



An analysis of shifting EFL teachers' perceptions on continuing professional development through lesson observation

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Abstract

The current study sought to determine how EFL teachers perceived continuing professional development and to what extent peer coaching influenced such beliefs. In keeping with the goal of the study, a qualitative case study approach was used. Participants in this study were 16 instructors, 9 of whom were men and 7 of whom were women, who worked at a private university's School of Foreign Languages. The data were collected by means of an open-ended question and reflective papers and analyzed by using Creswell's (2012) inductive content analysis. The results showed that four categories may be used to group the participants' perceptions of continued professional growth prior to the peer-coaching procedure. The categories were named (1) lifelong learning, (2) staying up to date, (3) skills development, and (4) team-building process. A new definition of self-leadership arose as a result of the peer-coaching process. Additionally, most participants admitted that the peer-coaching methodology had a positive impact on their career development procedures.

Keywords: Peer-coaching; self-leadership; continuing professional development; lesson observation

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1. Introduction

Learning to teach English is an incomplete and on-going process that requires teachers to update their pedagogical knowledge and improve their abilities of teaching and creating productive and meaningful environments to guide students in their learning processes through a continuous support which can be provided by various opportunities within a lifelong learning environment. In order to provide teachers with such collaborative and effective settings, much focus has been oriented towards Continuing Professional Development (CPD) units thanks to the research conducted in this area. However, the

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appropriate designs and approaches of CPD that cater for all needs and expectations of teachers have not been studied adequately. In this respect, lesson observation can create great opportunities for teachers to identify and support their professional development (PD) needs which can mediate further understanding of their awareness of themselves and classroom facilities. In view of the fact that most studies in the literature supported that teachers' perceptions of PD, beliefs, initial-knowledge base and classroom facilities are the main components to be considered while meditating such professional development units (Day, 1999; Clarke & Hollingsworth, 2002; Sowder, 2007; Zehetmeier & Krainer, 2011; Goldsmith, Doerr & Lewis, 2014). Opportunities for teacher professional development are vital for teachers both to improve themselves in order to better understand their capacity/competences and satisfy the needs of learners and the institutions they work for.

The idea of professional development is connected to a variety of traits and qualities. For instance, Showers, Joyce, and Bennett (1987) have pointed out that the objective of professional improvement is to foster subject matter knowledge and keep it better to provide support for newly applied practices and methods till they become a routine in daily life. Additionally, professional development is considered one of the keystones of a significant change (Fishman, Marx, Best, & Tal, 2003). Professional development ensures a collaborative setting which eases the possibility of social interactions among teachers. In such an atmosphere, teachers can cope with feeling alone and deal with any problem taking place both within and outside the classroom thanks to the support taken from colleagues through professional development (Murray, 2010). Moreover, it should be realized by the teachers that being involved in a professional development process is a continuing process that will always promote a learning context for them throughout their profession. To support this argument, Yates states (2007) that "their continuing education and training is . . . central to the achievement of quality learning" (p. 2). In order to sustain high quality in teaching, teachers need to engage in professional development activities that are designed considering their needs and skills.

As stated by Richards (2017) the professional teaching environments comprise of teachers with different educational, cultural, social and socio-economic backgrounds experiencing at distinctive stages. Taking account of the fact that language teaching and learning is an on-going process and the educational (curriculum, student needs, a new governmental teaching strategy) and technological changes effect this process, it is inevitable to be in need of involving in a well-organized professional development program which will support teachers' identity that plays crucial roles (Richards & Farrell, 2005). Teachers are required to respond well to the expectations occurring as a result of these changes and improvement observed in education-related areas. CPD units also give support to both institutions to reach their pre-determined goals and objectives and

teachers to discover themselves and enhance their teaching abilities. That is how teachers can have better understanding of their learners and their own capacity (Bailey, 1992).

Richards and Farrell (2005) pointed out that the studies conducted on professional development attach importance on facilities such as action research, peer observation and journal writings. However, they haven't focused on hands-on and functional activities that can empower teachers' abilities to create more meaningful and productive learning environment for their learners. The teachers require the techniques and in class activities that they can easily apply and get maximum amount of gains out of them rather than receiving theoretical knowledge. In addition, Crandall and Miller (2013) stated that the studies generally focus on professional development programs shaped according to the needs of institutions rather than each individual teacher's needs. The current study will meet the deficits stated by involving the teachers' perception and needs in the process helping them become more aware of themselves and their learners as well. As Murphey (2000) stated being a better professional and learning how to teach better depend on how actively teachers involve in decision making process of such professional development programs.

One of the crucial goals of designing a CPD program in an educational context is to identify teachers' individual development needs for the purpose of promoting their professional learning process. At this point, lesson observation plays an essential role as it naturally provides the coach and coachee with evidence-based information. Some researchers have attempted to define the concept of observation in their studies. Kretlow and Bartholomew (2010), Neuman and Cunningham (2009), Stormont and Reinke (2012) and Snyder, Hemmeter and Fox (2015) define observation as a process in which the teacher is watched directly in the classroom. They also state that main aim of lesson observation is to provide teachers with feedback on the performance so that they can engage in developmental activities. As can be concluded from the sentences above, a coach can make use of the findings of the observation in modelling activities so that a learning environment can be designed for teachers.

Lesson observation is a challenging procedure both for the observee and the observer. It is difficult for the observee because confronting with the feedback given by the observer and dealing with and overcoming undesired classroom activities are demanding. It is difficult for the observer because creating an environment in which meaningful and nonthreatening learning conditions are constituted. However, the teachers may not be objective towards their facilities and way of teaching in the classroom which makes it more crucial to have an observer as a source of data collection in order to determine the points to be changed and the points seen as strengths (Richards, 2017). Therefore, lesson observation creates a great opportunity for both the observer and the observee for a mutual

learning environment which can be supported through involving in a CPD program designed by taking teachers' development needs into consideration.

The concept of coaching for teachers within a professional development process is considered “an apprenticeship model of an experienced mentor who helps other teachers become more effective, reflective and evaluative in their daily work with children through individualized, ongoing, and intensive professional development” (Sandefur, Warren, Gamble, Holcombe, & Hicks, 2010, p. 88). The role of a coach is to raise awareness in the above stated characteristics to promote teachers' development and students' success. Sandefur et al. (2010) state that teachers' previous education or experience may not be utilized well to close the gap between the knowledge they have and the classroom facilities they utilize. For this reason, making use of coaching in continuing professional development programs can help teachers improve the quality of their teaching styles. Joyce and Showers (2002) have affirmed that coaching can play a more directive role by telling teachers how they can modify their approach to implement more effective practices and sometimes a reflective role by encouraging teachers' to utilize self-reflection to improve knowledge and abilities for better teaching processes. According to Sandefur et al. (2010), literature on coaching has emphasised the feature of being directive which is more charming to new teachers while less likely to influence experienced teachers' practices. On the other hand, the reflective approach is defined as a more cooperative structure as the coaches and coachees emphasise teaching issues and enhance meaningful changes in the process together (Deussen, Coskie, Robison, & Autio, 2007).

According to Showers and Joyce (1996), the first research on peer-coaching was conducted in 80s when low quality applications of in-service training activities were observed. On account of the current study, the term peer-coaching was considered a tool by means of which teachers “shared aspects of teaching, planned together, and pooled their experiences” (1996, p. 14). It is clear that when a teacher plans the content and process of a lesson with a colleague by sharing their knowledge, skills and experience, the teaching practices will be more effective and successful compared to a teacher trying to do all these things alone. Richards and Farrell (2005) describes the concept of peer-coaching as a collaborative activity in which a teacher and a colleague investigate their in-class practices. Kennedy and Shiel (2010) have emphasized that in order to foster teachers' opinions and trust in their in-class activities and observations, the support provided by a colleague and progressive feedback play essential roles. At this point, Denton and Hasbrouck (2009), Kennedy and Shiel (2010), Miller, Harris, and Watanabe (1991) have asserted peer-coaching as it ensures mutual support between two colleagues in terms of promoting their professional development and teaching facilities, strategies and techniques. Kohler, Good, Crilley, and Shearer (2001) have stressed that peer-coaching caters for a comfortable

learning setting so that teachers can experience new practices, reflect and develop their effective capacities.

The significance of the current study is its attempt in creating awareness for the language teachers of the effectiveness of being observed in a CPD program in order to enhance their professional identity to provide learners with more productive and meaningful environments to achieve predetermined objectives and aims. The offered design for the CPD program may serve as a good model for other educational institutions and enhance language teachers' strengths by encouraging them to identify their crucial identity roles in learning and teaching processes. Considering that there is no perfect match between each individual teacher's needs and any teacher development system, the designed CPD unit should supply a variety of tools to ensure that these needs are satisfied as effective as possible which require good planning and engagement of the teachers. In order to fulfill this objective, teacher development system could take teachers' needs, perceptions of professional development, and feedback into consideration. The goal of the current study, in this regard, was to determine the importance of the establishment of a CPD unit designed to foster self-reflection and self-evaluation of teaching facilities through the peer-coaching. It also aimed to raise teachers' awareness and understanding the nature of classroom learning and teaching processes and encourage for further discovery of their capacities.

The present research intended to examine the EFL teachers' perceptions of continuing professional development and see the effects of peer-coaching within a CPD program that took 15 teaching weeks. The following research questions were meant to be addressed in light of the information gathered.

1. How do EFL teachers perceive continuing professional development before the peer-coaching process?
2. How do EFL teachers perceive continuing professional development after the peer-coaching process?
3. What do EFL teachers think about the efficiency of the peer-coaching?

2. Method

For this study, a qualitative case study design was implemented since, as stated by Baxter and Jack (2008), it was intended to make a comprehensive and scientific search of a group of teachers for examining details pertaining to many variables within their contexts. Additionally, Merriam (2009) states that thanks to the chances researchers have to investigate participants' opinions in detail, the qualitative research constitutes a significant source to reach scientific information. My ontological position agrees the idea that 'people's knowledge, views, understandings, interpretations, experience and interactions are meaningful properties of the social reality' (Mason, 2002, p.63); while

considering my epistemological position, as being formed by my ontological position, I decided that the most appropriate way to create data in this research was through interaction with my participants, which required that I needed to pose questions and try to understand their perceptions and beliefs through their own explanations and words.

2.1. The Context of the Study

The present study was applied to the EFL teachers working for an English language teaching program offered between September 2019 and January 2020 by a private university in Turkey. The teachers are responsible for providing students registering to a department in which the medium of instruction is partly or totally in English with one-year English preparatory program. A continuing professional development unit was established for three essential purposes at the beginning of 2019-2020 academic year with the participation of all academic staff at the school. It was aimed at identifying the teachers' academic and professional needs. Additionally, the defined needs would be satisfied and teachers' development would be supported. Finally, it was aimed to check the quality of teaching and learning processes.

Three members of academic staff were chosen as coaches considering their academic backgrounds, qualifications and certificates they had related to the teacher training issues. All of the coaches had more than ten years of teaching experience at higher education level and held an MA degree in ELT department. In addition to that, they were given special seminars and trainings by outside experts on how to observe lesson, how to teach each skill efficiently, how to establish an environment based on mutual respect and trust, and how to give effective oral and written feedback. Based on peer-coaching process, the teachers observed/were observed many times to foster teachers' learning and changing processes.

As for the objectives of the CPD Unit, it was aimed at guiding teachers to promote their own learning and development process on an ongoing basis by observing, exchanging ideas and experience and reflecting on what have been learnt. Additionally, it was intended to encourage teachers to enhance their knowledge, skills and professional identities. Finally, it aspired after supporting teachers to place a high value on learning facilities and opportunities that involve job development, job satisfaction and formal trainings.

2.2. Research Population and Sampling

16 instructors from a private university's School of Foreign Languages -9 women and 7 men- participated in the current study. As for the teaching experience, 9 of the participants

have been teaching for 1 and 5 years, 6 of the participants have been teaching for 5 and 10 years and only one of the participants has been teaching for more than 10 years.

As for the sampling, each and every instructor employed at the School of Foreign Languages participated in the program designed by the CPD Unit. Therefore, the participants were chosen upon convenience. As Creswell (2012) states, in convenience sampling the participants are chosen as they volunteer and are convenient to be studied with. The permission for data collection was taken both from the rectorate of the university and from individual participants.

2.3. Data Collection Procedures and Instruments

To investigate the answers of the research questions, the required data were collected in three steps. Before the peer-coaching process, the participants were given an open-ended question that inquired their continual professional development perspectives. During the peer-coaching process, the participants were observed five times by their observers and at the end of each observation the observees were asked to write a short reflective paper. The data collected as a result of the short reflections written by the observees were used only for processual purposes such as helping observees have a chance to modify their teaching in a more productive and effective way, helping observers see the progress made thanks to the observation process and deciding for further implementations. Bailey's (2006) negotiated observation type was conducted in this respect. Then the observers gave both written and oral feedback to the participants together with decisions taken for the upcoming process. The written feedback was formed with the help of notes taken during the observation and the feedback was given a day after the observation so that the observee had time to reflect and the observer had time to write the feedback. The observers kept a teacher progress-sheet involving their opinions on the lesson observations for each participant. The purpose for keeping this teacher progress-sheet was to provide both the observer and the observee with a source for guidance during the peer-coaching process. Accordingly, the data gathered here were used only for processual purposes. After the peer-coaching process, the participants were asked to write a reflective paper in which they shared their perceptions of CPD and opinions on the efficiency of the peer-coaching process that took place almost once in every three weeks.

The peer-coaching process was divided into three main phases. The first one was pre-observing in which the observer and the observee came together before the observation to discuss the lesson plan and the date and time of the observation. By doing so, we tried to minimize the anxiety of the observee and at the same time help the observer learn the content of the lesson to be observed. The second phase was while-observation which involved the action of observing the participants in real teaching environment with the help of a lesson observation form. During the peer-coaching process, the participants were observed by considering the lesson observation form designed by Richards and Farrell

(2005) that was introduced to all participants beforehand. The form used to observe lessons involved nine parts and the categories are: (1) Planning and preparation, (2) Instructing and lesson objective scaffolding, (3) Learning, (4) Assessing, (5) Interpersonal dynamics, (6) Language, content and digital literacy, (7) Attentiveness to institutional regulations, (8) Learners' performance and (9) Commitment to professionalism. The data written on this form were used for the reflection and feedback processes. Additionally, the data gathered as a result of the observations were recorded as a written document that was signed by both parties. The lesson observation form was used to decide about the in-service trainings that were conducted by both outside experts and CPD members. Thanks to the teacher progress-sheets kept online, further steps and follow-up processes were decided depending on the participants' needs. The last phase was called post-observation, which included a chance for reflection and feedback given both orally and in written form. In the last phase, priorities, further steps and follow-up procedures were evaluated by both parties and agreed development points were given importance for upcoming observations.

After receiving required permissions for data collection, the participants were asked an open-ended question through which they explained how they perceive the concept of continuing professional development before the peer-coaching process. In this respect, an open-ended question was used to elicit information and search for the answers of research questions which helped us to reach a proper evaluation of the participants' opinions. The reason for choosing this instrument is that in a qualitative research participants are able to voice their opinions and experiences without facing any drawbacks that might be faced because of the researcher or previous research results (Creswell, 2012). Additionally, reflective paper was used to search for the teachers' perceptions of CPD after the peer-coaching process and observe whether the peer-coaching process was effective. The reflective papers had a pre-determined structure for guiding the participants as we intended to investigate how they perceive CPD after the peer-coaching process, whether the peer-coaching process was efficient or not, and to what extent the oral and written feedback they received was efficient. According to Cengiz and Karataş (2014), reflective writing provides teachers with a chance for self-evaluation as well as to analyze the issues with different approaches. For this purpose, the participants were given a chance to evaluate the peer-coaching process via writing a reflective paper after 15 teaching weeks. The participants were asked to submit their ideas without being directed or manipulated and no further explanation was made except for required notifications. The open-ended question and the guiding questions used in reflective paper were shared with experts in English Language Teaching department to ensure that the questions are aligning with the research paradigm and cater for the validity of the research. Both the open-ended question

and the guiding questions of reflective paper were shared with the participants via emails and the participants were asked to send their responses through emails.

2.4. Data Analysis

The open-ended question and the reflective papers' data were analyzed by using the cyclical model proposed by Creswell (2012) in his inductive content analysis. Inductive content analysis, according to Chinn and Kramer (1999), is the process by which researchers build a general notion out of a collection of specific details by moving from the details to the big picture.

There are some steps involved in coding the data and Creswell (2012) suggests the following: (1) All of the transcriptions should be read carefully to get a sense of the whole study. (2) The text should be divided into segments of information with codes. (3) The segments of information with codes needed to be labelled. (4) Overlap and redundancy of codes should be reduced. (5) The list of codes should be taken and all the transcriptions should be checked again to see whether new codes emerge. Moreover, definitions of the participant quotations that support the codes should be included. (6) Finally, the codes that are frequently stated should be converted into themes to be explained in details.

During the data analysis process, two researchers were involved to obtain reliable findings. They worked on the participants' papers individually by following the steps stated above. At the end of individual analysis, they compared their findings and found out the agreed themes to be explained in detail. Even if the disagreements amongst the researchers were discussed, they were not taken into account if they could not be resolved.

The inter-rater reliability must be established in order to use the coding approach with a qualitative research design, which assures the validity and trustworthiness of the study when numerous researchers are involved. Lincoln and Guba (1985) states that it is essential for the researchers to apply the most appropriate practices for data analysis to secure correctly interpretation of the data collected through qualitative research for the purpose of ensuring trustworthiness and quality of the study. Inter-rater reliability is a technique offered by Walther, Sochacka, and Kellam (2013) for “continuous dialogue between researchers to maintain consistency of the coding” (p. 650). According to Miles and Huberman (1994), the inter-rater reliability of 80% agreement amongst researchers who participated in the coding process on 95% of the codes is a satisfactory level of agreement.

The method from Miles and Huberman (1994) was applied to the current investigation, and the computed percentage of agreement amongst coders was 82.35%.

3. Results

3.1. Findings Related to the First Research Question

Four key themes emerged as a consequence of the data analysis process, which was used to answer the study question about how EFL instructors perceived CPD.

Perceptions of CPD	f	%
Lifelong learning	13	81
Staying up to date	11	69
Skills development	10	63
Teaching abilities	8	
Meeting students' and institutional needs	5	
Subject-area knowledge	4	
Technological advancement	2	
Quality assurance	2	
Team-building process	8	50
Collaboration and communication	6	
A shared learning culture	3	

Table 1: Teachers' Perceptions of CPD before the Peer-coaching Process

As seen in Table 1, the idea that was expressed the most commonly (81%) was that teachers associated CPD with the lifelong learning process. They believed that professional development was a concept starting with the beginning of their careers and continuing until the end of their professional lives. For example, Participant (P) 2 stated that the process of professional development acquired a perception of educational profession as a never ending process. Similarly, P7 defined CPD as an indispensable part of being a teacher, and a never ending process especially for teachers. Additionally, P13 supported that by defining professional development as a path starting but never-ending. Considering the above stated quotes by three participants, it could be understood that they

emphasized continuing professional development as a process that continues throughout a teacher's academic career.

Finally, P11 pointed out that PD is a process starting at the beginning of the career of a teacher and continuing until the end of the professional life underlining that a teacher should always stay as a learner. At this point, the participant attached importance to the fact that teachers continue learning during this never ending process which means that classrooms are instructional environments not only for the students but also for the teachers. Each teaching experience may cause teachers to reflect and modify their teaching facilities in a way that they meet learners' needs efficiently. All the quotes stated by the participants called attention to the importance of CPD as it involved a key source of learning for teachers involved in such developmental activities.

Table 1 confirmed that the second most mentioned concept related to the CPD (69%) was staying up to date. The participants stated that thanks to the opportunities they might be provided with the help of CPD facilities they could learn about new methods and approaches used in different parts of the world. For example, P1 defined professional development as keeping up with the time, the world and the needs of the world. The participant drew attention to the fact that the world is continuously changing and naturally the needs and expectations of the stakeholders in teaching and learning processes are changing as well. In this respect, teachers are supposed to equip themselves with modern techniques and applications in order to meet the requirements of the changing world in a more efficient and professional way. Similarly, P4 explained that she always thought that she needed to learn more about her field because the new things come up day by day. The professional development process might have been a key for this. She pointed out that, teachers needed to be educated well with different kinds of activities such as workshops, seminars, and conferences. As stated by the participant, teachers can update their knowledge and abilities through some professional development facilities such as workshop and trainings to be able to learn new things to be applied in the classroom environment.

Additionally, P8 pointed out that he liked to check newly introduced method over the world and follow the system in the other countries and other teaching environments. Even if it might not be so easy to apply some activities, at least teachers could make students realize that there were more things they could do out of the class to reach their goal of learning English. At this point, the participant attached importance to the fact that staying up to date is not an issue not only for teachers but also for students. Learners can be supported and encouraged to learn what happens in other countries so that they can try the same in their own learning process as well. Therefore, staying up to date was recognized as an important tool to achieve their goals and objectives.

Furthermore, P11 mentioned an important point by stating that everything changed over time in daily life and people needed to adapt themselves to these changes to survive.

As teachers, what was thought to be correct a decade ago could be incorrect in today's world. That was why teachers also needed to adapt to changes and develop themselves professionally to be helpful to their students and to the institutions where they worked. In this respect, the participant highlighted the necessity of staying up to date by stating that any valid information at present may turn into wrong information after some time. These changes that might occur due to the advancement in technology, education and science require teachers to adapt and professionally improve to survive.

Finally, P12 stated that the skills she needed in the changing world always needed to be updated, so professional development was the one and only concept to stay up to date. She attached importance to the fact that if she had necessary skills and knowledge in the place she worked, she would not have felt insecure and had the negative feeling of lack. According to the participant, staying up to date was associated with the required skill to feel comfortable and motivated towards the workplace and professional development was recognized as a significant tool to feel safe. As a result, the participants saw the CPD opportunity as a significant key to be connected with the world and so that they could equip themselves better to satisfy both students' and institutions' needs.

The third most mentioned concept related to the CPD (63%) was skills development. The concept of skills development was addressed under five sub-headings and they were development in (1) teaching abilities, (2) subject-area knowledge, (3) quality assurance, (4) technological advancement, and (5) meeting students' and institutional needs.

Skills development from different perspectives emerged as an essential component of the CPD process when the participants' quotes were checked carefully. For example, P7 stated that in her concern, empowering teaching skills by being aware of the present and past views, changed in technology, teaching techniques and generations and by analysing the students' needs on the spotlight of that awareness was the essence of professional development. At this point, the participant mentioned the importance of CPD as a tool that fosters teachers' teaching skills with the awareness of technological advancement. Moreover, the necessity of analysing the learners' needs was valued as a part of the CPD process.

Additionally, P10 explained that developing an effective means of supporting and retaining teachers had been crucial in creating a quality learning environment for students and a supportive work environment for teachers. He added that professional development was necessary to fill in the gaps in the skill sets of teachers, and to continue to develop the expertise of them. As it can be understood from the participant's explanations, quality assurance can be maintained by CPD facilities that the teachers are offered. In this way, they could be provided with an environment in which teachers can collaborate and support each other. As a natural result of this process, the quality of education offered to students can be assured by school managements and teachers. Additionally, the participant stated

that professional development facilities are required in order to help teachers develop their expertise and enhance their teaching skills.

Finally, P15 emphasized that professional development was one of the most significant processes during academic and teaching life. In order for teachers to improve in terms of teaching skills, they needed to actively participate in that process. It was not only about improving teaching skills, it was also about improving teachers' effectiveness and knowledge. As stated by the participant, professional development events were associated with active involvement of teachers and by doing so they could improve their effectiveness in the classroom and enhance their pedagogical content knowledge. Accordingly, teachers could meet both learners' and institutions' needs in a more productive and effective way. Therefore, active involvement in PD facilities was believed to be essential to satisfy stakeholders' needs and expectations. As a result, it could be concluded that the participants associated the developments in different skills with the facilities offered thanks to the CPD program.

Table 1 also affirmed that half of the participants identified the concept of CPD as a team-building process. The learning environment created with the participation of all teachers in the institution ensured collegiality that led to a more productive and meaningful setting for sharing. Team-building process was evaluated under two sub-headings and they were (1) collaboration and communication and (2) a shared learning culture. P3 pointed out that observations and peer work had mainly concentrated on the notion of sharing that might help teachers to exchange some ideas, experiences, methods, techniques, or even they might trigger some questions in teachers' minds that they had not been aware of them. As stated by the participant, a shared learning culture and environment could be established through lesson observation and peer-coaching since the process requires colleagues to express their opinions on the facilities conducted in the classroom which could lead them to increase the level of collegiality.

Additionally, P13 explained that she regarded attending seminars, sharing classroom experience with the colleagues, adding a new perspective in teaching were some of the examples that each teacher, that believed they were professionals, should do. At this point, the participant drew attention to the importance of PD activities on a shared learning culture through which teachers might design better lessons as a result of self-evaluation.

Finally, P16 considered PD a life-long learning process through teaching. During that process, collaboration with his administration, colleagues and maybe more importantly, with students was prolific for him. He continued by adding that although he was the one who would plan his own professional development process, the collaboration and interaction with the stakeholders mentioned above had a very important role in implementing his professional development plan. Apart from being a lifelong learning process, CPD was associated with the concepts of communication and collaboration with all stakeholders involved in teaching and learning procedures. The participant wanted to

draw attention to the fact that although the planning of professional development was recognized as an individual process, the role that collaboration and communication among colleagues took could be underestimated.

As could be seen clearly from the quotes stated above, the participants believed that CPD process was not a journey taken in an isolated way. Instead, it required a shared and valued environment in which teachers enjoyed learning from each other and reached the predetermined goals and objectives all together as a team through communication and collaboration.

3.2. Findings Related to the Second Research Question

The research question intended to determine whether peer-coaching process created any change in EFL teachers' perceptions of the CPD. As a result of analysis done on the reflective papers written by the participants at the end of peer-coaching process, the changes occurred in consequence of this process were demonstrated in Table 2.

Perceptions of CPD	f before Peer-coaching	f after Peer-coaching
Lifelong learning	13	13
Staying up to date	11	12
Skills development	10	13
Team-building process	8	12
Self-leadership		12
Feedback and reflection		9
Self-evaluation and awareness		8
Active involvement		6
Learning by doing		3

Table 2: Teachers' Perceptions of CPD after the Peer-coaching Process

As could be understood from the Table 2 that the perceptions stated before the peer-coaching process were emphasized again by the participants. We could observe that while the number of participants perceiving the CPD as staying up to date, skills development and team-building process increased, the number of participants perceiving the CPD as lifelong learning remained the same. It was observed that the most meaningful change occurred in perceptions was team-building process with an increase of 50% followed by the perception of skills development with an increase of 33%.

Table 2 also confirmed that a new theme emerged as named self-leadership as a result of analysis of reflective papers written by the participants at the end of the peer-coaching process that took 15 teaching weeks. Within this theme, the participants frequently stated

four sub-headings and they were (1) self-evaluation and awareness, (2) feedback and reflection, (3) active involvement and (4) learning by doing.

It could be concluded that the peer-coaching process resulted in more awareness for teachers in terms of their role as a determining factor. For example, P1 stated the effects of feedback and reflection processes by attaching great importance to teacher autonomy and having enough time to reflect. He also added that self-reflection had accelerated his pace into professional development. As a result of the peer-coaching process, the participant felt more autonomy both in designing and implementing the course. Moreover, thanks to the self-reflection process, the participant believed that the professional and academic improvements could be observed.

Additionally, P6 emphasized the importance of active involvement by stating that taking an active part in the professional development unit had been entirely in line with his desire because he had never perceived that it was a biased process that led the professional development unit to judge what he had done in classes. At this point, the participant felt motivated and committed because of taking an active role in the peer-coaching process.

As for laying stress on self-awareness along with the active involvement, P8 explained that it was an ongoing nonstop active process in which he kept figuring new things out in each and every lesson he attended. He also added that it was surprising to discover very small but crucial details in time in terms of teaching in the class, managing the class or testing different skills. It can be concluded that the participant started to discover some issues emerging in the classroom that she was unable to identify before the peer-coaching process. Additionally, the participant felt more comfortable with classroom management and evaluating students' actions and attitudes in the classroom environment.

Furthermore, P12 stated that the feedback had affected her self-awareness in a positive way and she thought it would influence her actions and behaviors in the long term. As it could be understood from the quote clearly, the participant expanded the level of self-awareness thanks to the oral and written feedback in such an effective way that she was determined to make some meaningful changes in her facilities and behaviors in the upcoming years. To conclude, the peer-coaching process resulted in positive changes.

Finally, P15 drew attention to the concept of learning by doing by stating that with the help of the professional development, teachers were more likely to solve the problems they face during their teaching careers. In this respect, the participant believed that they would be capable of developing suitable responses to the issues they might face as they felt more autonomy in learning by doing with the help of their leadership traits. All in all, the

participants believe that they should be responsible for their own learning process by satisfying the requirements of a good leadership.

3.3. Findings Related to the Third Research Question

The study question sought to determine if the peer-coaching approach used was effective for EFL instructors or not, and the data analysis of reflective papers submitted by participants at the conclusion of the peer-coaching process provided the answer and the Table 3 below.

Efficiency of Peer-coaching Model	Number of Participants	%
Efficient	13	81
A collaborative process	10	
Effective feedback	9	
Increased teaching skills	8	
Professional improvement	6	
Inefficient	1	6
Nonconstructive feedback	1	
Neutral	2	13
Self-coaching	1	
Uncertainty	1	

Table 3: Efficiency of Peer-coaching Model

Table 3 clearly demonstrated that most of the teachers (81%) found the peer-coaching process quite influential. They stated positive comments on the facilities they had during the process and the outcomes they gained as a result of the procedure. The four sub-headings that were used to address the often mentioned ideas about the effectiveness of

the peer-coaching process were (1) a collaborative process, (2) effective feedback, (3) increased teaching skills, and (4) professional improvement.

It could be understood from Table 3 that, most of the participants perceived peer-coaching as an effective tool for their continuing professional development process. For example, P1 stated that he realized during the peer-coaching process that he had developed himself mostly in terms of organizing things related to his teaching. Letting a peer into his class to observe his teaching and give feedback on it was like a mirror reflecting his own image back to himself. He was very positive about having that model during 15 weeks. What made that model more effective for him was the fact that his peers had changed after the first 8-week period of teaching, which enabled him to obtain a wider perspective from different colleagues. The participant benefited from the effective feedback given by the observers and reflection processes which were crucial components of the peer-coaching. By means of a collaborative process, the participant improved himself in terms of organizing things connected with a better teaching process. Similarly, P10 emphasized the importance of feedback and suggestions by stating that pertaining to the peer-coaching that he had during the past 15 weeks, they had been positive and beneficial because it's always good and more effective to have an extra set of eyes to give constructive feedback, or even suggestions if everything went well.

Additionally, P3 explained that peer-coaching was a positive process especially when two teachers trusted each other. It was based on mutual respect, sharing benefits and believing that process would give its fruitful results for the sake of upgrading teaching skills and experience after all. He added that the peer-coaching process had been very effective since it consisted constructive feedback. Not only the academic sharing but also the relationship between the coach and coachee played an outstanding role in the success of the peer-coaching practise. As it could be observed that the peer-coaching process was associated with fruitful results that occurred as a consequence of professional improvement.

Finally, P16 pointed out that having a coach before, while and after teaching surely brought some more responsibilities and not necessarily connected with his experience, it brought some anxiety and more care together with it, but the anxiety which helped him to conduct more aim-achieved courses had been fully positive. Thanks to the support received by the observers, the participant emphasized the importance of implementing more productive facilities with the help of increased teaching skills. In light of the aforementioned findings, the majority of participants rated the peer-coaching program as an effective way of fostering teachers' professional development as well as their abilities of working collaboratively.

It was clear from Table 3 that, only one participant stated negative comments on the peer-coaching program applied for 15 teaching weeks. P4 stated that she did not think that the peer-coaching process had been really effective. She added that it was nice to have a

certain schedule and pre-post observations forms but the feedback had not been constructive for her. The reason why the participant found the process as an ineffective one was the way the feedback was given. To support this argument, she added that the written feedback had been more detailed than the oral feedback but it was problematic since the negative ones were given but there was nothing about how to improve them. It could be concluded that giving constructive and meaningful feedback was one of the essential key points of the process and that was why it should have been treated well by both parties.

Finally, as could be deduced from Table 3, two participants stated neutral opinions on the peer-coaching process verbalizing that it had both advantages and disadvantages. To make it apparent, P5 stated that she could consider the peer-coaching model as a neutral not because there was a problem in the coach but in her point of view she saw that self-coaching in such cases could have been more efficient as she had done with herself from the beginning of the term. The participant believed that rather than having a peer-coach, it was more useful to act as a self-coach by paying attention to being the only one as responsible for the learning process. It can be concluded that the participant felt insecure while having another teacher in the classroom. Additionally, P7 emphasized that she felt neutral about the peer-coaching model stating that she was really for the idea of peer or supervisor observation and feedback processes, and felt positive about that application, but the observations had not been done in the same class or for the same lesson, so both observer and observee could not have gotten a clear idea if there was any improvement or not. As it could be concluded from the participant's quote, the participant mentioned the uncertainty of the peer-coaching process due to schedule followed by observers for the observations. It can be concluded that if the observations had been made in the same class rather than in different classes, the observee could benefit from the process more and have a more positive point of view towards peer-coaching process. All in all, they believed that the concept of peer-coaching was normally associated with the positive outcomes, but for this process they weren't been able to take enough advantages of the situation.

4. Discussion

The results of the current study have shown some notable parallels and contrasts with the earlier investigations that have been undertaken in the literature. For instance, when we compare and contrast the present study with the research implemented by Alibakhshi and Dehviri (2015) that aimed at investigating Iranian high school teachers' perceptions of CPD, we can state that 3 themes showed similarities and they are (1) skills development, (2) continuous learning, and (3) keeping up to date. As for the differences, in their study it was found out that teachers perceived CPD as learning for pleasure and teachers' professional revitalization while in the present study two different themes emerged as team-building process and self-leadership. The study conducted by Richardson (2003) is

also aligning with the current study as both state that a successful CPD program promotes team-building facilities. Additionally, a similarity between the current study and the research conducted by Sparks and Bruder (1987) emerged with regards to the improved collegiality as an effect of peer-coaching process. The participants in both studies stated that thanks to the constructive and meaningful environment created by the coach and teachers, their collaboration and collegiality improved. The findings of the study conducted by Yalçın Arslan and Ilin (2013) were align with the findings of the current study as both studies illustrated that the teachers found peer-coaching as an effective model for them to enhance their teaching abilities and facilities.

A similarity between the present study and the studies conducted by Babinski, Amendum, Knotek, Sanchez and Malone (2018) and Neuman and Cunningham (2009) emerged with regards to CPD's positive outcomes on teachers' better classroom activities applied in a more efficient way. Some of the participants in the present study supported this argument with the quotes in their reflective papers that they wrote after the implementation process. Additionally, the current study correlates positively with the study conducted by Murphy and Calway (2008) in which professional development activities were associated with teachers' commitment and motivation in improving themselves. Some participants in the current study stated in their reflective papers that they feel more motivated and committed for their own learning processes. As a result of the study conducted by Walter and Briggs (2012), it was stated that successful CPD facilities result in fostering teachers' autonomy and the present study is accordant with this outcome. It could be concluded that the peer-coaching process helped the teacher to feel more autonomy in designing and planning processes of the courses.

Additionally, the present study corresponds to the studies conducted by Novozhenina and Pinzon (2018) and Hammond and Moore (2018) with regards to the effect of CPD facilities on improving reflection abilities. The study conducted by Kohler et al. (1997) indicated that teachers carried out some changes in their lessons as a result of collaborative process with the help of their observers. Similarly, the current study showed a similar finding as the participants stated that they developed their skills in different areas as a result of changes occurred by favour of peer-coaching. A study conducted by Ercan and Ivanova (2020) revealed some significant similarities with the current study as both pointed out that the teachers are the ones who are responsible for their own learning process in a continuing professional development process. The current study indicated that teachers took the responsibility thanks to their active involvement during the peer-coaching process and they learned by doing.

The findings of the study conducted by Gomez Palacio, Gomez Vargaz and Pulgarin Taborda (2019) supported the findings of the current study in terms of the efficiency of coaching as a development tool for language teachers. The present study demonstrated that most of the participants found peer-coaching as an efficient model helping teachers

equip with better teaching skills and develop to satisfy learners' needs. Another similarity between the study conducted by Ercan and Ivanova (2020) and the current study emerged with regards to the efficiency of professional development activities such as seminars and workshops. In both studies, the participants emphasized the efficiency of peer-coaching model and benefitted from attending these trainings and reflecting what they learned in real teaching environments.

5. Conclusions

The present study intended to investigate teachers' perceptions of continuing professional development and find out if the peer-coaching process would be efficient and change their perceptions in the light of three research questions. The qualitative data was analyzed with the collaborative evaluation of two researchers and the findings revealed some significant outcomes.

The first research question aimed at finding out teachers' perceptions of CPD before the peer-coaching process and the perceptions emerged under four headings. They are (1) lifelong learning, (2) staying up to date, (3) skills development, and (4) team building process. The most frequently stated perception was lifelong learning. The participants stated that they perceive their professional development as a process that continue until the end of their academic career. The secondly most mentioned perception was related to the necessity of keeping themselves up to date in order to satisfy changing needs of all stakeholders in teaching and learning processes. Skills development was the thirdly most frequently stated perception by the participants with five sub-headings and they were development in (a) teaching skills, (b) subject-area knowledge, (c) quality assurance, (d) technological advancement, and (e) meeting students' and institutional needs. The participants stressed that they associated CPD with better equipment of required skills as stated above. Finally, the last perception that was frequently mentioned by the participants was that they identified CPD with a team-building process with two sub-headings and they were (a) collaboration and communication and (b) a shared learning culture. The participants stated that an environment in which teachers could learn from each other and enhance the collegiality was associated with the opportunities they were provided through CPD events.

The second research question aspired after searching whether there would be a significant change in the perceptions emerged before the peer-coaching process and a new perception emerged after the peer-coaching process. The reflective papers written by the participants at the end of peer-coaching process revealed that a new perception defined as self-leadership with the sub-headings such as feedback and reflection, self-evaluation and awareness, active involvement and learning by doing emerged. The participants perceived CPD process as a tool that stimulated them to show more autonomy both in designing and conducting the courses and be more accountable for their own learning journey as a result

of peer-coaching process. The reflective papers also indicated that while the percentage of participants who saw CPD as lifetime learning remained constant, more participants saw it as a way to keep current, enhance their abilities, and establish teams. While the most meaningful change was observed with the perception of team-building process with the highest increase, there was a significant increase in terms of the number of participants stating the perception of skills development.

The third and last research question aspired to investigate whether the peer-coaching would be recognized as an efficient process or not. The analysis of reflective papers demonstrated that the majority of the participants found it efficient in their learning process because of four main reasons which are (a) a collaborative process, (b) effective feedback, (c) increased teaching skills, and (d) professional improvement. The reflective papers also indicated that there was only one participant perceiving the peer-coaching process as an inefficient tool due to nonconstructive feedback. Finally, two of the participants reported that they were neutral in terms of the efficiency of peer-coaching process because of the preference of self-coaching and insufficiency in terms of taking advantages from the process.

The findings of the current study evidently demonstrated that the EFL teachers need to be supported professionally and academically in order to be able to satisfy changing needs of all stakeholders taking part in the teaching and learning processes. Considering the outcomes of the present study, below stated practical implications can be taken into consideration:

1) Continuing professional development can be included and taught within the programs approved by the Council of Higher Education for the faculties of education in order to create and expand the awareness of the importance of lifelong learning and professional development. Students with high level of awareness of the importance of continuing professional development will tend to pay more attention to the necessity of keeping up to date to cater for changing needs of their prospective students.

2) Continuing Professional Development Units can be established with the help of the Ministry of National Education in each city for the purpose of supporting teachers' learning processes by conducting lesson observations through peer-coaching. In-service trainings can be designed and applied accordingly.

3) School management and policy makers at educational institutions can design an appropriate CPD structure for their own learning and teaching environment focusing on

individual teacher's needs and expectations to foster their abilities and expand their knowledge of expertise.

4) School managements and policy makers at educational institutions can motivate the teachers by involving them in decision-making process and giving them more responsibility and autonomy both in the phases of lesson design and application.

5) The teaching load at each educational setting can be arranged and determined in a way that the teachers have enough time to deal with their professional development facilities through lesson observations and peer-coaching.

6) The universities in each city can take the responsibility of creating a bridge between their teacher candidates and the schools by providing opportunities for lesson observations to raise an awareness of CPD units and programs.

7) Teachers can be encouraged and supported to take more responsibility both for their own learning and their colleagues' learning by being provided with chances to participate in professional development activities designed by the policy makers and school managements.

The only limitation in our study is that the study was conducted in one university. This study could be applied in some other universities as well in order to gather more data. Therefore, the findings cannot be generalized for other higher education institutions.

The current study clearly indicated that teachers believe they gain from being involved in continuing professional development facilities as they believe that the learning process never ends and they need to refresh their knowledge to keep up with changing needs of institutions and learners. Considering the findings of previously conducted studies (Altinkurt & Yılmaz, 2014; Dean, 2011; Timperley, 2008; Walter & Briggs, 2012; Babinski et al., 2018; Wang, Coleman, Coley & Phelps (2003) and the present study, involving in carefully designed and planned CPD programs resulted in meaningful and positive outcomes both for the teachers and the students' academic progress. Following are some

recommendations for further research that might be made based on the findings of the study:

1) The current qualitative study included 16 participants. It could be conducted with a lower number of participants in order to reach more comprehensive data supported with an interview session as well.

2) The present study was conducted for 15 teaching weeks. It could be applied for a longer period of time to observe the possible changes that might occur.

3) The participants were observed five times through the peer-coaching process. The number of observations could be decreased or increased to observe changes.

4) In this study, the observers were chosen from the academic staff of the university. The outside expert coaches could be invited to conduct the present study to see possible changes.

5) The current study was conducted at a higher education setting. It could be conducted at high school or primary school contexts as well.

6) The relationship between the concept of CPD and self-leadership, team-building process and teacher autonomy could be investigated in a more comprehensive manner with a longer period of time.

References

- Alibakhshi, G., & Dehviri, N. (2015). EFL teachers' perceptions of continuing professional development: A case of Iranian high school teachers. *PROFILE Issues in Teachers' Professional Development*, 17(2), 29-42.
- Altinkurt, Y., & Yılmaz, K. (2014). Öğretmenlerin mesleki profesyonelliği ile iş doyumları arasındaki ilişki. *Sakarya University Journal of Education*, 4(2), 57-71. <https://doi.org/10.19126/suje.46033>

- Babinski, L. M., Amendum, S. J., Knotek, S. E., Sanchez, M., Malone, P. (2018). Improving young English learners' language and literacy skills through teacher professional development: A randomized controlled trial. *American Educational Research Journal*, 55(1), 117-143.
- Bailey, K. M. (1992). *The processes of innovation in language teacher development*. What, why and how teachers change.
- Bailey, K. M. (2006). *Language teacher supervision: A case-based approach*. Cambridge: Cambridge University Press.
- Baxter, P. & Jack, S. (2008). Qualitative Case Study Methodology: Study Design and Implementation for Novice Researchers. *The Qualitative Report*, 13, 544-559
<http://www.nova.edu/ssss/QR/QR13-4/baxter.pdf>
- Cengiz C., & Karataş F. Ö. (2014). Developing reflective thinking: Effects of keeping reflective journals with pre-service science teachers. *Journal of Research in Education and Teaching*, 3(4), 120-129.
- Chinn P.L. & Kramer M.K. (1999) *Theory and nursing a systematic approach*. Mosby Year Book, St Louis.
- Clarke, D., & Hollingsworth, H. (2002). Elaborating a model of teacher professional growth. *Teaching and Teacher Education*, 18, 947–967.
- Crandall, J., Miller, S. F. (2013). *Effective professional development for language teachers*. Teaching English as a Second or Foreign Language, 630-648.
- Creswell, J. W. (2012). *Educational research planning, conducting and evaluating quantitative and qualitative research*. Pearson Publishing.
- Day, C. (1999). *Developing teachers: The challenges of lifelong learning*. London: Routledge Falmer.
- Dean, S. D. (2011). *Collegial leadership, teacher professionalism, faculty trust: Predicting teacher academic optimism in elementary schools* (Doctoral dissertation, The University of Alabama).
- Denton, C. A., & Hasbrouck, J. (2009). A description of instructional coaching and its relationship to consultation. *Journal of Educational and Psychological Consultation*, 19(1), 150-175.
- Deussen, T., Coskie, T., Robison, L., & Autio, E. (2007). "Coach" can mean many things: Five categories of literacy coaches in reading first. (Issues & Answers Report, REL 2007 No. 005). Washington, DC: U.S. Department of Education, Institute of Education Sciences, National Center for Education Evaluation and Regional Assistance, Regional Educational Laboratory Northwest.
- Ercan, B., & Ivanova, I. (2020). Language instructors' perceptions and applications of continuous professional development in higher education institutions. *International Online Journal of Education and Teaching (IOJET)*, 7(2), 435-449.
<http://iojet.org/index.php/IOJET/article/view/820>
- Fishman, B. J., Marx, R. W., Best, S., & Tal, R. T. (2003). Linking teacher and student learning to improve professional development in systemic reform. *Teaching and Teacher Education*, 19(1), 643-658.
- Goldsmith, L., Doerr, H., & Lewis, C. (2014). Mathematics teachers' learning: a conceptual framework and synthesis of research. *Journal of Mathematics Teacher Education*, 17(1), 5–36.
- Gómez Palacio, C., Gómez Vargas, E., & Pulgarín Taborda, H. (2019). Coaching as a professional development strategy for adjunct instructors in a Colombian university. *Profile: Issues in Teachers' Professional Development*, 21(1), 121-135.
<https://doi.org/10.15446/profile.v21n1.71362>.

- Hammond, L., & Moore, W. M. (2018). Teachers taking up explicit instruction: The impact of a professional development and directive instructional coaching model. *Australian Journal of Teacher Education*, 43(7).
- Joyce, B. R., and B. Showers. (2002). *Student achievement through staff development*. 3rd ed. Alexandria, VA: Association for Supervision and Curriculum Development.
- Kennedy, E., & Shiel, G. (2010). Raising literacy levels with collaborative on-site professional development in an urban disadvantaged school. *The Reading Teacher*, 63(5), 372-383.
- Kohler, F. W., Good, G., Crilley, K. M., & Shearer, D. D. (2001). Effects of peer coaching on teacher and student outcomes. *The Journal of Educational Research*, 90 (4), 240-250.
- Kretlow, A. G., & Bartholomew, C. C. (2010). Using coaching to improve the fidelity of evidence-based practices: A review of studies. *Teacher Education and Special Education: The Journal of the Teacher Education Division of the Council for Exceptional Children*, 33(4), 279–299.
- Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic Inquiry*. Newbury Park, CA: Sage Publications.
- Mason, J. (2002). *Qualitative Researching*. 2nd Edition, Sage Publications, London.
- Merriam, S. B. (2009). *Qualitative research: A guide to design and implementation*. San Francisco, CA: Jossey-Bass.
- Miles, M. B., & Huberman, A. M. (1994). *Qualitative data analysis: An expanded sourcebook* (Second Edi). Sage Publications.
- Miller, S. P., Harris, C., & Watanabe, A. (1991). Professional coaching: A method for increasing effective and decreasing ineffective teaching behaviors. *Teacher Education and Special Education*, 14 (3), 183-191.
- Murphey, T. (2000). Becoming contributing professionals. Nonnative-English-speaking teachers in an EFL environment. In K. E. Johnson (Ed.), *Teacher Education* (pp. 105-118).
- Murphy, G., & Calway, B. (2008). Professional development for professionals: Beyond sufficiency learning. *Australian Journal of Adult Learning*, 48(3), 424-444.
- Murray, A. (2010). *Empowering teachers through professional development*.
- Neuman, S. B., & Cunningham, L. (2009). The impact of professional development and coaching on early language and literacy instructional practices. *American Educational Research Journal*, 46(2), 532-566.
- Novozhenina, A., & López Pinzón, M. M. (2018). Impact of a professional development program on EFL teachers' performance. *HOW*, 25(2), 113-128.
- Richards, J. C. (2017). *50 tips for teacher development*. Cambridge Handbooks for Language Teachers. Cambridge University Press.
- Richards, J. C., Farrell, T. S. C. (2005). *Professional development for Language teachers. Strategies for teacher learning*. Cambridge University Press.
- Richardson, V. (2003). The dilemmas of professional development. *Phi Delta Kappan*, 84(5), 401–406.
- Sandefur, S., Warren, A. R., Gamble, A. B., Holcombe, J. M., & Hicks, H. K. (2010). Coaching: It's not just for little league. In S. B. Neuman, & M. L. Kamil (Eds.), *Preparing teachers for the early childhood classroom* (pp. 87–103). Baltimore, MD: Paul Brookes.
- Showers, B., & Joyce, B. (1996). The evolution of peer-coaching. *Educational Leadership*, 53(6), 12-16.

- Showers, B., Joyce, B., & Bennett, B. (1987). Synthesis of research on staff development: A framework for future study and a state-of-the art analysis. *Educational Leadership*, 45(3), 77-87.
- Snyder, P. A., Hemmeter, M. L., & Fox, L. (2015). Supporting implementation of evidence-based practices through practice-based coaching. *Topics in Early Childhood Special Education*, 35(3), 133–143.
- Sowder, J. (2007). The mathematical education and development of teachers. In F. K. Lester (Ed.), *Second handbook of research on mathematics teaching and learning: A project of the National Council of Teachers of Mathematics* (pp. 157–224). Charlotte: Information Age.
- Sparks, G. M., & Bruder, S. (1987). Before and after peer coaching. *Educational Leadership*, 45(3), 54-57.
- Stormont, M., & Reinke, W. M. (2012). Using coaching to support classroom-level adoption and use of interventions within school-wide positive behavioral interventions and support systems. *Beyond Behavior*, 21(2), 11–19.
- Timperley, H. (2008). *Teacher professional learning and development*.
- Walter, C., Briggs, J. (2012). *What professional development makes the most difference to teachers?* Oxford University Press, 1-20.
- Walther, J., Sochacka, N. W., & Kellam, N. N. (2013). Quality in interpretive engineering education research: Reflections on an example study. *Journal of Engineering Education*, 102(4), 626–659. <http://doi.org/10.1002/jee.20029>
- Wang, A. H., Coleman, A. B., Coley, R. J., & Phelps, R. P. (2003). *Preparing teachers around the world*. Princeton, NJ: Educational Testing Service.
- Yalçın Arslan, F. & İlin, G. (2013). Effects of peer coaching for the classroom management skills of teachers. *Journal of Theory and Practice in Education*, 9(1), 43-59.
- Yates, C. (2007). *Teacher education policy: International development discourses and the development of teacher education*.
- Zehetmeier, S., & Krainer, K. (2011). Ways of promoting the sustainability of mathematics teachers' professional development. *The International Journal on Mathematics Education*, 43(6/7), 875–887.

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