Chapter – 5

Summary, Discussion, Implications, Conclusions, and Suggestions

5.0.0 Introduction

Change is perennial and continuous. Change remains omnipresent. Every field is experiencing the change. Today we observe change more rapid than ever before. The change is intricately interlinked with the knowledge explosion. Besides, technological advancements are influencing every walk of life. In such an environment the field of education cannot remain isolated or remained out of pace. Essentially, the personnel working in the field of education need to cope up with the rapid changes and its impact. Educational policy designers, administrative machinery, curriculum framing process, textbooks, teachers, teaching learning activities etc. cannot be isolated from the changing times, especially, from the technology impact. One may realize the student reflections after their exposure to internet resources. The position and role of teachers in this dynamic environment calls for continuous professional development and required support for it. Teachers to meet the need of the hour are required to continuously update and upgrade themselves. This requirement is just not for content enrichment alone, but it is for pedagogical and technological up-gradation also. One who chooses the path of this up-gradation in content, pedagogical skills and technology is obviously remains relevant and competent. Professional Competency of teacher was always desired by the society as well as it remained cherished and honored. Professional Competency of the teacher is not one parameter dependent. Many factors, like, teacher training, teacher’s dedication and effort to up-grade oneself etc. significantly influence Teacher’s Professional Competency. It is evident that Teacher’s Professional Competency contributes to better quality of education, in general. One needs to appreciate the effort made by many researchers working on different associated aspects of Teacher’s Professional Competency. Study of Teachers Professional Competency always remains motivating and inspirational.
Besides, Teacher’s Professional Competency there exist another equally important and significant aspect which comes into play in influencing the desired quality education. That is Teacher’s Professional Ethics. Every profession has its ethical domains. Teacher’s Professional Ethics equally important in promoting good education. Teacher’s Professional Ethics essentially, deals with the affective domain of the teacher in general also requires new awareness through periodic enrichment programs during the rapidly changing times. Perspectives and perceptions may vary but valued basic principles call for good practices in maintaining best ethics in teachers. Similar to that of Teacher’s Professional Competency, Teacher’s Professional Ethics also merits greater attention both for its right practices and also for required investigations on this subject for required research. This can address the question of relation between the Teacher’s Professional Competency and the Teacher’s Professional Ethics.

Following presentation places required perspective for better understand of Teacher’s Professional Competency and also Teacher’s Professional Ethics.

5.1.0 Professional competency

The term Professional Competence can be conceptualized as the procedure of gaining capacities and aptitudes which empowers to release professional duties and responsibilities all the more proficiently and successfully. In teaching profession, the teacher needs to obtain three critical abilities, viz., instructional capability, association ability, and evaluative competence. Further, sub-parts can be thought to be implanted into these three critical capabilities. In European pedagogical examination the expression "competence" is an assessive one and it signifies the capacity of a teacher to utilize his or her information and abilities in pragmatic professional exercises.
5.2.0 Ethics

Ethics is the branch of study dealing with what is the proper course of action for a man or woman. It answers the question, "What do I do?" It is the study of right and wrong in human endeavors. At a more fundamental level, it is the method by which we categorize our values and pursue them. Do we pursue our own happiness, or do we sacrifice ourselves to a greater cause? These are pertinent and important questions while considering the ethics.

5.2.1 Ethics and Professional Ethics

While ethics is a general construct as specified above Professional Ethics is related with the calling, similar to doctor’s Professional Ethics. The idea of Professional Ethics (PE) is partly what a professional should do, or should not do at the work place. It, likewise envelops a much larger piece of the professional’s life. Behavior of an expert individual needs to be ethical and according to the standards befitting the calling. Things that are incorporated in Professional Ethics are idea like: professional respect, avoidance of dishonest or fake movement, for example, written falsification and the expert advancement of then calling and the association inside which the professional works.

The code of Professional Ethics for teacher provides a framework of principles to guide them in discharging their obligation towards students, parents, colleagues and community. Increased awareness of the ethical principles governing profession is essential to ensure ‘professionalism’. Like all other professions, the teaching profession should also move towards self-regulation, which implies that every teacher should have the inner urge to adhere to the ethical principles listed in the Code of Professional Ethics for teachers given by NCTE (2010).

Ethics and Competency both measurements are thought to be vital in our instructional framework. Proficient Ethics helps a professional pick what to do when faced with an issue
at work that raises an ethical issue. One can absolutely think about what professionals do when faced with such problems, and limit the enquiry to the depiction.

5.3.0 Review of related literature

The review of related literature reveals that what other researchers have done and how they have addressed similar and related research problems. Following studies have been reviewed for related literature on Professional Competency and Professional Ethics of Pre-Service and In-Service teachers.

5.3.1 Studies on Professional Competency

Kaur (2002) studied teacher effectiveness in relation to teaching competency and divergent disciplinary orientations revealed that no significant gender difference exists in teaching competency of teachers. Helen Huntly (2008) conducted a research on Teachers’ Conceptions of Competence. The outcomes of this study propose that preliminary teachers accept that presentation capability obliges and exhaustive arrangement, a sound learning base, powerful classroom administration, proficient correspondence with a scope of partners, and a precise feeling of mindfulness on the part of teacher. These originations will be contrasted with a determination of the accessible writing about instructor capability and related educating standards. Shukla (2010) Studied about the Effect of Simulated Practice Teaching on Teaching Competency of Student Teachers of B. Ed. and concluded that teaching competency of the student teachers having practice of micro lessons would be better than that of the student teachers having practice teaching of simulation lessons. It was also found that there was no difference graduate and post graduate student teacher in their teaching competency and also there was no significant effect of the interaction between simulated practice teaching and academic qualification of student teachers on their teaching competency.
Y. V. Jagannadh (2011) conducted a research on “Teaching Competency and Attitude towards Teaching Profession of B.Ed. College students” and revealed that inter dimensional relationship between Teaching Competency and Attitude towards teaching profession is positive. U.K. Kulkarni (2011) conducted a Comparative Study of Teaching Competency among Female Prospective B.Ed. Teachers and revealed that Graduate and Post Graduate B.Ed. prospective teachers studying in KSWU and RCU do not differ significantly in respect to the teaching competencies. F.L. Antony Gracious (2011) made a study on the Prospective B.Ed. Teacher’s Creativity and Teaching Competency. Study found that there was no relationship in the Creativity and Teaching Competency of B.Ed. teachers. Vibha Chawla (2011) investigated student teacher’s competency in their teaching based on the feedback from students. A Microteaching Experiment” and revealed that student feedback has been found to be effective in improving the general teaching competence of student-teachers. Surajit Mahanta (2012) conducted a research on Professional Competence with gender and locality and conformed that it depends on gender and locality. Female teacher professional competency was superior and also urban teachers were sophisticated than the rural. Umadevi and Kantharaj (2012) studied about the Development and Validation of Competency Based Teaching Programme in Enhancing Teaching Competencies among Secondary Student Teachers in the Context of Globalization and concluded that competency based teaching programme is effective in enhancing teaching competencies of secondary student teachers in teaching English. Srutirupa Panda (2012) conducted a research and revealed that very low percentages of science teachers have high level of pedagogical competency. It was also found that there lies significant difference in pedagogical competency of science teachers in relation to their Sex, age, qualification and teaching experience. Goteti Himabindu (2012 Examined how the teacher competencies and the teaching qualification are related? Study included independent and interdependent aspects of teacher effectiveness and teaching qualifications. Furthermore, the efficacy and competency in the teaching were found to be important and connected in the process of teaching learning. Islam H. Abu et.al. (2012) studied on “Pre-Service Teachers Level of Competence and their Attitudes towards the Teaching Profession”. The study revealed that the teachers’ attitude after training was correlated with their competency and training improved it. Gupta Ram Prakash (2013) conducted research on “Impact of Micro –Teaching Competence of Pupil-Teachers-A Comparative study” and revealed that Micro-Teaching helps in bringing desirable modification in the behavior of pupil-teachers. There exists no significant difference in the level of performance among male and female pupil-teachers. V.
Balakrishnan et al. (2013) conducted research on the competency of teaching and concluded that Women educators are fundamentally higher on teaching competency when contrasted with the men. Furthermore he reasoned that there was no difference between the age group of teachers in their teaching competency. Nirupma Jaimini (2014), from their studies revealed that; through dialogue and reflective practices, socialization and support capacity building of teacher interns as a constructive peer feedback input was possible. A group of six teachers as intern researchers were observed along with their peer review discussions and analyzed narratives. Study showed significance of contextual issues in support of the peer feedback, which in turn promotes teacher competency. Mandeep Kaur et al. (2014) conducted a study on teaching competency of secondary school teachers and their relation to emotional intelligence. Findings confirmed that teaching competency and emotional intelligence were obverse to be varying among secondary teachers. However, they were not influenced by gender studies on professional competency. Naree et al. (2009) conducted a research on Teacher Competence of Teachers at Schools in the three Southern Provinces of Thailand. Raymond Uwameiye (2010) conducted a research on Professional and Technical Competencies needed by Teachers of Business Studies in Junior Secondary Schools in Ondo State, Nigeria and revealed that the teachers of Business Studies in Ondo State Public Junior secondary schools need improvement in instructional planning, implementation and evaluation skills, as well as in core business skills in relation to the teaching of office practice, shorthand and keyboarding as well as in commerce, book-keeping and ICT. Muhammad, Akram Aziz (2010) investigated the teacher competency in relation to the demographic factors. This study says planned lesson were better than the unplanned. Teaching remained impressive for the teachers who showed dedication in their teaching. Improved results were noted from the disciplined teachers ensuring better results. Better performance was evident from the teachers when their supervisor motivated them. Abdul Rahim Hamdan (2010) conducted a study of “Teacher Competency among Malaysian School Teachers”. The study revealed that all the teachers were competent and there existed a significant relationship of gender, teaching experience and specialization with their competency, whereas academic qualification had no significant influence on their teaching competence.

R. Burceva (2012) conducted a research on Professional Competence of Museum Teacher Rezekne Higher Education Institution, Latvia and revealed that the competence of a museum teacher has been based on the traits of two kinds: the professional and the private
Liakopoulou, Maria, (2011). Does the Competence of Teachers: With qualities, state of mind, aptitudes and learning add to an instructor's viability? Study uncovered that a "decent instructor", as most instructors appear to partner their adequacy at work with individual qualities and "educational and pedagogical abilities", and in addition pedagogical learning. These specific discoveries added to an orderly and investigative depiction of the substance of professional information needed for the effective execution of an educator's pedagogical and educational work. Valentina et.al. (2013) studied about the Training In-Service teachers' competencies in classroom management and revealed that all participants reported better knowledge of classroom management after training. Necla Koksal (2013) studied Competencies in teacher education: Pre-Service teachers’ perceptions about competencies and their attitudes revealed that a positive and meaningful relationship between general teaching competency perceptions and attitudes towards the profession. Safdar Rehman Ghazi (2013) investigated “Teacher’s Professional Competencies in Knowledge of Subject Matter at Secondary Level in Southern Districts of Khyber Pakhtunkhwa, Pakistan”. It was concluded that the secondary school teachers working in various districts of the southern region of the Khyber Pakhtunkhwa. Competency in the knowledge of the subject matter of the teachers who were working in the district Hangu is significantly weak as compared to the teachers working in the district Bannu, D.I.Khan, and Peshawar.

Effort made by the researcher could help ensemble the above mentioned studies conducted by different investigators, in India and abroad, as detailed above. It is clear from the above studies that due attention was paid by the investigators in understanding the Teacher’s Professional Competency.

5.3.2 Studies on Professional Ethics

Different professions call for different set of behavioral or conduct related aspects embedded in the respective code for all to follow. This inurn includes its inherent and latent elements, such as investigating, using relevant logic, and assessing for rational inferences and also reporting avoiding whimsicalness or tentative. Organizing a set of schedule of approvals for any acceptable conducted which stands as a guide for any institution in maintaining the values. In essence Professional ethics remains necessitating requirement for
all. Teachers organizations and even Government bodies, of late have developed certain norms in this respect. However, researcher could not find many studies in this respect for review; yet, few related works, conducted abroad were identified and presented below for review.

Blake et.al (2000) investigated changes in student teachers' attitudes concerning Professional Ethics as they progressed through teacher education programs and concluded that about half of each group defined ethics as relating to values, morals, and beliefs.

S. Alvin Leung (2003) carried out a survey on ethical counseling. Study revealed that the vast majority of directing teachers were mindful of their expert breaking points, and were willing to look for approaches to enhance their ability. Numerous teachers were mindful of the centrality of issues, for example, educated assent and classifiedness in an advising relationship, however they from time to time made an interpretation of their mindfulness into composed approaches and standard methodology. While shirking of double or numerous connections is one of the key components in advising morals, a larger part of guiding educators felt that double connections were unavoidable in school settings. As far as expert standing, most guiding instructors did not see themselves as expert guides as they connected with other helping professionals.

Maisarah Mohamed Saat et.al (2004)” examination was made on perception of ethics by the teachers and students. The outcome uncovered that dishonest activities that most instructors are utilizing college resources for individual exercises, instructing material that the teachers have not by any stretch of the imagination comprehended and scratching off available time unreasonably. Furthermore study found that the likeliness of respondents submitting the exploitative conduct is somewhat low contrasted with the likeliness of their associates doing it. Among suggestions proposed; the University ought to create and convey moral values through morals course, preparing, colloquium, University ought to concentrate on the nature of faculty and expert improvement programs for both pupils and staff, setting great sample or part displaying by the workforce and University individuals. Moreover, the study proposes that the educational program ought to underline in coordinating morals in all
subjects taught and the staff code of morals must be made more mindful to all University individuals.

Julie (2005) mulled over the advancement of new learning about the significance of moral standards for instructive authority. There is a general concern among numerous specialists about current patterns of dishonest conduct as exhibited by conspicuous pioneers in numerous fields. Morals has been a theme of concern all through history and showed a solid relationship between fruitful authority and moral conduct. Instructive associations have an extraordinary commitment to model morals for the advantage of teaching on youth. Society can't be more moral if school pioneers carry exactly opposite to it. Examination affirmed a genuine absence of expert preparing for instructive pioneers in the ethical and moral measurements of organization.

William (2007) led an exploration on Ethics in teacher education colleges. The discoveries of this Tanzanian study disclosed two noteworthy activities: the utilization of school regulations and the educating of religious implicit rules. Difficulties, then again, ran from the unlucky deficiency of a course identified with instructor morals, proficient "inadequacy" of educator teachers, lack of qualified instructors, absence of assets, the ethical issue of society or the flippancy of folks and society. This study has emphasized that without a much characterized training strategy for advancing instructor morals instruction endeavors to that impact are destined to fall level.

Lorenzo Cherubini (2008) directed an exploration on the complexities of moral choice making in forthcoming instructors' learning and inferred that the moral proclamations are instrumental in their learning; and the act of showing exists inside dumbfounding pressures.

Ana Paula Caetano (2009) made a study on Professional Ethics and Teacher Education. Study distinguished a few angles identified with the moral preparing of instructors which are joined with different measurements under study, to be specific the regulation and formation of a deontological code and the moral, individual and expert originations of
educators. Notwithstanding an interpretative examination of information and a brief audit of current enactment and studies, this study pondered the points of view and techniques to be considered in the moral preparation of instructors.

Naciye Aksoy (2010) considered the Educators' Beliefs about Ethical Dilemmas in Teaching Teachers. This study of Turkey was focused on Elementary School Teachers and conclusively opined that few of the teachers agree that there are some issues in the profession. However all do not agree to it.

Emre Unal (2011) examined the relationship between Pre-Service teachers’ ethical reasoning levels and their academic dishonesty levels. The study have supported the hypothesis that ethical judgment levels, genders and accommodations of prospective teachers significantly predict their academic dishonesty levels while the hypothesis that universities, departments and class levels of prospective teachers have a significant effect on their academic dishonesty levels is proven wrong.

Mary Anne (2012) studied on an Outcomes Centered Ethics Course for Pre-Service Teachers Using Case Histories and concluded that the effectiveness of using case histories in teaching ethics with the purpose of increasing awareness of ethical issues and enhancing judgmental skills.

Elizabeth Mendoza (2012) directed her investigation on thinking via ethics and inferred that both fresher and specialists identically organize their "loyalty," "doing great," and "compensation," albeit there was variability between two sets. To clarify their reactions, mediators referred to their expert moral code and rubric choice making rules, and they utilized low-setting talk to dissect individual-centered reactions. Master mediators, alternately, drew upon implicit learning based upon an establishment of the Code of Professional Conduct and utilized high-setting talk to add to a group centered reaction.

Sanjaya Kumar Das (2014) directed an examination on Professional Ethics grow with Teaching Experience on Women Teachers in Higher Education Institutions of Punjab and reported that professional ethics build positive family relationship with teaching knowledge of lady educators in Higher Education Institutions in India. Ethical values in educators
develop with experience of teachers and a deduction could be drawn from APA's study through the present Indian research that instructors with additionally teaching background show moderate level of expert ethics which is resultant of age that get tuned with identity characteristics. An aggregate of 200 lady educators were drawn from two colleges (self-financed and government) of Punjab. The Professional Ethics Scale for Teachers (PEST, 2007) of Jasmeen Kaur was utilized to record proficient morals while showing background was recorded on an ordinal scale. With the backing of Pearson's Correlation, the study reported an insignificant positive relationship coefficient between proficient morals and showing background among lady teachers; along these lines demonstrating a pattern well coordinating towards "morals are found out crosswise over ages and age advance encounters.

Various studies conducted abroad on Professional Ethics paid due attention to the ethical considerations. A Tanzanian study William (2007) Studied on managing advancing educator morals in teacher training schools felt deficiency of any course identified with educator morals to advance the same amongst teachers. Shortage of well-defined educational policy promoting teacher ethics is essential. Student teachers attitude towards ethics remained large on considering the responsibility of determining ethics (Blake et.al. 2000). On the other hand Lorenzo Cherubini (2008) studied complexities in ethical decision making observed an important aspect, i.e. ethical statements are instrumental in scaffolding their learning. Studies in general considered importance to Professional Ethics. Yet, a pertinent question remains to be answered that is there any relation between Professional Competency and Professional Ethics? If so how is it related? Peter Broeder et.al. (2012) designed a study to examine teacher reflective professional roles and competence domains. Studies revealed that all teachers encountered with the cultural and linguistic variations. It was well known that there exists a cultural difference in the class. Considering the teacher as a reflective practitioner 16 competences domains were identified. Necla Koksal (2013) studied competencies in teacher education: Pre-Service teachers’ perceptions about competencies and their attitudes revealed that a positive and meaningful relationship between general teaching competency perceptions and attitudes towards the profession. Safdar Rehman Ghazi (2013) investigated teacher’s PC in Khyber Phaktunkhwa, Pakistan. Study demonstrated that the teachers do possess the subject matter but they showed their inability in applying the same subject knowledge to the real life situations. Indira Adilkanovna
Oralkanova et.al, (2014) made a study on “Professional Competence of Teachers in Conditions of Modernization of Education”. Studies that professional competence of teachers, scientific works have been analyzed to discover the notions of professional competence. The emphasis is made on analysis of the components of teachers' pedagogical activity.

In brief one may get motivated by these investigations for some further studies in the area of Professional Competency and Professional Ethics of teachers, including their interrelation, if any. Critical examinations of the above stimulating investigations promote the idea of further work as some research gaps were visualized.

Mostly the researchers, as mentioned above, conducted on Professional Ethics are done in India and aboard countries. In Indian context researcher observed that most of the studied were conducted mainly on teaching skills, teaching methods etc. but very few studies were observed to be conducted on different competency in teaching. No studies were found to study on Professional Ethics and Professional Competency. It is also found that no research work has been conducted which made a study on the Professional Competency and Professional Ethics of Pre-Service and In-Service teachers. Principal’s perception related to Professional Competency and Profession Ethics of teacher in India could not be traced out. In order to fulfill research gaps a scientific study was needed to the study of Professional Competency and Professional Ethics.

### 5.4.0 Rationale of the study

Review of related literature motivates the investigator to look critically into certain areas of study for further research. Professional Competency in relation to Professional Ethics of both Pre and In-Service teachers was one such area for study. Though various studies were conducted in the related field one can always find some research gaps meriting a research study. More specifically the Professional Competency of a teacher is an area which deserves to be probe d from different perspectives. Further, when the Teacher’s Professional Competency is viewed from the Teacher’s Professional Ethics point of view it encourages
the researcher to find the interrelations, if any, between these two aspects; namely teacher’s Professional Competency and Teacher’s Professional Ethics.

Teacher is considered as a learning facilitator. Besides imparting knowledge, skills teacher makes every effort to develop right attitudes, and values in the learner. This remains continuous in teaching learning process. In the era of knowledge explosion and its availability everywhere on finger tips it becomes a natural imperative for any teacher to continuously update and upgrade his or her own professional capabilities. Besides, knowledge explosion and technology down pour and its integration with the educational process is fast emerging. Open Educational Resources have become enriching as well as handy to one and all. Technocracy is inspiring, facilitating and motivating the current generation of learners. These learners are handling lots of useful knowledge with their fingertips, by employing internet and many technology based gadgets and facilities. However, despite all the technological facilitation it is undisputable that teacher with his or her competencies and ethics is a must. No one can ignore the role of a teacher in the educational process. Most essential lively human element in the process of learning is the teacher, besides the learner. The value inculcation process with the required human touch in the contemporary learner is possible only through the teacher. Preparing the student of the day for sustenance, survival and advancement is not a child’s play. It calls for an omnipotent teacher. In other words today’s society requires a teacher with plethora of competencies. There is an acute need of enhanced teacher efficiencies in their professional practice. This ensures a better teacher performance in the process of teaching learning. A single competency is not the solution, whereas the teacher needs a plethora of merits performing collectively and synergically, promoting the best possible teaching competency, while practicing the profession.

Teacher is a maker of human, a social engineer. In other words, a person in the field of teaching essentially, is a social architect, who slowly and steadily builds and develops a harmonious and enlightened learned society. Teacher remains synonymous to the light enlightening the other light. Therefore it is the fundamental requirement of any country that it offers utmost importance and highest effort in producing the best and competent teachers. To do so, it is necessary to provide sufficient opportunities to both the teachers as well as to the teacher educators, so that they are suitably equipped with the Professional Competences together with the required Professional Ethics. This cannot remain as a static frame. On the
contrary one should perceive that these aspects; namely Professional competency and the Professional ethics remain dynamic in nature and accordingly they deserve to be updated and upgraded from time to time. Such a process enhances the quality in education. This calls for the study of the Professional competency and the Professional ethics. (Natesan 2010).

Importance of a teacher in the rapidly changing times and very special significance of a teacher is a well-known matter. This also calls for more and more competent teachers having rich wealth of appropriate ethics built-in. Any study made on the Teacher’s Professional Competency and Teacher’s Professional Ethics remains useful to the better understanding of today’s professional needs of the teaching community.

Having considered different issues concerning the Professional Competency and Professional Ethics of teachers belonging to Pre and In-Service groups it becomes relevant to investigate the contemporary status of the teachers in respect of their competency and ethics. Such studies augur the right identification of professional requirements, including the design of teacher’s training programs for effective educational transactions. However, one needs to address the following research questions while considering the research study in the field of Professional Competency and Professional Ethics.

### 5.5.0 Research questions

Research questions help in consolidating the emerging ideas of the research. These questions when raised effectively they pave the way to design the research and also help in choosing the research methodology. One may be guided and motivated by the earlier research in raising suitable and relevant research questions. This can happen from the subtle research gaps observed while reviewing the earlier research. Researcher derives some useful direction and stimulation in designing the methodology with the help of pertinent research questions. This leads to finding some answers to the research questions, thus raised. In the process of research the research questions have much meaning in the very design of the study. On conclusion of the research study these research questions get answered to the extent possible. In the present investigation following questions were identified with the research concerns.
1. How is the trend of Perception of Professional Competency, Professional Competency and Perception of Professional Ethics of Pre-Service and In-Service teachers?

2. Is there any variation in the Perception of Professional Competency, Professional Competency, and Professional Ethics amongst the In-Service teachers working in different Boards?

3. Is there any gender influence in Pre and In-Service teacher’s Perception of Professional Competency, Professional Competency and Perception of Professional Ethics?

4. What is the relation between Perception of Professional Competency, Professional Competency and Perception of Professional Ethics of Pre and In-Service teachers?

Keeping in view of the research questions mentioned above following study was proposed for detailed investigation.

5.6.0 Statement of the problem

Having considered the rational of the study and the relevant research questions it is now required to establish the actual statement of the problem. This enables the researcher to seek greater focus of the investigation. Clear statement of the research problem helps the researcher and also the readers as well as the evaluators. Therefore and In the light of preceding perspective on the present study and considering the research problem, investigator identified the following research problem, for in-depth study. Thus the statement is presented below.
"A study of Professional Competency and Professional Ethics of Pre-Service and In-Service Teachers at Mumbai".

5.7.0 Objectives of the research

Every research project deals the solution of an issue of human interest. Along these lines, the researcher has a distinct reason as a primary concern. He has important and particular objectives to attain through his research work. Such particular objectives or reasons for existing and are actually termed as objectives. Each investigation study must have a few goals to accomplish, without which no investigation can be led. The whole research methodology is guided by objectives which have been clearly and exactly spelled out by the investigator in advance. The present study, like all other studies, had a few objectives to achieve. The investigator has stated these objectives as follows:

1. To find out the Professional Competency, Perception of Professional Competency and Professional Ethics of Pre-Service and In-Service Teachers.

2. To develop appropriate measuring instrument to find out Professional Competency, Perception of Professional Competency and Professional Ethics of teachers.

3. To find out variation in Professional Competency, Perception of Professional Competency, and Professional Ethics amongst the In-Service Teachers from different boards.

4. To find the gender influence, if any, on Pre and In-Service Teacher’s Professional Competency, Perception of Professional Competency and Professional Ethics.

5. To find relation if any between Professional Competency, Perception of Professional Competency and Professional Ethics of Pre and In-Service Teachers.
5.8.0 Hypotheses

Following hypotheses were formulated by the researcher keeping in view of the objectives stated above:

$H_01$. There exists no significant difference between Professional Competency, Perception of Professional Competency and Professional Ethics of Pre-Service and In-Service Teacher.

$H_02$. There exists no significant difference between Professional Competency, Perception of Professional Competency and Professional Ethics amongst the teachers from different boards of study.

$H_03$. There exists no significant difference between Professional Competency, Perception of Professional Competency and Professional Ethics amongst male and female teachers.

$H_04$. There exists no significant relation between Professional Competency, Perception of Professional Competency and Professional Ethics.

5.9.0 Variables in the Research

A. Dependent Variable:
   a. Professional Competency
   b. Professional Ethics

B. Independent Variables:
   a. Gender
   b. Board
   c. Pre-Service Teachers Performance
   d. In-Service Teachers Performance
5.10.0 Operational definition of the terms

Whenever research is undertaken, the key terms used in the study needs to be defined. This facilitates the clarity in carrying out the investigation properly. It also ensures the un-blurred persuasion of the study avoiding conceptual misinterpretations basing on the technical terms. This is done to give a concrete meaning to the variables and also to establish the references so that the researcher can approach the problem with greater clarity. The operational definition is the meaning adopted by the researcher to study the given variable. Operational definitions of the key terms enable measurability or quantification of the variable involved. It also helps to a greater extent in analyzing different parameters to draw appropriate conclusions of the study. Given below are the operational definitions of the terms involved in the present study:

5.10.1 Teacher’s Perception of Professional Competency

Teaching is a profession. Every profession calls for a certain Professional Competency. This implies that the teachers are professionals, and are expected to have some degree of Professional Competency. Do the Teachers themselves have their own perception of Professional Competency? If so, how is the Perception of Professional Competency of the teachers? It may not be possible to accurately measure the Teacher’s Perception of their Professional Competency. Yet one may attempt to understand the trend of Teacher’s Perception of Professional Competency. For the purpose of present study the Perception of Professional Competency of the teachers remains indicated by the scores obtained on the tool TPPC.

5.10.2 Teacher’s Professional Competency:

Professional Competency of a teacher involves various aspects like content knowledge its pedagogical consideration, language, communication and ICT skills etc. However, for the
purpose of present study Professional Competency is determined by the scores obtained on the following three testing tools.

A.1: Lesson Observation Tool (LOT)

A.2: Teacher’s Perception of Professional Competency (TPPC)

A.3: Student’s reflections on their Teacher’s classroom performance (SRTCP)

5.10.3 Teacher’s Perception of Professional Ethics

Every profession has its own basic and profession specific ethics to be observed by the professional practitioners. Teaching being a profession and teacher being a professional the Professional Ethics in this field has its own importance. Basic values, morals and ideals which are essential to this field deserve due honor and respect in its practice. Present study operationalizes the Perception of Professional Ethics as the scores obtained on the tool Teacher’s Perception of Professional Ethics (TPPE). In doing so it was considered that the Teacher’s Perception of Professional Ethics (TPPE) and the Professional Ethics (PE) were treated as same and represented by PPE. This was done due to the fact that no other measure was used to define Professional Ethics, separately, as it was done in the case of PPC and PC.

5.10.4 Professional Ethics

Every profession has its own ethics. This includes basic and profession specific ethics which are to be observed by the professional practitioners. Teaching being a profession and teacher being a professional the Professional Ethics in this field has its own importance. Basic values, morals and ideals which are essential to this field deserve due honors and respect in its practice. Present study operationalizes the Professional Ethics as the scores obtained on the tool Professional Ethics
5.10.5 Pre-Service Teachers

Students admitted into the English medium B.Ed. Colleges of Mumbai University and located at Mumbai.

5.10.6 In-Service Teachers


5.11.0 Scope and limitations of the study

Any research study remains contained by some scope together with certain limitations. Limitations are likely to arise due to resource limitations, time and cost etc. parameters. Present study has its scope ranging from Perception of Professional Competency, to Professional Competency and then to the Perception of Professional Ethics. However these key elements of the present study were mainly considered from the educational practice at secondary level. On the other hand the study was delimited to certain aspects as presented below. Resource limitations, including costs involved in the study called for some restrictions in limiting the size of the sample.

1. The present study is delimited to the Pre-Service and In-Service teachers at Mumbai.

2. The study is delimited to In-Service teachers working in the English medium secondary schools affiliated to any one of three boards Maharashtra State Secondary Board (Secondary School Certificate: SSC), Council for the Indian School Certificate Examinations. (Indian certificate secondary education: ICSE) and Central
Board of Secondary Education (CBSC) offering All India Secondary School Examination: AISSE, at Mumbai.

3. The Present study is restricted to the Pre-Service teachers studying at English medium B.Ed. colleges at Mumbai.

4. The investigation is essentially delimited to the Professional Competency, perception of Professional Competency and Professional Ethics of the Pre-Service teachers and In-Service teachers.

5. The present study is restricted to Greater Mumbai only.

5.12.0 Research methodology

Research study calls for a systematic procedure to be followed. It involves a logical and scientific way of approach in addressing different aspects involved in the study. The very essence of the research method is a scientific way of approach at every stage of research study. Therefore research methods are very important in a research process. For addressing any research problem, the research methods describe the various steps of the plan. According to Webster’s Dictionary (1970) “Methods indicate systematic way of procedures adopted in scientific investigations.” Proper method leads to systematic proceedings and finally brings fruitful results.” For the present study, keeping in view of the objectives of the study it was opted to employ the survey method.

5.13.0 Research design

Research design explains the entire plan of the study in detail. It includes a detailed description of the tools used for collecting information, sample, methodology of the study and the methods used for data analysis. Research design refers to the structure of an enquiry planned to show the path for effective completion of the study undertaken. It is the detailed description of a proposed study design to investigate given problem. The research design is
a theoretical structure within which research is conducted. It constitutes a sort of plan for the
collection, measurement and analysis of data. It is needed because it makes research as
efficient as possible yielding maximum result with the minimum of time, efforts and money.
Preparation of a research design becomes important as soon as the research problem has
been defined. A careful design of planning enables the researcher to do work in a systematic
manner. It helps the researcher to organize the ideas in such a way where in it will be
possible for the researcher to look for flaws and inadequacies. Research design guides the
researcher to keep the right direction. Thus research design is essential for imparting rational
approach to the study. A diagrammatic presentation of the research design concisely depicts
different aspects of the research pictorially. Thus one can choose to depict the research
design in a diagrammatic way also. It is a stepwise, logical and systematic activity. A
research design includes following components:

a. Research Methods
b. Sampling Design
c. Tools for the research
d. Statistical Techniques used for data analysis

Kerlinger (1964) opines: “Adequately planned and executed design helps greatly in
permitting us to rely on both our observation and our inference.” An architect prepares a
blue print before he approves a construction similarly a researcher makes a plan before she
undertakes her research work. This helps researcher to save time and resource. Such a plan
or blue print for the study, known as a research design remains an essential element of any
research study. Research design indicates a plan of action to be carried out in connection
with a proposed research work. It provides only guidelines for the researcher to enable her
to keep track of her action and know that she is moving in the right direction in order to
achieve her goal. The research design of present investigation was visualized and depicted
pictorially here.
5.14.0 Tools

To study the Professional Competency and Professional Ethics of all Pre-Service and In-Service Teachers the researcher used following Tools.
1. Teacher’s Perception of Professional Competency (TPPC), a questionnaire using Likert scale, developed by researcher.

2. Teacher’s Perception of Professional Ethics (TPPE), a questionnaire using Likert scale, developed by researcher.


4. Student’s Reflections on their Teacher’s Classroom Performance (SRTCP), a questionnaire developed by researcher.

5. Structured Interview of Principal (SIP), developed by researcher.

### 5.15.0 Population sample and sampling

Population is a statistical concept. It refers to a collection of a specific group of human beings or non-human entities such as objects, educational institutions, and geographical areas taken into consideration for a study. For the present study the population consists of all English medium secondary school teachers of greater Mumbai affiliated to SSC, CBSE and ICSE board. All English medium B.Ed. colleges affiliated to Mumbai University were also considered as a part of the population. For various reasons it remains difficult to include all the members of the population for the study. In such a situation there remains a statistical facility to choose the representative sample selected from the defined population. The data obtained from a representative sample statistically yields the results, implications, trends in a logical manner. Subject availability and cost factors are legitimate considerations in determining the appropriate sample size (John W. Best, 2012). Though the defined population of the present study was finite, due to limitation of time and other resources the sample of individuals from the total population have been selected, which could represents the identified population. The individuals, representing the population were termed as the sample.
5.15.1 Sample

A sample is a proportion of a population selected for observation and analysis. Sample consists of a number of selected individuals, objects, events which represents the total population. A sample can yield reliable results only, if it is a true representative of the whole population, unbiased and of an adequate size. Therefore it becomes essential for the researcher to take necessary precautions while selecting the sample. The process of selecting the representative sample from the defined population, which is known as sampling, is equally important in any research work.

After defining the problem of the study, together with the objectives of the study one needs to define the sample systematically for data collection. It is necessary to select a finite number of individuals from the population for a study. The systematic process of selecting a limited number of individual, institution or objects from the population for the study is called Sampling. A careful and well planned selection of the sample helps in saving time, money and efforts of the researcher without jeopardizing the reliability and validity of the findings.

Sampling is broadly classified into two probability and non-probability categories.

a. **Probability sampling:** In probability sampling the units of the population are not selected at the discretion of the researcher but by means of certain procedures which ensure that every unit of the population has one fixed probability of being included in the sample.

b. **Non probability sampling:** In non- probability sampling, the units are selected at the discretion of the researcher. Such samples derive their control from the judgment of the researcher.
There are different methods of sampling

a. Simple random sampling
b. Systematic sampling
c. Stratified sampling
d. Cluster sampling
e. Incidental sampling
f. Purposive sampling

5. 15.2 Sampling

In the present study, a two stage sampling procedure was used. At the first stage the schools for IST and Colleges for PST were selected. And at the second stage teachers were selected from the above mentioned two groups. However, this was limited to secondary level teachers for including into the sample. In the first stage of sampling, the researcher initially collected the list of the English medium secondary schools at Mumbai. For the purpose of the study the researcher selected the schools on the basis of their affiliation to respective Boards, popularly known as SSC, ICSE and CBSE. Thus, stratified random sampling was used for selecting the sample. The simple random sampling was also used for selecting the schools in each stratum, allowing equal probability to each of the school to be selected on random basis. At the second stage the teachers were selected from the schools identified on stratified random basis, as mentioned above. A lottery method was used to select schools from different Boards. This was restricted to the available Teachers (sample) due to the restrictions in the permission granted for data collection by the school authorities. Therefore the available sample, in each institution was included in the sample composition of IST.

For the Selection of Pre-Service teachers in the first stage of sampling, the researcher initially collected the list of the English medium B.Ed Colleges affiliated to Mumbai University. From the list of English medium B.Ed Colleges of Mumbai four English medium B.Ed. colleges were selected through random sampling method. A total of 200 pre
service teachers were selected from four B.Ed. colleges. Researcher randomly selected four students from each class and obtained the feedback of their pre service teacher’s classroom presentation. This was done immediately after the lesson presentation of the PST. Further, to ascertain the qualitative reflections of the Principals on the Professional Competency and Professional Ethics of teachers, researcher selected sixteen secondary school Principals of different Boards for the interview purpose.

5.15.3 Sample composition

As presented above sample of the present study consists of In-Service Teachers, from English medium secondary schools of different Boards. English medium B.Ed Colleges affiliated to Mumbai University were considered for Pre-Service Teachers.

The sample consists of In-Service teachers from 4 SSC, 3 ICSE and 3 CBSE English medium secondary schools of Greater Mumbai. The following Table-5.1 shows both board wise and gender wise sample distribution of In-Service and Pre-Service teachers.

Table-5.1: Board wise and Gender wise sample distribution of Pre-Service & In-Service Teachers

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Category</th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Pre-Service Teachers</td>
<td>38</td>
<td>162</td>
<td>200</td>
</tr>
<tr>
<td>2 A</td>
<td>In-Service Teachers from CBSE</td>
<td>30</td>
<td>36</td>
<td>66</td>
</tr>
<tr>
<td>2 B</td>
<td>In-Service Teachers from ICSE</td>
<td>20</td>
<td>45</td>
<td>65</td>
</tr>
<tr>
<td>2 C</td>
<td>In-Service Teachers from SSC</td>
<td>20</td>
<td>49</td>
<td>69</td>
</tr>
<tr>
<td>2 D</td>
<td>Total In-Service Teachers of 3 Boards</td>
<td>70</td>
<td>130</td>
<td>200</td>
</tr>
<tr>
<td>3</td>
<td>Total Pre &amp; In-Service Teachers</td>
<td>108</td>
<td>292</td>
<td>400</td>
</tr>
</tbody>
</table>
5.16.0 Statistical techniques

Following statistics were used for the analysis of data.

- Percentage
- Mean
- Standard Deviation
- Analysis of variance (ANOVA)
- ‘t’ test
- Pearson’s product moment co-efficient
5.17.0 Findings

The Main findings of the present study are presented below in systematic way in different categories as follows.

a) Professional Competency , Perception of Professional Competency related finding.( PC, PPC)
b) Perception Professional Ethics related finding (PPE)
c) Relation between PC,PPC,PPE related finding
d) Other finding

5.17.1 PC, PPC Related findings

All the finding pertaining to Professional Competency and Perception of Professional Competency are placed below.

1. In-Service Teachers lead over the Pre-Service teachers on PC scores by 15% in the category of Good teachers. However, a reverse trend was observed in-the category of Average teachers. That is PST lead by 15% over the IST on their PC scores.

2. In-Service teachers (99%) lead over the Pre-Service teachers (96%) on PC scores by 3% in the category of Good teachers. However, a reverse trend was observed in-the category of Average teachers. That is Pre-Service teachers lead by 3.5% over the In-Service teachers on their PC scores.
3. 7.50% teachers were found to be Very Good category out of 400 teachers from PST and IST. This is based on student’s reflection on their teachers’ classroom teaching performance.

4. Bulk of the Teachers, i.e. 92.50% was found to be in Good category of the total sample of PST and IST.

5. None of the Teachers were falling in to the category of Satisfactory after student’s reflection on their teacher’s classroom teaching performance.

6. From the total sample (400) of PST and IST 15.50% of teachers were found to be Very Good category based on their LOT scores.

7. Bulk of the Teachers, i.e. 80.50% was found to be in Good category on their LOT scores of PST and IST. Remaining 4% of teachers were found in the satisfactory category on their LOT scores on the total sample of PST and IST.

8. Mean PC of total IST is leading by 2.46 % over mean PC of PST. Mean PC of female group from PST lead over the male group by 2.10, but incase IST group the mean PC of male and female group remain identical.

9. Pre-Service Female group of the sample demonstrated comparatively higher mean value of PE than that of the mean scores on PC of PST Male sample and it remained statistically significant.

10. Mean value of PC of total IST sample remained more than the mean scores of total sample of PST. Difference in the mean remained statistically significant.
11. Very high percent (94.5%) of teachers from CBSE, ICSE and SSC were found to be good on their PC scores, leaving 11% to the category of Average and none falling in to the category of Very Poor, Poor and Very Good.

12. While 100% of the ICSE teachers remained Good, 98.5% CBSE teachers, followed by 85.5% SSC teachers were observed to be Good on their PC scores.

13. Hundred percent of Male as well as Female teachers from ICSE remained Good, without any gender based difference. However, in case of SSC 95% of Male teachers remained Good against 81.6% Female teachers. An opposite trend remains evident in case of CBSE Male (96.7) and Female (100%) teachers on their PC scores.

14. Identical percent of Male (97%) and Female (93%) teachers were observed under Good teacher category on their PC scores, when all the Boards were considered together.

15. Mean PC of total male and female sample from all the three Boards differ from each other. While ICSE sample’s average PC remains highest SSC”s sample shows the least mean PC.

16. Mean PC of male and female sample from CBSE remain equal. But for SSC there is a mean difference of 1.82 and identical in case of ICSE Board’ sample.

17. The mean difference of PC of CBSE and ICSE was 3.7%, CBSE and SSC are 35% and finally the difference in the means of ICSE and SSC on their PC values was 6.8%. Further, a low p-value indicates that there is a significant difference among the groups under consideration.
18. Very high percent (86.5%) of Pre and In-Service Teachers of both the gender were found to be Good on their PC scores, leaving 13.5% to the category of Average and none falling in to the category of Very Poor, Poor and Very Good.

19. Identical percent of Male (85%) and Female (87%) teachers were observed under Good teacher category on their PC scores, when teachers from IST and PST were considered together.

20. Professional Competence of the total male and female sample remained identical with a marginal difference of 0.06.

21. Mean value of PC of total Male sample and Total Female sample remained identical. Difference in mean was found to be statistically not significant.

22. Mean value of PC of IST Male and IST Female remained equal. This result was found to be not statistically significant.

23. Mean value of PC of PST Female sample remained higher than that of the PST male sample. Mean difference was found to be statistically not significant.

24. Mean value of PPC of total IST sample remained more than the mean scores of total sample of PST. Difference in mean remained statistically significant.

25. Almost all the teachers (99%) from CBSE, ICSE and SSC were found to be Good on their PPC scores.

26. While 100% of the CBSE and ICSE teachers were observed to be in the category of Good nearing 97% of SSC teachers were observed to be Good on their PPC scores. Two female IST and one female PST were found to be Very Good. Very high
percent (94.5%) of teachers were found to be good on their PPE scores, leaving 4.75% to the category of Average and none falling in to the category of Very Poor and Poor.

27. Mean PPC of total male and female sample from all the three boards differ from each other.

28. While one Female In-Service teacher was found to be Very Good, very high percent (97.5%) of teachers were found to be good on their PPC scores, leaving 2% to the category of Average and none falling in to the category of Very Poor and Poor.

29. Near equal percent of Male (95%) and Female (98%) teachers were observed under Good teacher category on their PPC scores, when teachers from IST and PST were considered together.

30. Mean PPC of total female group from PST lead over the male group by 4, but for IST group the mean PPC of male and female groups remain identical.

31. Mean value of PPC of total male sample and total female sample differ by 1.73%. The difference in the mean was found to be statistically not significant.

5.17.2 PPE related findings

All the findings pertaining to Perception of Professional Ethics are given below.

1. In-Service teachers (95%) lead over the Pre-Service teachers (94%) on PPE scores by 1% in the category of Good teachers. However, a reverse trend was observed in-
the category of Average teachers. That is Pre-Service teachers lead by 2.8 % over the In-Service teachers on their PPE scores.

2. Mean value of IST on PPE exceeds by 3.84 over the mean value of PST. Mean PPE scores of total PST and total IST sample were found to differ by 1.56.

3. Mean PPE scores of IST sample stands highest with 69.76%, while the lowest remains 64.00% with the PST Male group.

4. Mean value of PPE of IST was more than PST. The difference in the mean was found to be statistically significant.

5. One percent of teachers from CBSE, ICSE and SSC were found to be Very Good and 95% teachers are good, 4% teachers are average category on their PPE scores.

6. On PPE scores 98.5% of the CBSE and 93.8% ICSE and 95% SSC teachers were observed to be in the category of Good.

7. One and half percent of teachers from CBSE, 6.2% ICSE and 4% SSC teachers are average category on their PPE scores.

8. Mean PPE scores of total sample from CBSE, ICSE and SSC were found to be unequal and stand at 67.97%, 69% and 69.31% respectively.

9. Mean scores of female sample of ICSE group showed 5.08 higher mean PPE scores over their counterparts mean score values and this is highest compared to other two boards. Mean PPE scores of total Female sample exceed by 2.86% over the total male sample.
10. Mean scores of female sample of ICSE group showed 5.08% higher mean PPE scores over their counterparts mean score values and this remained highest compared to other two boards.

11. Near equal percent of male (95.7%) and female (94.75%) teachers were observed under Good teacher category on their PPE scores, when teachers from IST and PST were considered together.

12. Female group of the sample demonstrated comparatively higher mean value of PE and it remained statistically significant.

13. Mean value of PE of Female IST sample remained more than the mean scores of male IST sample. Mean difference remained statistically significant.

14. The mean PPC and PPE of the total sample remained 68.47% and 67.78%.

5.17.3 Findings of PC, PPC and PE relation

1. It is clear from the data that there exists a positive correlation between PC and PPE. However, this positive correlation is low. Correlation between PC and PPE remained highest for sample from CBSE Board, followed by the sample from SSC, leaving sample from ICSE as the lowest. Male sample showed the higher value of correlation compared to the female group of sample. Correlation remained low (r=0.24075) over the total sample under study. All values of “r” were significant at 95% level except for the sample from ICSE Board.

2. Positive and low correlation was indicated between PPC and PPE. Correlation between PPC and PPE remained highest for sample from CBSE Board, followed by the sample from SSC, leaving sample from ICSE as the lowest. Male sample showed the higher value of correlation between PPC and PPE, compared to the female group of sample.
5.17.4 Other Findings

Principal of 16 schools were interviewed to as written to Qualitive dimention related to Professional Competency, Perception of Professional Competency and Perception of Professional Ethics they are placed below:

1. Majority of the principal’s view that Professional Competency includes content knowledge, method of teaching, communication skills, handling students appropriately. Very few of them feel that Professional Competency also includes teacher’s decision making power related to their students and subjects. As far as PE is concerned majority of the principals feel that if a teacher is fulfilling his/her duties like teaching properly with sincerity, if he or she is punctual, having good moral values, then the teacher is professionally ethical but at the same time few principals were not clear in their views related to PE.

2. As far as Principal’s Perception on teachers PC is concerned, majority of them revealed that if a teacher is updating her knowledge and are ready to learn new things means they are having PC whereas very few also connected PC with knowledge of technology, they also said PC increases with experience. About perception of PE some principals were not clear about their ideas on PE of their teachers but they said these days’ ethics are very casual and can be changed easily according to the situations. But majority of the principal connected PE with the fulfilling of their duties and responsibilities properly.
5.18.0 Discussion of results

To facilitate the discussion of results in an orderly and systematic way following broad areas were considered to carry out the discussion, in sequence.

1. Perception of Professional Competency (PPC)
2. Professional Competency (PC)
3. Perception of Professional Ethics (PPE)

While discussing the results under these three different areas it was also kept in view to place the discussion by taking into account of variables like In-Service Teachers (IST), Pre-Service Teachers (PST), male and females groups of sample and teachers working under different Boards; like, CBSE, ICSE and SSC. Further, to facilitate systematic discussion an additional sub classification of above mentioned areas was considered as mentioned below.

(A). Number of teachers in percentage belonging to “Very Good” to “Very Poor” Categories.

(B). Mean scores of PPC, PC and PPE of different categories of sample.

(C). Relation between PPC, PC and PPE.

1. Perception of Professional Competency (PPC)

It is important to understand the Perception of teachers on Professional Competency. This can guide them, motivate them for professional growth. How teachers perceive the Professional Competency? To understand the trend in this respect we need to have some
classification of teachers. However, categorizing the teachers on qualitative consideration, even based on some quantitative scores, into “Very Good to Very Poor Teachers need not offer precise information, yet it can help understand the trends in general. In the present study all the Teachers, in general, whether Pre-Service or In-Service, Male or Female group of Teachers or Teachers working under different Boards; like, CBSE, ICSE and SSC category do have some perception of their Professional Competency. Very high percent (97.5%) of teachers were found to be “Good” on their PPC scores, leaving 2% to the category of “Average” and none falling in to the category of “Very Poor” and “Poor”. Near equal percent of Male (95%) and Female (98%) teachers were observed under “Good” teacher category on their PPC scores, when teachers from IST and PST were considered together. Almost all the teachers (99%) from CBSE, ICSE and SSC were found to be “Good” on their PPC scores. While 100% of the CBSE and ICSE teachers were observed to be in the category of “Good”, nearing 97% of SSC teachers were observed to be “Good” on their PPC scores. This trend, as observed on the group of teachers studied clearly establishes the fact that Teachers possess some perception on their Professional Competency. Though, hardly any one reaching the level of perceiving Professional Perception at “Very Good” level a big majority could reach the level of “Good”. Further, hardly any teacher was falling to the bottom level; namely, “Very Poor” on their PPC. Daniel R. Johnson’s (2011) finding in the related study suggested that none of the three aspects (context, process, and content of teacher learning.) of Professional Learning Communities (PLCs) that were studied had a statistically significant influence on teacher perceptions.

Interestingly, there is no much difference in the Teachers category on the basis of their gender, in general, and remained identical with male (85%) and female (87%) groups of teachers on PPC. In other words and in general, a “Good Teacher” is a “Good Teacher” whether male or female teacher or working under different Board system. This underlines the professionalism in teaching learning process. At the same time some noticeable differences in the percentage of “Good Teacher” under different gender category or Board pattern could be due to the organizational, motivational professional environment, which deserves more pointed study on this variation in the percent of “Good Teachers”. Why a difference of 13% of superiority of male teachers from SSC over their counterpart female teachers as a “Good Teachers” deserves more detailed and specific study.
Reasonable summative observation of the above discussion indicates that the majority of teachers remained “Good” on their PPC. But on merging the other related elements like, Lesson Observation of Teachers in the class and combining the student’s reflections on their teacher’s classroom presentations a more comprehensive understanding of the teacher’s category emerges. Following discussion includes PPC with LOT and Student’s reflections for better and enriched categorization of teachers.

2. Professional Competency (PC)

Professional Competency together with the consideration of LOT and SRTCP yields PC, as presented below. With this combination of consideration data on the sample studied reveals the percent of Teachers under “Very Good”, “Good” etc. shows some difference from PPC based category, as mentioned below. This is in variation with findings of Goyal J.C, Pandey and Damayanti (1987), which observes that majority of the teachers possess average or below average teaching competency where as the number of teachers that possess above average teaching competency is very low. On the other hand findings of Naree Aware Achwarin R. N (2009) reveal that majority of teachers were highly competent, which remains in agreement with the findings of the present study. Study of Abdul Rahim Hamdan (2010) reveals identical findings by observing; all the teachers were competent and there existed a significant relationship of gender, teaching experience and specialization with their competency,

Considering the dimension of the Lesson Observation of the Teacher (LOT) while presenting his or her lesson in the class data suggests that 15.50% of teachers were found to be in “Very Good” category based on their LOT scores, and maintaining bulk of the Teachers, (80.50%) in the “Good” category on their LOT scores, retaining 4% of teachers in the satisfactory category on their LOT scores.

Similarly, considering the reflections of the students on the Professional Competency of their teachers, based on their classroom performance it is interesting to note that; 7.50%
teachers were found to be “Very Good” category of the total sample of PST and IST. Bulk of the Teachers, i.e. 92.50% was found to be in “Good” category of the total sample of PST and IST. This positive reflection of the students on their teachers’ remains in tune with the findings mentioned earlier. That is majority of the teachers are good on their PPC and PC in general. In other words the teachers with Good PPC, PC were rated as “Good” teachers by their students. This stands as the corollary to the preceding observation. However, important distinction is both LOT and SRTCP ratings identify few “Very Good” teachers, along with a big majority of “Good” Teachers. This was not the case with the Perception of Professional Competency made by the teachers themselves.

Quantitative consideration of the data on PPC and then PC scores of different sample groups, which carries weighted summation of scores from PPC, LOT and SRTCP, gives somewhat identical results. Computed mean and ANOVA values indicate this trend. Perception of Professional Competency of the total male and female sample remained identical with marginal difference of 1.72%, which was found to be statistically significant. However, mean PPC of total IST is leading by 6.2% over the mean value of Total PST sample. But in case of IST group the mean of PPC of male and female group remain identical. But, Mean PPC of total female group from PST led over the male group by 4%. When the data was considered from the teachers based on their Boards Mean PPC of total male and female sample from all the three boards differ from each other. While SSC sample average PPC remain highest, ICSE sample shows the average difference of PPC 2.64% from CBSE. Mean PPC of male and female sample from all the three boards are significantly different. The difference in means of male and female in their PPC of CBSE board is 2.21%, ICSE board is 6.6% and SSC board is 4.46%. These intra-group subtle variations in the mean PPC scores deserve to be probed further to understand the difference in mean PPC scores of In-Service and Pre-Service teachers.

After considering the PPC an attempt was made to understand the trends on different sample groups over their mean PC. As mentioned earlier, PC is the sum of weighted average of PPC, LOT and SRTCP. Following discussion offers some insight into the mean PC of different sample groups studied. Mean PC of the total male and female sample remained identical. Mean PC of total IST was leading by 2.46% over the PST. Mean PC of female
group from PST lead over the male group by 2.10%, but in case of IST group the mean PC of male and female group remain identical. This is in agreement with the study of Passi B.K. and Sharma S.K. (1982) who found that male and female teachers did not differ in competency.

When the data was considered from all the three Boards Mean PC of total male and female sample differ from each other. While ICSE sample’s average PC remains highest SSC’s sample shows the least mean of PC. Mean PC of male and female sample from CBSE remain equal. However, the mean PC of male and female groups from SSC show a marginal difference and the mean PC remained identical in case of ICSE Board’ sample.

3. Perception of Professional Ethics (PPE)

In addition to Professional Competency Teachers, like any other professionals, are likely to exercise Professional Ethics. This implies that Teachers do possess some Perception of Professional Ethics. Present study made an attempt to note the reflections of Teachers over their Perception of Professional Ethics (PPE).

Data reveals that all the Teachers studied possess some Perception of Professional Ethics. Mean PPE scores of PST and IST sample were found to differ marginally by 1.56%. The difference in the mean was found to be statistically significant. Similarly, Mean value of PE of Female IST sample remained more than the mean scores of male IST sample. The difference in the mean was found to be statistically significant. On considering the mean scores on PPE of teachers from different Boards data confirms that the Mean PPE scores of total sample from CBSE, ICSE and SSC were found to differ marginally. This trend indicates that though all the teachers studied do possess some Perception of Professional Ethics they show some marginal variation on being In-Service-Pre-Service, male-female and on being teachers from different boards. Results in general indicate variation in the Perception of Professional Ethics. However, variation in the mean may have its roots in the teacher’s socio-cultural background and or organizational culture which deserve further in-depth study.
4. Relation between PPC, PC and PPE

Keeping in view of the objectives of the study data was analyzed to find the relation between the PPC, PC and PPE. Data shows that there exists a positive correlation between PC and PPE. However, the correlation remained positive but low. Correlation between PC and PPE varied with the teachers from different boards. Correlation between PC and PPE remained highest for sample from CBSE board, followed by the sample from SSC, leaving sample from ICSE as the lowest. Male sample showed the higher value of correlation compared to the female group of sample. Correlation remained moderate \((r=0.24075)\) over the total sample under study. All values of “r” are significant at 95% level except for ICSE board.

Data studied establishes that there exists a low positive correlation between PPC and PPE. Correlation between PPC and PPE remained highest for sample from CBSE board, followed by the sample from SSC, leaving sample from ICSE as the lowest. Male sample showed the higher value of correlation between PPC and PPE, compared to the female group of sample. These findings are significant except for the sample from ICSE Board.

These findings suggest that PPE of Teachers has some positive impact on the teachers PPC and PC. Though, weak yet positive correlation between PPC-PPE and PC-PPE suggests that Perception of Professional Ethics and Perception of Professional Competency as well as Professional Competency promote each other and complement them mutually. How effectively they complement each other and to what degree they promote each other needs to be studied in depth. Also one may like to study the variation in the correlation due to different sample groups, like gender, IST-PST and the teachers from different boards.
5.19.0 Implications of the research

Based on the findings of research, an attempt has been made to present important educational implications of the study for In-Service teacher and persons who are developing programs for Pre-Service and In-Service teachers.

5.19.1 Implication for teachers

The study investigated that if teachers have good Professional Competency and Professional Ethics then he/she can be a competent teacher. These findings of the present study may be helpful for the students who are studying in B.Ed. (PST) course, as they try to become competent and ethical teachers. This study will also help students to believe in themselves and to understand the importance and role of Professional Competency and Professional Ethics which can make them successful teacher in the future. Necessary help is essential for In-Service teachers as they try to develop their professional skills, competency and Professional Ethics in teaching learning process and if they want to become an ethical and competent teacher. In-Service teachers can develop their Professional Competency and Professional Ethics through different In-Service programmes. Teachers need to be supported with appropriate In-Service programs to enrich their Professional Competency and also enriching their ethical standards.

5.19.2 Implication for teacher educators

The results of present study highlighted different elements of Professional Competency and Professional Ethics which are essential or expected in future teachers. Hence the teacher educators can develop those elements of Professional Competency among the pupil teacher while they are in their B.Ed. course through various formal or informal activities. Also it is required to find ways and means to promote good ethical practices, laying foundation for good ethics in prospective teachers, during their Pre-Service training. Teacher educator can guide, motivate and mentor the B.Ed. students while laying foundation of ethical practices in teaching profession.
As far as competency is concerned the teacher educator may make extra effort to build different competencies related to teaching profession during the course. This benefits their students and they can become more competent teachers for our future generation.

5.19.3 Implications for education policy makers

The results of this research may help education policy makers to understand the importance and need of Professional Competency and Professional Ethics in Pre-Service and In-Service teachers; hence they can plan and implement various programs for teachers to develop their Professional Competency and Professional Ethics. Recognizing and rewarding the professionally competent teachers and also honoring the teachers for their great ethical practices as inspiring models deserve due attention for the policy makers.

5.19.4 Implications for school management personnel

School management needs to understand the importance of Professional Competency and Professional Ethics in In-Service teachers. To enhance their staff members’ competencies they can organize in-service programmes such as workshops on communications skills, teaching skills, technical skills, managerial skills, content as well as pedagogical and technology based skills etc. They can also organize seminars on various areas and elements of competency. Efforts can also be made to send their teachers for training in various organizations such as SCERT, NCERT, and DIET to attend different programs organized by them for the enhancement of the teacher’s skills. For the development of Professional Ethics school management can also organize In-Service programme like guidance and counseling, value based ethical programs, moral based guest lectures and workshops, and different spiritual talks.
5.20.0 Suggestions for further studies

During the present investigation the researcher came across a few related problems. Some of the key areas noted for further research which are likely to enrich the field, are given below for the benefit of further investigations.

1. Present study was done on the Pre-Service and In-Service teachers in secondary section only. Similar study of Professional Competency and Professional Ethics may be undertaken on primary section and higher secondary section school teachers too.

2. A similar research may be conducted to study of Professional Competency and Professional Ethics of rural and urban area teachers specifically male and female teachers can be compared to find gender dependency.

3. Effort can also be made to study the Professional Competency and Professional Ethics of graduation and post-graduation levels teachers.

4. A comparative study of the teachers working in other boards, like IB, IGSCE, etc. may be conducted.

5. A similar study may be conducted for D.T.Ed, and M.Ed. teachers.


7. A study of Professional Competency and Professional Ethics can be made on rural and urban as well as vernacular samples.

8. A similar study can be conducted covering a large sample of teachers from different parts of the country.
9. An Investigation can be carried out to find Professional Competency and Professional Ethics of teachers together with the variables like, qualification, discipline, experience and age.

10. A study can be conducted for developing Professional Competency in Pre-Service and In-Service teachers.

5.21.0 Conclusion

Present study was focused on to the Professional Competency, Perception of Professional Competency and Professional Ethics of Pre-Service teachers and In-Service Teachers working under different board systems. Accordingly, a set of objectives were identified (Section 5.7) as well as hypotheses were formulated (Section 5.8). After drawing the sample from defined population data was obtained from the sample using the developed tools, observations and interviews. Analysis of the data thus obtained yielded a set of findings as mentioned above and thus the objectives of the study were successfully achieved. However, implications to different sections like teachers, policy makers were placed (section 5.19) along with the suggestions for the future persuasions (Section 5.20) of research in this area.