are based on three dimensions- research’s problems orientation dominant diffusion channel and audience. Its research are channelized to the sponsoring enterprises and practioners are its quinces the process of action research design as
1. The identification of a problem area about which an individual or a group is sufficiently concerned to (what to) take action.
2. The selection of specific problem and the formulation of hypothesis or prediction that implies a goal and procedure for reaching it this specific goal must be violet in relation to the total situation.
3. The careful recording of actions taken and the accumulation of evidence to determine the degree to which the goal has been achieved
4. The inference from this evidence of generalizations in action situations.
5. The continuo’s re-testing of these generalizations in action situations.

The design depend on the setting and context of the organization in which the research is carried out.

The purpose of action research is to solve classroom problems through the application of scientific methods. It is concerned with a local problem and is conducted in a local setting.

Action research is research undertaken by practitioners in order that they may attempt to solve their local, practical problems by using the method of science.

**Methodologies of Research:**

Research may be defined as the application of the scientific method in the study of problem.

At times, the term research and the scientific method are used interchangeably. Research is the systematic attempt to obtain answer to meaningful question about the phenomenon or controlled observation that may lead to the development of the generalization, principles or theories, resulting to some extent in prediction and control of the event that may be the consequences or causes of the specific phenomenon. Research is scientific, and as such, is not satisfied with isolated facts, but objective verification of generalizations. Such a verification requires logical analysis of problem and devising of the appropriate methodologies for obtaining evidence.

**Meaning of research Design:**

The purpose of the research is to discover answer to the question through the application of scientific procedures the main aim of research is to find out the truth, which is hidden and has
not been discovered yet. Each research study has its own specific purpose. In may think of research objective falling into number of broad grouping to gain familiarity with phenomenon or to achieve new insight into it. To portray accurately the characteristics of particular individual situation or a group, to determine the frequencies with which something occur or which associated with something else and to test a hypothesis of casual relationship between variables research design has been define by different social scientist in different terms. All these definition emphasis systematic methodology in collecting accurate information for interpretation with economy in procedure to mention a few definitions miller has defined research as the planned sequence of the entire process involved in conducting a research study.

According to Seltiz and other research design is a catalogue of the various phases and facts relating to the formulation of a research effort. It is an arrangement of the essential conditions and analysis of data in a form that aims to combine relevance to research purpose with economy in procedure.

A few other definition of research of research design are “research design designated the logical manner in which individuals or other units are compared and analyzed it is the basis of making interpretation from the data” The research design is the plan, structure and strategy of investigation conceived to obtain answer to research questions.

**Need of the Research Design.**

Research in education as in the other fields is essential for providing useful and dependable knowledge through which the process of education can be made more effective. There are various consideration which emphasize the need of research. Research design explains the the plan of the study in details. It gives the description of the tools for collecting information, sample. The methodology of the study and the method used for analyzing the data. Research design puts the entire research plan on the paper and thus by serving as a blueprint for the
research, it helps the researcher work logically. Analyze the data scientifically and interpret it methodologically, thereby avoiding a disorganized work.

The selection of research design depends on the objectives of the study, variables taken into consideration and the condition under which it is conducted. A worthwhile study could be resulted by careful planning.

**Methodology of study**

The methodologies of educational research are based on most instances, on research methods in the behavioral and social, relying most heavily on psychology, sociology, anthropology. Because research these fields emphasizes logical positivism. Which uses experimental and quantities research methods most of educational research also utilizes these methodologies.

Method of research according to Good and Scats (1941 p 207) may be classified from many points of view. i.e. the field to which applied education, History, Psychology, Biology etc. Place were it is conducted in the field or in the laboratory. Application pure research or applied research, data gathering devices employed test-rating, questionnaires etc. symbols deployed in recording describing or treating results mathematical symbols or language symbols forms of thinking deductive inductive etc Control of factors, controlled and uncontrolled experimentation methods in establishing casual relationship agreement, difference residues and concomitant variation.

**History research:**

Usually refers simply to an account of the past of human societies Historical research is systematic and objective location, evaluation and synthesis of evidence.
i) Identifying a research topic that address past events
ii) Review of primary & secondary data
iii) Systematic collection & objective evaluation related to past occurrences & cretinism for historical searches & evaluation of the information.

Historical studies information and understanding of past historical, legal & policy events & method consists of techniques of the techniques and guidelines use historical sources & other evidences to research to write history.

**Experimental Research:**

The experimental research is the application and adaptation of the classical method, scientifically practical method of experimentation in educational Research. It provides a method of investigation for the basic relationship between among fact under controlled condition to indentify the conditions of a given aspect. It is the description and analysis what will be, or what you occur under core fully controlled conditions.

It operates certain courses. Treatments or environmental conditions to observe when the conditions or behavior of the subject is affected or dinged. This manipulations are deliberate and systematic, hence researchers must be aware of other factors also which effluences the outcome and remove or cantered them to establish a logical association between manipulated factious and observed factor us. It provides a method of Hypothesis testing, which is the heart of experimental research. The problem which is defined by the experimenter must be answered tentatively means they must at least answer on trial basis of data. This method is used in the laboratory and as well as in non-laboratory i.e. the classroom the purpose of this method is to events in the experimental setting. The ultimate purpose is to create the variable relationships to apply all side the laboratory to a wider population of interest.

**A) Characteristics of Experimental Method:**

are as follows :-
1. Cool
2. Administration
3. Observation
4. Duplicate

**Manipulations:**

Manipulation refers to particular operation of the conditions called independent variable or experimental variable alas treatment variable. In proper terms this variables are revered to deliberate operation of independent variable on the subjects of experimental group by the researches to observe its effect. Sex socio-economic status, intelligent, method of teaching training Qualification of teacher and classroom environment are the major independent variables in educational research.

**B) Experimental Designs:**

Experimental design is the duplicate copy of the produces that enable the researcher to test data by teaching valid concussions about relationships between independent and dependent variables. Thus it provides the researcher an opportunity for the comparison as required in the hypothesis (data) of the experiment and help him to make a meaningful awareness of the result of the study. The designs deal with practical problems related with the experimentation such as:

1. How subjects are to be selected for experimental and contact group
2. The ways through which variables are to be administered (managed) and controlled.
3. The ways in which irrelevant variables are to be controlled, how observations are to be made, and
4. The type of statistical analysis to be employed.

Variables are the conditions or characteristics, that the experiment manage, controls or observes. The conditions or characteristics, where the experimenter administer wanted & observes in his or her attempt to study their relationships to the observed data. Whereas
dependent variables are the conditions or characteristics that approach or disappear or change as the experimenter introduces. Removes or changes the independent variable. (In educational research teaching method is an example of independent variable whereas the achievements of the students is an example of dependent variable.

There are some constitute variables that may rule the (status quo the parallel study which investigates the relationship between variables to developmental studies which seek to determine changes over time.)

Experimental design (types)
Campbell and stanley (1963) have discussed the designs, which have proved very useful is psychological designs.
1. Pre-experimental design.
2. True – Experimental design.
3. Quasi – Experimental design
4. Factorial design.
5. Time series design.

Descriptive Research:
It means to describe, to attempt to explain, to interact, interpret the present conditions, to examine a data that is occurring at a specific(particular) place(s) and time, it a conditions, processes that are proofed the various methods of descriptive research are as follows:-
1. Co-relational research
2. Casual comparative research
3. Document analysis
4. Ethnography
5. Case study
6. Analytical method

1. Co-relational research:

It is a relational research which describes about the moment conditions, practices, processes, structures etc, is classified as desiderative method. This research are used for collecting data to determine whether, and to what extent, a relationship maintains between two or more Quantity variables. This uses numerical data between or more variables. It is expressed in terms of coefficient, it has a relationship between variables that implies on one variable to another variable. It the relationships are continuous constant, then it become easy to predict about the variables. It is aimed at determining the nature, degree and direction of relationships between variables or using these relationships to make predictions. It normally investigate a number variables expected to be related to a major, complex variable are omitted, related to the major complex variable, to determine the exact nature of the study. It does not specify cube and effect relationships between variables under consideration. For example, if the students scour good both in math’s and science, then it doesn’t mean that math’s is a cause and effect is a science. It is the student’s intelligence which is the cause and effect.

A research can be administer by pre-test fore being the same At the same time Pre-test as well as post-test are administered we a group and man pulsations is involved.

Steps of a Co-relational Research:

1. Selection of a Problem:

It is use to find weather and how set of variables nver relation and test the hypothesis of expected relation before variables. On the basis of sound theory or observation and experience or prior research the variables to be included in the study need to be selected. There is a relation between the variables to take inter petitions of the finding of the study valid scientific and more meaningful.
2. Selection of the Sample and the Tools:

**Procedure and design**: this study is simple for basic design of a correlation

**Interpretation of the findings**: it is depend on hypothesized relationships.

**Co-relation Research is of the following to types**: 
   a) Relationship studies
   b) Prediction studies

2. **Causal-Comparative Research**: 
   Predication, causal – centerline Researches the types of research the investigation start by investigation and effectiveness variable. Causal-comparative research involves two or more group and one independent variable.

3. **Documentary Analysis**: 
   Document Analysis is closely related to historical research since in such surveys we study the existing documents. But it is different from historical research we emphasize on the study of past: and descriptive research we emphasize on study of present.

4. **Ethnography**: 
   Ethnographic studies basically concentrate or the sociological vastest of human being slaying in the society the ethnography whole on the study of the pattern of lifestyle of different sect of human being; right from the types of following used try various callctinal or virginal living humans. Their good habits, chasings manages of sublimes they follow etc. Every little adversative vattro watch is lying later try the ethnography for preservation of the Act & culture fouling on the community the proton followed try the ethnography studies right from selecting
will culture evening varies licensure & dirtying variable of interest of the selected out time for studying however the most common ethnographic approach is participant observation and useful termed earlier viewing as a part of field wrench the ethnographies invovement the field research has no preset limit & comprises of undersize field notes tersely.

5. Case Study:

Most case studies are usually leased on psychological behavior of the individuals case study research is as mush beneficial for as through which we can work on any complex issues and it also entered our experience with knowledge. Case study evolve analysis of group effect of events or condition and their relationships. Social scientist made a wide use of this psychological behavior method at individual to examine current data and provide ideas for application and for the extension of method in deters the case study research method as an data analysis that either together a current data written its real life content when the laundries between current data and the data after the observation are not clearly evident multiple source of evidence ore used. Some case studies are liased on marks and other data especially they deal with cost effeteness, cost benefit analysis or entertutional effectiveness’. Many case studies have been done lay complaining both the study physiology and study based on the marks initially psychology based study approach has been used and data is collected and interviews and observations bellowed by the study based in the marks.

The approach of case studies ranges from general to single individual or group. A case study can be boscnsed on topic or have a leroadriew of life and society for example a case study can locus on the single gifted student on his actions behavior, abilities. It’s also considered case study of view what thought induct
Types of Case Study Designs:

(a) Exploratory Case Study Design:
(b) Explanatory Case Study Design:
(c) Descriptive Case Study Design:
(d) Evaluative Case Study Design:

3.11 Sampling:

The research is generally concerned with the samples available other than its data for studying any problem it is impossible to study the entire population. It is therefore easy to pick out a sample of the total area to be covered process of sampling helps to conclude a valid information by fearful observation of variables within a small proportion of the population.

Concept of universe sample & sampling:

Universe population it refers to the group of people items or units under investigation and includes every individual first the population is selected for observation and analysis

Need for Sampling:

large population cannot be coverod easily Time, money and energy is consumed But if sampling is dne large population cn be covered with less time money & energy, Sampling is useful when units of areas are homogenous and recent accuracy is not acquired.

Characteristics of a good Sample:

Characteristics of good samples

1) A true representative of population free from error due to size of reliable units of sample should be independent and relevant and completer details and up to date y nee from random sampling error Avoiding substituting the original sample for convenience.
Techniques of Sampling:

There are different types of sampling

1) The Representation basis

2) Element selection technique based on Representation

The sample may be true sampling or it may be non-probability sampling

On the element basis the sample may be either unrestricted orRestricted. Here we will discuss about two types of sampling

a) Probability Sampling (true sampling)

b) Non-probability Sampling

A) A probability Sample is one in which each member of the population has an equal chance of selection.

B) In a non-probability sampling—randomness is the element of control and on personal judgment.

Types of Probability Sampling:-

1) Simple random sampling

2) Systematic sampling

3) Stratified Sampling

4) Cluster sampling

5) Multi stage sampling

Multi Stage Sampling

The sample in be studied is selected at random at different stages. We selected the people from different classes like

1) Middle class couples in Maharashtra

2) Rural and urban areas

3) Middle class working couple.
Non-probability sampling:-

Types:-

1) Purposive Sampling
2) Convenience Sampling
3) Quota Sampling
4) Snowball Sampling

1) Purposive Sampling:

In this sampling method the researcher selects of Individuals who might represent the larger population and then collect data from this group e.g. if a researcher wants to survey the attitude toward teaching profession of teachers teaching students he or she might survey the teachers teaching in municipal school with the assumption that since all teachers teaching in municipal schools cater its students from the lower socio-economic stratum.

Sample : Its Size and Nature :

To meet his interest the researcher mashes population a group of individual who all have the same characteristics is common

It is difficult for the researcher to make direct observation of every individual among the population for thy collect data from a sample of individual of then use it for their inferences about the entire population.

The researcher selects a small set of the population observes & analysis it that observing the similar characteristics & make inferences about the characteristics from the sample population
The researcher accept that the characteristic of the sample corresponding to the large part of the population. In that case the characteristic of the sample is applicable to the larger part of the population.

As it was difficult to study the characteristic of a large population a small Portion which was used for the study made it simple to draw the valid inference.

3. 12 Size of Sampling:

The Research has opted D.T.Ed College Related to Thane District & Mumbai Suburban are the selection of the D.E.Ed college only not Included other medium as Hindi, English, Gujrathi & other Research find out only aided & unaided Marathi medium D.T.Ed. college. The Research collect the metrer of the person from repested college as to 276 included Male – 109, Female 162 in D.T.Ed. Teacher the selection of the D.T.Ed college on the bases of Random Sampling and teacher selection of the teacher as according cuter sampling the total sample is 271
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<td>50</td>
<td>Unaided</td>
<td>Marathi</td>
</tr>
<tr>
<td>27</td>
<td>N.C.R's Sterlig College Of Education, Nerul, Navi Mumbai, Thane</td>
<td>50</td>
<td>Unaided</td>
<td>Marathi</td>
</tr>
<tr>
<td>28</td>
<td>Pandit Rajapati Mishra Adhyapak Vidhyalay, Manoma Nagar, Thane</td>
<td>100</td>
<td>Unaided</td>
<td>Marathi</td>
</tr>
<tr>
<td>No.</td>
<td>School Name</td>
<td>District</td>
<td>Capacity</td>
<td>Medium</td>
</tr>
<tr>
<td>-----</td>
<td>-----------------------------------------------------------------------------</td>
<td>----------</td>
<td>----------</td>
<td>--------</td>
</tr>
<tr>
<td>29</td>
<td>Jay Bhagwan College Of Education, Vitava, Kalwa, Thane</td>
<td>Thane</td>
<td>150</td>
<td>Marathi</td>
</tr>
<tr>
<td>30</td>
<td>Rashtriya Apang Adhyapak Vidhyalay, Sahapur, Thane</td>
<td>Thane</td>
<td>50</td>
<td>Marathi</td>
</tr>
<tr>
<td>31</td>
<td>Surjusing Memorial Adhyapak Vidhyalay</td>
<td>Thane</td>
<td>150</td>
<td>Marathi</td>
</tr>
<tr>
<td>32</td>
<td>SwaSidhi Mitra Sang College Of Education, Sonavdevi, near Jakatnaka, Bhivandi, Thane</td>
<td>Thane</td>
<td>150</td>
<td>Marathi</td>
</tr>
<tr>
<td>33</td>
<td>Idiol College Of Education,Bhal, Kalyan, Thane</td>
<td>Thane</td>
<td>50</td>
<td>Marathi</td>
</tr>
<tr>
<td>34</td>
<td>Saket College of Education,Chinchpada, Vidyanagri Marg, Kalyan</td>
<td>Thane</td>
<td>50</td>
<td>Marathi</td>
</tr>
<tr>
<td>35</td>
<td>H.B College of Education, Vashi, Navi Mumbai, Thane</td>
<td>Thane</td>
<td>50</td>
<td>Marathi</td>
</tr>
<tr>
<td>36</td>
<td>Universal College of Education,Kochregaon, Kalyan, Thane</td>
<td>Thane</td>
<td>50</td>
<td>Marathi</td>
</tr>
<tr>
<td>37</td>
<td>Gurukrupa College of Education And Research, Kalyan, Thane</td>
<td>Thane</td>
<td>50</td>
<td>Marathi</td>
</tr>
<tr>
<td>38</td>
<td>Nas College of Education, Sarvali, Palghar, Thane</td>
<td>Thane</td>
<td>50</td>
<td>Marathi</td>
</tr>
<tr>
<td>39</td>
<td>Seth Chelaram Adhyapak Vidhyalay, Ankhar, Kalyan, Thane</td>
<td>Thane</td>
<td>50</td>
<td>Marathi</td>
</tr>
<tr>
<td>40</td>
<td>Nagrik Shikshan Sanstha's Adhyapak Vidhyalay</td>
<td>Thane</td>
<td>100</td>
<td>Marathi</td>
</tr>
<tr>
<td>41</td>
<td>Thomas Baptista D.Ed College, Papdi, Vasai, Thane</td>
<td>Thane</td>
<td>50</td>
<td>English</td>
</tr>
<tr>
<td>42</td>
<td>D.L.Patil Adhyapak Vidhyalay, Devghar wada, Thane</td>
<td>Thane</td>
<td>50</td>
<td>Marathi</td>
</tr>
<tr>
<td>43</td>
<td>shantisuri Vidya Mandir D.Ed College, Temghar, Bhiwandi, Thane</td>
<td>Thane</td>
<td>50</td>
<td>Marathi</td>
</tr>
<tr>
<td>No.</td>
<td>College Name</td>
<td>District</td>
<td>District City</td>
<td>Category</td>
</tr>
<tr>
<td>-----</td>
<td>------------------------------------------------------------------------------</td>
<td>----------</td>
<td>----------------</td>
<td>-----------</td>
</tr>
<tr>
<td>44</td>
<td>Aashirwad S.P.M. Junior College of Education, Dahagaon, Kalyan, Thane</td>
<td></td>
<td></td>
<td>Unaided</td>
</tr>
<tr>
<td>45</td>
<td>Divakar Patil D.Ed College, Boisar, Palghar, Thane</td>
<td></td>
<td></td>
<td>Unaided</td>
</tr>
<tr>
<td>46</td>
<td>Sahapur Taluka Education Society's D.Ed College, Sahapur, Thane</td>
<td></td>
<td></td>
<td>Unaided</td>
</tr>
<tr>
<td>47</td>
<td>Baba e Rehmat education Society's D.Ed College, Kausa, Mumbra, Thane</td>
<td></td>
<td></td>
<td>Unaided</td>
</tr>
<tr>
<td>48</td>
<td>Oriental Junior College Of Education, Jogeshwari, Mumbai</td>
<td></td>
<td></td>
<td>Unaided</td>
</tr>
<tr>
<td>49</td>
<td>Swami Karpatri College of Education, Dhokdi, Manormanagar, Thane</td>
<td></td>
<td></td>
<td>Unaided</td>
</tr>
<tr>
<td>50</td>
<td>Manjra Charitable Trust's D.Ed College, Airol, Navi Mumbai, Thane</td>
<td></td>
<td></td>
<td>Unaided</td>
</tr>
<tr>
<td>51</td>
<td>Parag D.Ed College, Mumbai</td>
<td></td>
<td></td>
<td>Unaided</td>
</tr>
<tr>
<td>52</td>
<td>Shri. Radhikabai Moghe Memorial Shikshan Sanstha, Airoli, Navi mumbai</td>
<td></td>
<td></td>
<td>Unaided</td>
</tr>
<tr>
<td>53</td>
<td>Sadhna Education Society Adhyapak Vidhyalay, wagde Estate, Thane</td>
<td></td>
<td></td>
<td>Unaided</td>
</tr>
<tr>
<td>54</td>
<td>Siddhi Education Trust's B.A Talreja, D.Ed College, Vanwali, Ambernath, Thane</td>
<td></td>
<td></td>
<td>Unaided</td>
</tr>
<tr>
<td>55</td>
<td>Dippiromedical Organisation D.Ed College, Pandurangwadi, wada, Thane</td>
<td></td>
<td></td>
<td>Unaided</td>
</tr>
<tr>
<td>56</td>
<td>Shri Hariprasad Education Trust's Shri Virji Karmaji Hariya College Of Education, Ambadi Road Divaman, Vasai, Thane</td>
<td></td>
<td></td>
<td>Unaided</td>
</tr>
<tr>
<td>No.</td>
<td>Details</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-----</td>
<td>---------</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>57</td>
<td>Add Bhagwan Kedi Shikshan Prasarak Mandal's Devta College Of Education And Research, Kharegaon, Kalwa, Thane</td>
<td>50</td>
<td>Unaided</td>
<td>Marathi</td>
</tr>
<tr>
<td>58</td>
<td>R.K.Education Mandal's Sant Dhyangeshwar Adhyapak Vidhyalay, Nevadpada, Saradgaon, Murbad, Thane</td>
<td>50</td>
<td>Unaided</td>
<td>Marathi</td>
</tr>
<tr>
<td>59</td>
<td>Mahatma Society's Adhyapak Vidhyalay, Chembur, Mumbai</td>
<td>50</td>
<td>Unaided</td>
<td>Marathi</td>
</tr>
<tr>
<td>60</td>
<td>Shubham D.Ed College, Mira Road, Thane</td>
<td>50</td>
<td>Unaided</td>
<td>Marathi</td>
</tr>
<tr>
<td>61</td>
<td>Dr.Aaesha Junior College Of Education, Kausa, Thane</td>
<td>50</td>
<td>Unaided</td>
<td>Marathi</td>
</tr>
<tr>
<td>62</td>
<td>Vidhadhar education Trust's Badlapur Teachers Training College, Yadav Nagar, Shirgaon, Badlapur, Ambernath, Thane</td>
<td>50</td>
<td>Unaided</td>
<td>Marathi</td>
</tr>
<tr>
<td>Sr. No</td>
<td>Jender</td>
<td>Sample</td>
<td>Percentage</td>
<td></td>
</tr>
<tr>
<td>-------</td>
<td>--------</td>
<td>--------</td>
<td>------------</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Total inculed D.T.Ed Teacher</td>
<td>271</td>
<td>98.18 %</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Not inculed D.T.Ed Teacher</td>
<td>5</td>
<td>1.82 %</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>276</td>
<td>100.00 %</td>
<td></td>
</tr>
</tbody>
</table>
Graphs 3.1

Figure of included teacher and around teachers

Included Teachers

Not Included Teachers

Y-axis: Included Teachers

X-axis: Not Included Teachers
Table 3.3

Sample size according to gender

<table>
<thead>
<tr>
<th>Sr. No</th>
<th>Jender</th>
<th>Sample</th>
<th>percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Male D.T.Ed Teacher</td>
<td>109</td>
<td>40.22 %</td>
</tr>
<tr>
<td>2</td>
<td>Female D.T.Ed Teacher</td>
<td>162</td>
<td>59.78 %</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>271</td>
<td>100.00 %</td>
</tr>
</tbody>
</table>

The Total numbers of male teacher is 109 and female teacher is 162
3.2

figure according to sex difference
Table No. 3.4
Measuring scale of Emotional Intelligences

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Items</th>
<th>Always</th>
<th>Frequently</th>
<th>Some time</th>
<th>Never</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>I don’t agree without reason on anyone</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>I never effects my teaching when I am disappointed</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 3.5
Measuring scale of teaching effectiveness

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Items</th>
<th>Always</th>
<th>Frequently</th>
<th>Some time</th>
<th>Never</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>I teach my lecture depended on textbook</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>I prepaid final out the objective of related unit before teaching</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 3.6
Scores of rating scale

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Statement</th>
<th>Positive statement score</th>
<th>Negative statement score</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Always</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>Frequently</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>Some time</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>Never</td>
<td>1</td>
<td>4</td>
</tr>
</tbody>
</table>
**Contant Validity of tools:**

The contant validity of both tools used for research has examine finalized by there experts berson fron respected teachers traning colleges teacher educators. The tools has finalized according to guidenline /correction by export person.

Privions study.

1. Pre- pilot study
2. Pre- pilot study

Pre-pilot study on selected sample related to field for examin the present status of questions (Items) After 3 weeek the second time the tools has administrated on selected. Prfnlation and find out the differences in its each items the tetore dinalized the test of both tools.

**(Data Analysis)**

Data analysis is must through statisfied view of points and its interpration are depended on ontiiened raw scores.

There are two types aof analysis has been conducted in present study as

- Descriptive Analysis
  1. Meashres of congral terdancy as
  2. Mean b)Median c) mode
  3. Measurment of variability

As standeird deviation, skewness kurtosis and graphausoul anatysis

(Hypothetical Analysis of data)

Researcher has used t- test for shanin differaness beteen two variance
1. **t-test**

\[
| M_1 - M_2 |
\]

\[
\sqrt{\frac{\sigma_1^2}{N_1} + \frac{\sigma_2^2}{N_2}}
\]

- $M_2$ mean of 2nd Group
- $\sigma_1$ = Sd 1st Group
- $\sigma_2$ = Sd 2nd Group
- $N_1$ = Number of 1st group (sample size)
- $N_2$ = Number of 2nd group (sample size)

2. Calculation of correlation (r-test) The researcher has used the r-test (correlation) for examine co-relation between two variance.

\[
R = \frac{N\sum XY - (\sum X)(\sum Y)}{\left\{ N\sum X^2 - (\sum X)^2 \right\} - \left\{ N\sum Y^2 - (\sum Y)^2 \right\}}
\]

As

- $Exy = X \cdot \sum \sum \sum \text{Sum of x scores}$
- $EXY^2 = X \sum \text{Sum of y scores}$
- $EY^2 = Y \sum \text{Sum of squared x score}$
EX = X Sum of squared Y score

EY = Y Sum of product of paired

N = Numbers of paired scores (Sample)

Table No.3.7
Number of Accepted and rejected statements of Teaching
Effectivenss No’s Item

<table>
<thead>
<tr>
<th>Item</th>
<th>Accepted items</th>
<th>Avided items</th>
</tr>
</thead>
<tbody>
<tr>
<td>40</td>
<td>40</td>
<td>0</td>
</tr>
</tbody>
</table>

1) Tools Teachers Emotional intelligence
2) Teaching effectiveness measure.

Reliability of Tools:
“Reliability is concerned with the level of internal consistency of the measure or it over the time” – Burge, 1997

It is must for each survey study because reliability show the standardization of tool. If tools are reliable than applicable for test.

Rulons Formula:
The Rulons formula has used for test of reliability.
The above formula has apply for both of tools as below.

\[
R = \frac{\delta^2d}{\delta^2 t}
\]

<table>
<thead>
<tr>
<th>Sr. No</th>
<th>Sample</th>
<th>(r) Reliability</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Measuring scale of Emotional Intelligence</td>
<td>0.84</td>
</tr>
<tr>
<td>2</td>
<td>Measuring scale of Teaching Effectiveness</td>
<td>0.86</td>
</tr>
</tbody>
</table>

### 3.13 Collection of data:

The collection of data from respective field and their population for scoring the data is a primary source of research works all analysis and interpretations are deposited on raw score. The research has collected the data form Teacher education college (D.T.Ed.) the teachers has involved in this concern.
Types of data Collection:

1. Primary Resource
   
The researcher observes and examines the present status and condition of related studies to identify problems through interview checklist and questionnaires to concern related persons.

2. Secondary Resource
   
In this type of research, the researcher does not collect data from related persons. He/she collects information through published literature, handwritten scripts, and statistical data.

Data collection for present study: The researcher has collected data from 62 aided and unaided teachers training schools located in Thane district and Mumbai suburban area.

The collection of data from teachers' training schools is for teachers D.T.Ed. only.