

## Mentoring Effectiveness for Primary School Teachers' Competencies Through Continuous Professional Development (CPD)

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**Abstract** *The aim of the current study was to identify different competencies developed through Continuous Professional Development (CPD) and to evaluate the effectiveness of mentoring in developing different competencies among primary teachers. It was a descriptive and quantitative study in nature. Primary school teachers (PSTs) from the district of Lahore were the population of the study. The sample was selected randomly from 10% of the total population (N = 786). For the data collection, a 5-point Likert-type questionnaire was developed by the researcher. To answer the research questions, data were analyzed using SPSS version 21 with mean SD, t-test, and ANOVA. The identified professional competencies through the CPD program were classroom management, micro-teaching, reinforcement, planning and strategies, learning environment, human growth and development, assessment, communication skills, asking questions, and lesson planning. Mentoring is recommended to be done at the elementary and secondary levels to develop competencies.*

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### Introduction

Quality education can be achieved through the competency and proficiency of teachers. Teacher education plays an important role in quality education ([Gudmundsdottir & Hatlevik, 2018](#)). The Punjab Education Sector Reform Program (PESRP) was established in 2003 by the Punjab Government. For teacher education, several in-service programs have been conducted for educational development, but it is commonly supposed that there is still a need for a quality teaching-learning process in real classrooms. This reliable verification of incomplete accomplishment, as reported in the CPD framework, provides guidelines for planners to conduct a more successful training model or framework. These can be observed as the exceptional features of the CPD program now in use. Importance was placed on a required assessment of primary school teachers (PSTs), the prerequisite of mentoring in the classroom, incessant support from district teacher

evaluators (DTEs), and follow-up and support regularly.

According to a publication by DSD (2014), the focus of education was based on seven aspects, comprising ECE (early childhood education), child-friendly schools, the reforms related to the curriculum, initiatives related to English-medium schools, continuous assessment of students' learning, CPD (continuous professional development), and the school reforms roadmap framework. CPD is the main initiative for quality education taken by the government of Punjab. In 2006, a program was launched by the Directorate of Staff Development (DSD) Punjab, named the "Continuous Professional Development (CPD) Programme," to improve the teachers' competencies at the primary school level. The CPD services were provided to 47,000 schools along with all primary school teachers (PSTs). Under this program, some 152,000 primary

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school teachers are mentored each month, and about 2.2 million students are assessed each month to get feedback on the mentoring and training of their teachers. About 47,000 schools are reporting to DSD under this program (<http://www.schools.punjab.gov.pk>).

The Teacher Education program received due attention and enabled the production of a large number of trained and qualified teachers who are well familiar with education methodology (Hussain, 2004). In the view of [Hopkins \(2015\)](#), teachers' professional development causes an improvement in quality education. In the educational context, different stakeholders participate in quality education, like teachers, students, and parents. All of these stakeholders carry out their responsibilities and roles in the pursuit of high-quality education. Further, it provides guidelines for teachers, administrators, and policymakers to enhance the teaching-learning process.

In 2006, to improve quality education in the primary classes of public schools, DSD launched a Continuous Professional Development (CPD) programme. It focuses on mentoring teachers for better classroom practices, content knowledge, and pedagogical skills. The performance indicators of the CPD programme are based on the National Professional Standards for Teachers (DSD Manual, 2007). CPD is concerned with the capacity building of teachers at the primary school level in Punjab. The District Training and Support Centers (DTSCs) and Cluster Training and Support Centers (CTSCs) provide training for the teachers and are established at the district and cluster level, respectively. In the first phase of the CPD programme, lead teacher educators (LTEs) were trained in 12 districts. This need-based training included monitoring and empowering teachers to take responsibility for their professional development.

Teachers need certain skills or competencies to achieve their targets or goals successfully. Through CPD, teachers enhance and improve their competencies in terms of subject knowledge, pedagogical skills, as well as skills regarding communication, motivation, and dedication. As per the mentoring aspect of the CPD programme, the following are the main competencies of primary school teachers (DSD Manual, 2007).

(i) Planning; (ii) Assessment; (iii) Mentoring; (iv) Professional Development; (v) Activities; (vi) Reporting; (vii) Monitoring and Quality

Assurance; Management; and (x) Coordination. (DSD Manual, 2007). The researcher intended to focus on the processes that were responsible for gauging the performance of the teacher concerning the competencies which are predefined in the Continuous Professional Development (CPD) programme of DSD. This current study found the effectiveness of mentoring on teacher competencies at the primary school level in Punjab.

Following were the objectives of the study:

1. To identify different competencies developed through CPD among primary school teachers.
2. To evaluate the effectiveness of mentoring on developing different competencies among primary teachers.

The research questions of the study were as under:

1. What are different competencies developed through CPD among primary school teachers?
2. What is the effectiveness of mentoring on developing different competencies among primary teachers?

## Literature Review

Quality teaching is a major component that directly affects the students' performance, along with the size of the class as well as the school ([Darling-Hammond, Hylar, & Gardner, 2017](#)). The quality of teaching with regard to teachers' pedagogical content knowledge is affected by the students' achievements in a school ([Keller, Neumann, & Fischer, 2017](#)). This targeted investment is essential for the improvement of teaching in education. To compete with the changes emerging in the educational field, teachers are required to enhance their professional skills and qualifications, along with their capabilities. To become professionally developed, they required training. In the view of [Guskey \(2003\)](#), as stated by [Marcelo and Yot-Domnguez \(2019\)](#), content knowledge, pedagogical content knowledge, and the belief system of the teachers have changed. As discussed earlier, the government focused on seven indicators for quality education (DSD, 2014).

In conceptualizations of professional development for the teaching profession, it is

separated into two facets. For professional development, training has of much importance ([Kennedy & Laurillard, 2019](#)). Our understanding of development and growth in teaching is dependent on our perspective of the profession ([Kennedy & Laurillard, 2019](#)). In teacher education and professional development is of much importance ([Collins, & Halverson, 2018](#)). Looking upon teaching as a craft for sensitivity to the practical aspects of teaching and the nature of competence as "reflective practice" by [Leinhardt, \(1990\)](#) as stated by ([Zakaria 2020](#)).

Teacher competencies are measured through establishing professional performance indicators. These indicate whether the competency requirements are fulfilled or not. Teacher competencies may also be categorized as follows: Primary school-level CPD ([Bawa, 2015](#)).

It is believed that the continuous professional development of teachers is highly relevant for improving a teacher's educational capacity, performance, and commitment, as well as job satisfaction. These elements are interlocked with the constraints and features of a specific school context, and the competencies of teachers can also bring positive change in students' performance and abilities. For quality education, teachers' commitment and school leaders' commitment play an important role in teachers' knowledge, skills, and commitment. Therefore, the recruitment committees should keep in mind that individuals should have the highest caliber to fulfill all needs and tasks ([European, 2009](#)).

Mentoring and ongoing education professional development of teachers is a remarkable step taken by the Punjab government to improve the quality of education. Since its inception in 1959, the Directorate of Staff Development (DSD) has been playing a major role in improving the competencies of teachers in the whole province. DSD has taken many steps to enhance the professional competencies of teachers. One of the important steps taken by DSD was the selection of a new cadre of District Teacher Educators (DTE) among the existing teachers. They have to provide mentoring, including help, guidance, feedback, and counseling to the participants.

It was focused that by enhancing the professional competencies of teachers, the target of quality education can be achieved. It was a new project and a very expensive one. A

lot of foreign aid, local financial resources, equipment, and manpower were put into the project to achieve its goals. (DSD Manual, 2007).

At present, teachers' professional development is considered an essential requirement in teacher education. It is also considered an important factor in increasing teachers' professional competencies. The major function of teachers' professional development is to develop students' learning outcomes ([Darling-Hammond et al., 2017](#); [Guskey, 2002](#)). Any system of education can be influenced by effective teachers ([Galamay-Cachola, Aduca, & Calauagan, 2018](#)). So, arrangements for teachers' professional development must be made.

CPD in education is defined in a variety of ways, including formal training and on-the-job learning opportunities. [Day \(1999\)](#) provided a more comprehensive view of CPD, encompassing all components that contribute to good changes in classroom practise: "It comprises all-natural learning experiences as well as conscious and planned activities that are intended to be of direct or indirect benefit to the individual, group, or school, and that add to the classroom's quality of education." It is the process by which teachers, individually and in collaboration with others, review, renew, and extend their commitment as change agents to the moral purpose of teaching and by which they acquire and critically develop the knowledge, skills, and emotional intelligence required for good professional thinking, planning, and practise.

In recent research on initial teacher education and development, mentoring is the main focus of attention ([Dikilitas & Wyatt, 2018](#)). Mentorship means playing a role as a bridge between the initial learners and teacher trainers in their assistance to the young partner in solving problems. Mentorship is also presented in the UK and describes a relationship in which an individual voluntarily gives time to support and encourage another (Mentoring and Befriending Foundation, 2006). Mentorship is particularly developed for the mentee's lifetime period, which he always retains forever. Mentorship is a process that creates a relationship between a senior and a junior teacher, in which the senior teacher is called a mentor and the junior is called a mentee. The senior teacher helps and guides the junior in his development and growth by exchanging knowledge and insight. It is also a

process to make a junior teacher familiar with his teaching responsibilities by an experienced teacher (Fischer & Andel, 2002).

Mentorship benefits progressive teachers in all aspects of their teaching careers (Gholam, 2018). is the communication between a new teacher and an expert teacher that contributes to the learning of a new one (Collins, 1998). Moreover, he also provides the concept of active mentoring, such as responses offered by the teachers to the students. It was also described as a proficient method to support novice teachers (Lindgren, 2005).

Mentoring, as a creative method, works to promote professional development, which helps to change the method of self-actualization and augmentation. is a long-lasting and significant relationship between two teachers, focusing on the quality of the relationship that includes joint admiration and motivation to learn from one another. It is different from other activities because the focus of mentoring is on learning generally and mutual learning in particular. Mentorship is a source of guidance and help for teachers to solve their difficulties (Alemdag & Erdem, 2017). It is a tool that promotes self-confidence, skills, and teaching strategies that are responsible for quality teaching and learning (Fischer, 2000). Mentorship for teachers has a lot of benefits, such as helping novice teachers to gain success in their profession as well as helping in their retention in the teaching profession.

Teaching competencies are sometimes different from the teacher's approach as a worker (in respect of timings) and from the approach of the teacher as a professional (in respect of education). This is an internationally recognised demand for teachers that has exceeded past demands and expectations (Darling-Hammond et al., 2017). It includes five following steps: the parents' and community environment; opportunities and demand creation for lifelong students; pedagogy; collegiality; and the creation of an enabling school environment to manage diversity.

In a study conducted by Masood (1996), effectiveness was evaluated in the orientation course of new primary teachers. Similarly, in a study conducted by Mahmood (1998), in-service training was proved to be effective and significant in an experimental study. The new PTOC training was also used in a study conducted by Khurshid (1998). This study was conducted in the Rawalpindi district with female

teachers. Another group of studies was also conducted by Hayon (1989). The results suggested the use of interpersonal skills for effectiveness and efficiency. Moreover, teachers having these skills were more effective in the classrooms regarding students' behaviour, achievement, and attitude.

In the view of Ghaith and Yaghi (1997), there was an association between the experience of educators' effectiveness and the behaviour towards instructional novelty. This finding explored that individual teaching had a positive effect on teachers' behaviour with the latest instructional practices. According to Harris and Sass (2011), different kinds of education were found with training regarding the efficiency of educators for the achievement of students' development. Moreover, it was also discovered that middle and primary school teachers' efficiency rose with experience. In contrast, there was found to be no connection between formal professional development training and teachers' efficiency. In a study conducted by Jarvis and Pell (2007), the confidence and attitude level of the teachers were explored before and after service programs. Regarding science teaching, the confidence level of the teachers increased. It was also found that most of the teachers improved their conceptual understanding since they also became more optimistic regarding their attitude. Moreover, students' cognition and attitudinal differences were also explored. Teachers' continuous professional development was observed regarding teachers at the university level (Dilshad, Hussain, & Batool, 2019).

## Methodology

This study was quantitative with a descriptive research design. To find out the objectives of the study, a 5-point Likert type questionnaire was used. The population of the study comprised all male and female PSTs from primary, elementary, high, and higher secondary schools. The sample size for this study was 786 male and female PSTs by using simple sampling techniques. A sample of the study was taken from 10% of the total population (N = 7862), i.e., (N = 786, Male = 222, Female = 564). The age level of respondents varied from 31 to 40 years old, with qualifications such as M.A/M. Sc; B. Ed/M. Ed. The district of Lahore was selected due to its literacy rate, head office, large number of students and teachers,

minimum dropout rate, initiator of the CPD programme, personal availability of the supervisor, program organizers, surprise visits, and TEs/DTEs/CTSC Heads' training.

A five-point Likert type scale as a questionnaire was used as an instrument to take the opinion of respondents. This questionnaire was developed by the researcher himself after consulting related literature and expert opinion. The instrument's Cronbach alpha was calculated and found to be  $r = 0.91$ . The researcher himself visited the schools/cluster centers. After the collection of the questionnaires, the data was compiled into groups for further statistical analysis and description. The data were calculated using descriptive and inferential statistics in the Statistical Package for Social Science (SPSS), and the mean score and standard deviation were displayed. After filling out the questionnaires, they were reviewed to ensure that the respondent had properly and correctly answered the question. The data was then compiled and analyzed using the Statistical Package for Social Science (SPSS) using descriptive and inferential statistics. A t-test and ANOV were used to analyze the data. After getting the questionnaires filled out, they were analyzed to make sure that the respondent had properly and correctly answered the question. The dataset was compiled and analyzed using the Statistical Package for Social Science (SPSS).

## Findings

The findings of the study are discussed below.

- The total respondents were (N=786, Male=222, 28.24%, Female=564, 71.76%) of the whole sample. (Urban=478, 60.81%, Rural, N=308, 39.19%, Contractual N=214, 27.22%, Permanent, N=572, 72.87%), maximum age level 31 to 40 years (N=312, 39.69%). With the respect of academic qualification, maximum M.A (N=358, 45.5%), professional qualification, maximum B.Ed respondents (N=410, 52.2%), teaching experience 7-9 years (N=172, 21.9%).
- Total 749(95.3%) of the respondents responded 'Yes' while 37(4.7%) of the respondents replied 'No' regarding the inquiry of on job training. 683(86.9%) of the respondents replied 'Yes' while 103 (13.1%) claimed 'No' regarding Induction training. 668(85%) of the respondents

responded 'Yes' while 118(15%) of the respondents replied 'No' regarding the 'Refresher Course' statement. 674(85.8%) of the respondents responded 'Yes' while 112(14.2) of the respondents replied 'No' regarding the 'Subject Training' statement.

- About the perception of respondents' mentoring visits, a maximum of 46 (59%) of the respondents claimed that DTEs visit after weeks. In the same way, 575 respondents (73.2%) of the respondents replied that TE visits the school after one month. Similarly, most of the respondents (N=628, 79.9%) claimed the CTSC visit after one month. In the same way regarding DTSC mentoring, most of the respondents (N=638, 81.2%) claimed to mentor after one month.
- Most of the respondents (N=639, 81.3%) responded 'Activity-based' teaching method.
- Most of the respondents (N= 22, 2.8%) each, claimed that (Teacher diary & SLOs/Taleemi Calendar) are helpful to develop the capacity building.
- There was a significant difference between competencies of male and female PSTs through CPD Programme, ( $t=786$ ,  $p<.000$ .) Hence, it is concluded that female PSTs have a greater effect (M=254.00, SD=61.71) of mentoring on developing competencies through the CPD Programme as compared to male PSTs (M=242.95, SD=69.62).
- There was a significant difference between competencies of urban and rural PSTs through CPD Programme, ( $t= 786$ ,  $p<.000$ .) Hence, it is concluded that urban PSTs have a greater effect (M=253.710, SD=59.431) of mentoring on developing competencies through the CPD Programme as compared to rural PSTs (M=246.490, SD=70.828).
- The results of the study reflected that there was a significant difference between competencies of contractual and permanent PSTs through CPD Programme, ( $t=786$ ,  $p<.000$ .) Hence, it is concluded that contractual PSTs have a greater effect (M=257.444, SD=56.048) of mentoring on developing competencies through the CPD Programme as compared to permanent PSTs (M=248.423, SD=66.865).

- There was a significant difference between different age groups; there is a significant difference between different age groups concerning teacher competencies (F = 16.754, P-Value = 0.00).
- It was clear that there is a significant difference between different categories of academic qualification, concerning teacher competencies. (F = 12.439, P-Value = 0.00).
- There was a significant difference between different categories of professional qualification concerning teacher competencies (F = 4.825, P-Value = 0.001).
- There was a significant difference between different groups of teaching experience, concerning teacher competencies (F = 10.447, P-Value = 0.00).
- More respondents strongly agreed 41% (326) and fewer respondents who strongly disagreed 4%(37) with the statement you make efforts to improve your classroom management, strongly agreed 42%(333) strongly disagreed 2.67% (21) you motivate your students in developing classroom management, agreed 35.75%(281) strongly disagreed 6.87%(54) you introduce innovative ideas to enhance your classroom management, strongly agree 35.87% (282) undecided 5.97% (47) through classroom management you have made your classroom attractive, agreed 37.85% (296) strongly disagreed 7.12% (56) you have improved your classroom decoration with the help of the students and strongly agreed 40.83% (321) agreed 5.47%(43) you use modern facilities like a whiteboard, colour markers etc. during your teaching against the factor regarding classroom management.
- More respondents agreed 45.33%(354) and fewer respondents who strongly disagreed 4.45%(35) with the statement the ability of reinforcement enables the teacher to teach effectively, agreed 43.25%(340) strongly disagreed 4.70%(37) mentoring enabled you to reinforce teaching techniques effectively, agreed 40.83%(321) strongly disagreed 3.56%(28) in your view reinforcement is the most important stage in teaching, agreed 40.96%(322) strongly disagreed 5%(40) mentoring gives you new ideas to reinforce new educational strategies, agreed 44.78%(352) strongly disagreed 4.07%(32) after reinforcement the techniques you get its feedback to improve it.
- More respondents agreed 41.34%(325) and fewer respondents who strongly disagreed 6.48%(51) with the statement effective planning plays an important role in teaching agreed 34.22%(298) strongly disagreed 5.60%(44) mentoring improve the ability to plan in teaching, agreed 34.73%(273) strongly disagreed 5.34%(42) continuous mentoring is essential for better planning, agreed 38.54%(303) strongly disagreed 4.96%(39) you adjust your teaching strategies according to the local environment, agreed 37.76%(289) strongly disagreed 3.94%(31) teacher develop his plan and strategies before going to class and agreed 38.54%(303) strongly agreed 5.47%(43) you are in favour to use a variety of teaching strategies in the class against the factor regarding instructional planning and strategies.
- More respondents agreed 38.39% (301) and fewer respondents who strongly disagreed 4.96%(39) with the statement you have improved the learning environment with your efforts, agreed 33.46%(293) strongly disagreed 7.63%(60) you are satisfied with the learning environment in your school, agreed 41.85%(329) strongly disagreed 4.32%(34) learning environment affects in teaching/learning activities, strongly agreed 38.04%(299) agreed 3.94%(31) you involved your students to improve the learning environment, agreed 37.65%(296) strongly disagreed 5.34%(42) and your headteacher supports and guides you to improve the learning environment.
- More respondents agreed 40.45%(318) and fewer respondents who strongly disagreed 5.08%(40) with the statement continuous mentoring is essential for character building of the students, agreed 36.38%(286) strongly disagreed 4.70%(37)

Mentoring enabled you to judge the individual differences among the students, agreed 41.73%(328) strongly disagreed 6.73%(53) CPD programme has developed the social life skills in both; teachers and students, agreed 42.23%(332) strongly disagreed 6.61%(52) you arrange the activities to improve the social life of students and agreed 43.38%(341) strongly disagreed 5.18%(40) you are aware of the importance of human development and growth in teaching activities.

- There were more respondents who agreed 38.93%(306) and less respondents who strongly disagreed 3.94%(31) with the statement you are fully updated about the stages of lesson plan, agreed 41.98%(330) strongly disagreed 4.19%(33) you follow all the stages of lesson plan during your teaching, agreed 42.11%(331) strongly disagreed 4.70%(37) mentoring enabled you to use a variety of teaching styles, agreed 38.42%(302) strongly disagreed 6.61%(52) mentoring enables teachers to prepare standard and effective lesson plan, strongly agreed 36.38%(286) strongly disagreed 4.96%(39) you know the importance of evaluation and assessment in teaching, agreed 37.65%(295) strongly disagreed 5.21%(41) you use the modern techniques to evaluate the students, agreed 43.63%(343) strongly disagreed 12.21%(96) you keep the record of students' continuous assessment, agreed 40.07%(315) strongly disagreed 3.94%(31) you mentor the students in the light of previous assessments and agreed 40.45%(318) strongly disagreed 6.23%(49) against the factor regarding developing competencies and skill of lesson planning / evaluation / assessment.
- More respondents agreed 44.53%(350) and fewer respondents who strongly disagreed 6.23%(49) with the statement CPD programme encourages interactive teaching, agreed 43.51%(342) strongly disagreed 6.61 % (52) through mentoring you encourage the learner cantered teaching, agreed 37.78%(297) strongly disagreed 6.61%(52) learner cantered approach is better as compared to teacher cantered approach, agreed 42.36%(333) strongly disagreed 5.21%(41) mentoring has developed your teaching behaviour, agreed 39.94%(314) strongly disagreed 7.50%(59) you support and facilitate the students to work in partnership with each other and strongly agreed 37.02%(291) undecided 6.87%(54) students take more interest to work in partnerships against the factor regarding the skill of interactive teaching / working in partnership.
- There were more respondents who agreed 46.94%(369) and less respondents who strongly disagreed 6.10%(48) with the statement you got training to develop your communicative skills, agreed 42.11%(331) strongly disagreed 7.88%(62) you pay special attention to improve the communication skills of the students, agreed 36.76%(289) strongly disagreed 4.32%(34) you use AV aids to improve communication skills, agreed 36.64%(288) strongly disagreed 6.36%(50) you personally motivate your students to improve their communication skills, agreed 36.89%(290) strongly disagreed 3.18%(25) you motivate your students through rewards and badges etc. agreed 39.94%(314) strongly agreed 3.56%(28) you often arrange group discussions to develop the communicative skills, agreed 44.27%(348) strongly agreed 3.43%(27) you have multi-dimensional skills to motivate the students positively, agreed 39.82%(313) strongly agreed 5.47%(43) mentoring can make an ordinary teacher to a model teacher and agreed 40.45%(318) strongly agreed 7.25%(57) mentoring is changing the traditional teaching style of the teachers against the factor regarding developing competencies in the skill of communication skills / motivation and management.
- More respondents agreed 37.65%(294) and fewer respondents who strongly disagreed 4.45%(35) with the statement with your skills you can change the dull student into a hardworking one, agreed 40.83%(321) strongly disagreed 5.47%(43) mentoring has developed your technique of asking questions, agreed 40.45%(318) strongly disagreed 4.32%(34) you follow

the stages of questions while teaching, strongly agree 37.65%(294) strongly disagreed 6.74%(53) you motivate the students to ask the questions, agreed 36.25%(285) strongly disagreed 5.60%(44) mentoring has enabled you to develop reasoning and logical questions and agreed 40.96%(322) strongly agreed 5.85%(46) you ask the questions to develop the interest of the students against the factor regarding developing competencies in the skill of a changing agent.

- The most of the respondents who agreed 4.27%(336) and less respondents who strongly disagreed 6.24%(49) with the statement you construct your own questions related to your lesson plan, agreed 43.12%(339) strongly disagreed 6.61%(52) mentoring enabled you to handle the people responses, agreed 41.73%(328) strongly disagreed 4.70%(37) you use the responses for the betterment in your performance, agreed 42.87%(337) strongly disagreed 5.34%(42) you keep a record of peoples' responses, agreed 36.25%(285) strongly disagreed 6.10%(48) mentoring has developed your skill of using white board properly agreed 32.31%(254) strongly agreed 10.05%(79) mentoring has developed your skill to manage the white board in standard form, agreed 40.96%(322) strongly disagreed 5.97%(47) mentoring has developed your skill of using colour markers effectively, agreed 37.27%(293) strongly disagreed 40.58%(36) through mentoring you teach your students as a facilitator, agreed 49.74%(291) strongly disagreed 5.85%(46) your students enjoy working in pairs and agreed 40.83%(321) disagreed 6.10%(48) mentoring helped you to form activities in the light of learner centered approach against the factor regarding developing competencies in the skill of asking question.
- The mean score values and Sd for teacher competencies were (Classroom management M=3.83, Sd=1.22), (Reinforcement M=3.52, Sd=1.13), (Planning and Strategies M=3.80, Sd=1.18), (Learning Environment M=3.61, Sd=1.27), (Human Growth and

Development M=3.76, Sd=1.15), (Assessment M=3.72, Sd=1.18), (Communication Skills M=3.75, Sd=1.16), (Asking Questions M=3.75, Sd=1.15), (Lesson planning N=3.69, Sd=1.16), (Change Agent N=3.72, Sd=1.21).

## Conclusion

The main aim of the study was to determine the effectiveness of mentoring in developing teachers' competencies through the CPD program. According to the results, the identified professional competencies through the CPD programme were classroom management, micro-teaching, reinforcement, planning and strategies, learning environment, human growth and development, assessment, communication skills, asking questions, and lesson planning. Most of the respondents agreed regarding the teacher competencies through the CPD program. Through the CPD programme, there was a significant difference between the competencies of male and female PSTs. Female respondents had a more positive perception regarding competencies gained through the CPD programme as compared to male PSTs. In the same way, based on locale, both urban and rural respondents strongly agreed regarding competencies gained through the CPD programme. There was a significant difference between the competencies of urban and rural PSTs through the CPD programme. The urban PSTs had a greater effect of mentoring on developing competencies through the CPD program as compared to rural PSTs. Permanent and contractual respondents also strongly agreed regarding competencies. Permanent respondents had the permanent PSTs had the greater effect of mentoring on developing competencies through the CPD program as compared to contractual PSTs. There was a significant difference between different age groups concerning teacher competencies. Mentoring had a significant impact on developing competencies in participants aged 31 to 40 years old through the CPD program. In the same way, there was a significant difference between different categories of academic qualifications concerning teacher competencies. Participants of the M.A. qualification had a great effect of mentoring on developing competencies through the CPD program. Similarly, there was a



significant difference between different categories of professional qualifications concerning teacher competencies. Participants having a B. Ed qualification had a great effect on mentoring and developing competencies through the CPD program. There was a significant difference between different groups of teaching experience concerning teacher competencies. Mentoring had a significant impact on developing competencies in participants with 7–10 years of teaching experience and older than 16 years.

It was found that there is a positive effect of mentoring on teacher competencies, i.e., classroom management, micro-teaching, asking a question at a different level, competencies in the skill of reinforcement, instructional planning, and strategies, the skill of learning environment, the skill of human growth and development/social life, the skill of lesson planning/evaluation/assessment, interactive teaching/working in partnership, communication skills/motivation, and management, the skill of change agent, the skill of asking questions. Furthermore, the most effective mentoring was found in classroom management, planning and strategies, and human growth and development. Mentoring, on the other hand, had a smaller impact on reinforcement and the learning environment.

## Discussion

Most of the respondents had gained on-the-job training as well as induction training, refresher courses, and subject training. It shows that most respondents were trained in all types of training. The perception of respondents' mentoring visits by DTEs, TEs, CTSC, and DTSC was after one month. The "activity-based" teaching method is mostly used in the class while teaching. According to the instructions, it is a good sign that activity-based teaching is used in primary schools in Punjab as it meets the need of the hour for the best understanding of 21<sup>st</sup>-century learners. The teacher's diary and SLOs/*Taleemi* Calendar were helpful to develop the capacity building. A teacher's diary helps to plan a teacher for the future and looks at weaknesses that need to be removed. Through the CPD programme, there was a significant difference between the competencies of male and female PSTs. Female respondents were more competent than their male counterparts. This may be because

women's interest in working with enthusiasm is greater than men's. There was a significant difference between the competencies of urban and rural PSTs through the CPD programme. The urban PSTs had a greater effect of mentoring on developing competencies through the CPD programme as compared to rural PSTs. The urban respondents have a greater mentoring effect. There was a significant difference between the competencies of contractual and permanent PSTs through the CPD programme. The contractual PSTs had a greater effect of mentoring on developing competencies through the CPD programme as compared to permanent PSTs. Permanent employees feel their job security is compared to contractual respondents. Contractual respondents have great zeal for their work. There was a significant difference between the different categories of academic qualification concerning teacher competencies. There is a significant difference between the different categories of professional qualification concerning teacher competencies. There was a significant difference between different groups of teaching experience concerning teacher competencies. Most respondents claimed that they make efforts to improve their classroom management, including motivating their students to develop classroom management skills. Through classroom management, they have made their classroom attractive, improved their classroom decoration with the help of the students, used modern facilities like a whiteboard, colour markers, etc., during their teaching to the factors regarding classroom management. It shows the teachers' professional development and enthusiasm for the learners. Most of the respondents claimed that the ability of reinforcement enables the teacher to teach effectively; mentoring enabled them to reinforce teaching techniques effectively; reinforcement is the most important stage in teaching; and mentoring gave them new ideas to reinforce new educational strategies. It all shows the great contribution and effect of mentoring on their professional development. More respondents agreed with the statement that effective planning plays an important role in teaching. As agreed, mentoring improves the ability to plan in teaching. Continuous mentoring is essential for better planning. You adjust your teaching strategies according to the local environment. The teacher develops his plan and strategies before going to class. You are in favour of using

a variety of teaching strategies in the class against the factors regarding instructional planning and strategies. The above perception of respondents is also in favour of mentoring, which is necessary for it. These findings are also in support of different researchers like Nemser, Carver, Schwille, and Yusko (1999). More respondents agreed with the statements: you have improved the learning environment with your efforts, you are satisfied with the learning environment in your school, the learning environment affects teaching and learning activities, you involve your students in improving the learning environment, and your headteacher supports and guides you to improve the learning environment. Most of the respondents agreed that continuous mentoring is essential for character building of the students. It enables you to judge the individual differences among the students. The CPD Programme has developed the social life skills of both teachers and students. You arrange the activities to improve the social lives of students, and you are aware of the importance of human development and growth in teaching activities. The above perception shows the concern of mentoring to be effective in CPD for the enhancement of the competencies of the PSTs. Most respondents claimed that they were fully updated about the stages of the lesson plan. They followed all the stages of the lesson plan during their teaching. Mentoring enabled them to use a variety of teaching styles. It enabled teachers to prepare standard and effective lesson plans. They knew the importance of evaluation and assessment in teaching, used modern techniques to evaluate the students, kept a record of the students' continuous assessment, and mentored the students in the light of previous assessments. More respondents agreed with the statement that the CPD programme encourages interactive teaching. Through mentoring, you encourage the learner-centered approach. The learner-centered approach is better as compared to the teacher-centered approach. Through mentoring, they support and facilitate the students in working in partnerships with each other. Students show more interest in working in partnerships against the factor regarding the skill of interactive teaching and working in partnership. Most of the respondents claimed that they got training to develop their communicative skills, paid special attention to improving the communication skills of the students, used A.V. aids to improve communication skills, personally motivated their

students to improve their communication skills, motivated their students through rewards and badges etc., often arranged group discussions to develop the communicative skills, had multi-dimensional skills to motivate the students positively, mentoring can make an ordinary teacher into a model teacher, mentoring changes the traditional teaching style of the teachers against the factors regarding developing competencies in the skills of communication skills/motivation and management. More respondents agreed with the statement about your skills. Mentorship has developed your technique of asking questions. You follow the stages of questions while teaching, and you motivate the students to ask questions. Mentorship has enabled you to develop reasoning and logical questions. You ask the questions to develop the students' interest in the factor of developing competencies in the skill of a changing agent. The effect of training in different educational contexts was found to be on educators' efficiency. Also, teacher training affected students' writing skills. Pritchard (1987). According to the results, there was the highest mean score for senior students. A significant difference was also found between trained and untrained teachers. In a study conducted by [Jarvis and Pell \(2007\)](#), teachers' confidence levels increased in the study continuously within a major in-service programme. Most of the teachers increased their level of understanding with attitude development. The results revealed four types of responses. First attainers; development of confidence and attitude The second type was that they had inadequate knowledge regarding science since it was difficult for them. The third type was performing well in the programme with little effort. The fourth and last type was with low confidence. There were also found to be cognitive and attitudinal differences among all these types. They developed their skills in using a whiteboard properly, managing the whiteboard in standard form, using colour markers effectively, and teaching their students as a facilitator through mentoring. Their students enjoyed working in pairs. Mentoring assisted you in developing activities in the light of learner-centered approach against the factor of developing competencies in the skill of asking questions. It is clear from the above findings that mentoring has a great effect on teachers' professional development.

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