# TEACHER PROFESSIONAL DEVELOPMENT MODELS FOR EFFECTIVE TEACHING AND LEARNING IN SCHOOLS

Ceren Çetin
Institute of Education Sciences, Sakarya University, Sakarya, Turkey
crnctn94@gmail.com

Mustafa Bayrakcı
Faculty of Education, Sakarya University, Sakarya, Turkey
mbayrakci@sakarya.edu.tr

**ABSTRACT**
High-quality professional development is a central component in nearly every modern proposal for improving education. Policy-makers increasingly recognize that schools can be no better than the teachers and administrators who work within them. Teacher professional development provides opportunities for acquisition or renewal of basic knowledge and skills in specific professional and academic area. Professional development is more than training, including workshops, seminars, monitoring, reflection, observation and performance of activities by teachers, sets them in the role of trained, who are placed in this long process, but future trainers lead teachers to use new methods, techniques, approaches in their practice. There are many models of professional development that incorporate several of these characteristics of high quality. Recent research and policy in professional development support moving away from 'sit-and-get' workshops on general topics toward teacher-driven efforts to identify and solve instructional problems rooted in their daily work. In this study, models of teacher professional development are examined and compared based on literature review. Advantages and disadvantages of several teacher professional development models are reviewed.
**Keywords:** Teacher Professional Development, Models, Teaching

## INTRODUCTION
Teachers are the key asset of schools. They need to be well trained at the beginning of their careers and provided with high quality professional development in subsequent years in their profession (Hargreaves, 1998). Institutions of teacher education fulfil vital roles in the global education community; they have the potential to bring changes within educational systems that will shape the knowledge and skills of future generations. Often education is described as the great hope for creating a more sustainable future; teacher education institutions serve as key change agents in transforming education and society so that such a future is possible (Almeida, 2015). Positive changes occur in teachers' practices when they experience sustained, high quality professional development. "However, the research on learning…and that on effective teacher development…suggest that teacher development as carried out in most schools today is not designed to develop the teacher expertise needed to bring about improved student learning" (Rhoton & Stile, 2002, p. 1).

### What we understand the term "teachers professional development"?
"Development refers to general growth not focused on a specific job. It serves a longer-term goal and seeks to facilitate growth of teachers' understanding of teaching and of themselves as teachers" (Richards and Farrell, 2005, p. 4). Professional development is an on-going process encompassing all formal and informal learning experiences that enable all staff in schools, individually and with others, to think about what they are doing, enhance their knowledge and skills and improve ways of working so that pupil learning and wellbeing are enhanced as a result (Bubb & Earley, 2007, p. 4). A teacher may have good intentions in mind but may cause damage to students or the system due to lack of training and skill. To keep teachers at par with the changing dynamics of this world and to help them perform better not only teacher education programs are fundamental but teacher continuous development programs are also essential (Nauman, 2017, p. 21). Professional development is about teachers learning, learning how to learn, and transforming their knowledge into practice for the benefit of their students' growth (Avalos, 2011, p.10).

Relevant literature indicates that professional development is indispensable element in terms of teacher competence and quality, student learning and outcomes, school improvement and effectiveness and educational reform. Professional development plays an important role to improve teacher's professional and personal development and increase their career by helping them changing and reviewing their skills, knowledge, attitudes and understanding (Ozdemir, 2013). Teacher development can be recognized as a variety of activities which teachers participate in to improve their teaching skills. It mostly lays emphasis on teaching experience as well as interaction with other colleagues and reflecting (Miller de Arechaga, 2001, as cited in; Yuvayapan, 2013).  It included both an intellectual and personal endeavor which requires not only engagement with new and differing ideas about education, trying out new activities and developing classroom practice, but also an emotional response as personal beliefs are challenged (Girvan, Conneely & Tangney, 2016, p. 130). Teachers have historically participated in professional development activities inside and outside schools. These activities have been sponsored by a variety of organizations, including schools, school districts, consortia of districts, professional organizations, teacher associations, state departments of education, private consultants, and institutions of higher education. They have most typically taken the form of inservice training, workshops, conferences, summer institutes, and graduate courses (Ganser, 2000, p. 11).

Professional development can support deep changes in teaching if it is situated in classroom practice, is on-going, and is collaborative with other teachers. Because this professional development experience is centered on the teacher as a professional, it also must consider the needs of the adult learner (Gregson & Sturko, 2007 p. 3).

### How teacher professional development affects student achievement?

"Professional development has an impact on teachers' beliefs and behavior. The relationship between teachers' beliefs and their practice is not straightforward or simple; on the contrary, it is dialectic, "moving back and forth between change in belief and change in classroom practice" (Cobb, Wood and Yackel, 1990; Franke et al., 1997; Thompson, 1992, in Nelson, 1999, p. 6; as cited in Villegas-Reimers, 2003). Effective continuing professional development is likely to consist of that which first and foremost enhances pupil outcomes, but which also helps to bring about changes in practice and improves teaching (Bubb & Earley, 2007, p. 4). In other words, becoming a better teacher means enhancing student learning outcomes.

Professional development affects student achievement through three steps. First, professional development enhances teacher knowledge and skills. Second, better knowledge and skills improve classroom teaching. Third, improved teaching raises student achievement. If one link is weak or missing, better student learning cannot be expected. If a teacher fails to apply new ideas from professional development to classroom instruction, for example, students will not benefit from the teacher's professional development (Yoon, et al., 2007, p.4).

It is clear in a review of the literature that researchers and educators agree that teacher quality has a considerable impact on student learning and achievement. According to the National Commission on Teaching and America's Future (1996) nearly a quarter of secondary school teachers need extra training because they lack adequate preparation in the subject they teach (Bayar, 2014). Harootunian & Yargar (1980) discover that, `regardless of teaching level, most teachers define their success in terms of their pupils' behaviors and activities, rather than in terms of themselves or other criteria' (Guskey, 2002, p. 382).  Sanders & Rivers (1996) conducted a research on the relationship between the students' achievement and the qualities of teachers. They found that effective teachers could improve the scores of low-achieving students. It is clear that teachers have an influence on students' achievements (Yuvayapan, 2013, p. 9).

### What are the models of teacher professional development?

There are a number of models that have been developed and implemented in different countries to promote and support teachers' professional development from the beginning of their career until they retire (Villegas-Reimers, 2003, p.69). In many countries do a combination of different models, to undertake certain parts of different models and new innovative arise, different from the other model, of course complies with the conditions and possibilities for implementation in specific country (Jovanova-Mitkovska, 2010).

*1) Individually Guided Development:* Teachers design their own professional learning goals and select the activities that will result in the achievement of those goals. Professional portfolios, reflective journaling, and video/audio self-assessment are examples of individually guided activities. This model of professional development provides for a variety of flexible options that enable teachers to individualize their professional growth experiences. Self-directed development empowers teachers to address their own problems and by so doing, creates a sense of professionalism. This model is an internal aspect of a teacher towards improving their knowledge and skills. Individually-guided development allows teachers to find answers to self-selected professional problems using their preferred modes of learning (Sparks & Loucks-Horsley, 1989; Rauf, Ali & Noor, 2017).

*2) Observation and Assessment:* This model of professional development is based on the feedback the teacher receives from the other teacher's observations. Having someone else in the classroom to view instruction and provide feedback or reflection also is a powerful way to impact classroom behavior. Observers also learn as they view their colleagues in action. This model may be used as a support measure following workshops or periodically throughout the school year as a form of peer coaching. The observation/assessment model can be found in the literature on teacher evaluation, clinical supervision, and peer coaching. (Sparks & Loucks-Horsley, 1989; Rauf, Ali & Noor, 2017).

*3) Involvement in a Development or Improvement Process:* Teachers are often asked to be involved in schools' development programme as such curriculum planning, drafting the programme, and in the process of school improvement. Involvement in the development/improvement process can result in many new skills, attitudes, and behaviors. This learning could be acquired through reading, discussion, observation, training, and/or trial and error (Sparks & Loucks-Horsley, 1989; Rauf, Ali & Noor, 2017).

*4) Training:* Training is typically presented in the form of a workshop, seminar, or some other form of large-group presentation. This model can be described as a session conducted by an expert who will present the content and teaching objectives assuming the teacher can learn the teaching behavior from others and translate it in the classroom. Typically, the training session is conducted with a clear set of objectives or learner outcomes. Usually the outcomes involve awareness, knowledge, or skill development, but changes in attitude, transfer of training, and "executive control" need to be addressed as well. The improvement of teachers' thinking should be a critical outcome of any training program (Sparks & Loucks-Horsley, 1989; Rauf, Ali & Noor, 2017).

*5) Inquiry:* Inquiry model is also known as the action-research model. In the inquiry or action research model, participants use a structured method to investigate how a change in a particular practice impacts teaching and learning. This model is built on the belief that teachers will develop new ideas and strategies in teaching if they are given the opportunity to ask questions and answer the questions based on the data they collected in their classroom (Sparks & Loucks-Horsley, 1989; Rauf, Ali & Noor, 2017). According to Glatthorn (1987), the inquiry/action research model includes four-step processes:

    a) Identify a problem
    b) Decide upon specific research questions to be investigated and methodology to be used
    c) Carry out the research design
    d) Use the research to design an intervention to be implemented in the school

Inquiry/Action Research involves the use of higher order skills (researching, synthesis), a more surgical instructional approach (targeting areas of instructional difficulty), more advanced computer applications (spreadsheets, databases, and possibly statistical software packages). It is most likely a useful TPD choice for teachers who already have advanced skills (Gaible & Burns, 2005).

*6) Mentoring:* In a Mentoring model, older or more experienced teachers guide and assist younger or novice teachers in all areas of teaching (Gaible & Burns, 2005). Mentoring affects both the new teachers who are being mentored, and the experienced teachers who will serve as mentors (Shaw, 1992). Mentoring occurs around activities such as classroom observations, coaching, feedback, and the collaborative teaching. It can help new teachers learn to creatively and effectively meet the day-to-day challenges of teaching (Smith, 2002; as cited in

Fifield & Kedzior, 2004). Mentors have many roles to fulfil; sharing information, providing access to resources, role modelling, counselling, coaching, encouraging reflection, advising in career moves and supporting new teachers (Villegas-Reimers, 2003). Mentoring serves as a non-formal or semi-formal method of ensuring accountability: teachers can complete TPD, demonstrating mastery of the targeted knowledge and skills that they never import into their classrooms (Hooker, 2008). Maynard and Furlong (1993) and Jones (2001) determine three models of mentoring:

- **The apprenticeship model**: the mentor is the master teacher to be emulated;
- **The competence model**: the mentor relates training and assessment to pre-determined standards of practice;
- **The reflective model**: the mentor adopts the role of 'critical friend' who assists in the evaluation of teaching.

*7) Critical Friends Group:* CFG is a professional community aiming to promote student learning through collaboration. Members focus on factors affecting students' achievement such as examining curriculum, and students' work (School Reform Initiative, 2012; as cited in Yuvayapan, 2013). CFG identifies the students' learning goals, reflect on practices aimed to achieve the goals in a collaborative teachers' community (Cohen, 2008; as cited in Yuvayapan, 2013). CFG is characterized by goals, which are clearly stated and related to the purpose of the group. Lunenberg (1995) determines six characteristics of the goals (as cited in Yuvayapan, 2013);

- **Specific:** Goals are specific when they are clearly stated.
- **Measurable:** Measurable goals are precise and can be measured over time.
- **Achievable:** Goals are achievable if they are realistic. The effort needed to reach a goal can inspire great effort; unrealistic goals are self-defeating.
- **Relevant:** Goals are relevant if they are viewed as important to the individual and to the team. Superficial goals are forgotten because they lack meaning.
- **Trackable:** Goals need to be trackable to check progress. Goals should not be so numerous or complex that they confuse rather than direct teams.
- **Ongoing:** Not all goals will be completed by the end of a specific period. Some goals are achieved over a longer time; others can be reached more quickly"

It enabled the participant teachers: to develop a sense of professional community working collaboratively, to learn from each other in a constructive and sharing environment, to improve their teaching based on their experiences of CFG protocols, to become more reflective in their teaching, to discover their strengths and weaknesses and finally to establish positive attitudes towards professional development which is a prerequisite in creating effective teaching and learning environment (Yuvayapan, 2013)

According to Zepeda (2008) CFG is a satisfying professional development method because it is continual, it is focused on teachers' own teaching and their own students' learning and it takes place in a small group of supportive and trusted colleagues within their own school.

*8) Professional Development Schools:* Professional Development Schools often take the form of a partnership between a school and a local teachers college. A cluster of teachers is identified within the school as "master teachers." (Gaible & Burns, 2005). The professional-development school model involves and requires institutional support (Wise, 2000). The model of professional-development schools varies from setting to setting. Professional Development Schools can help teachers who have basic skills develop intermediate and advanced skills (Hooker, 2008).

Student teachers at the teachers college enroll in practica (or internships) with the master teachers, gain hands-on experience implementing specific classroom techniques, return to the teachers college for more instruction, and upon graduation are placed in this same school where a master teacher becomes their mentor for the year. Over time, cohorts of highly trained younger teachers are created at the Professional Development Schools. When they

gain experience, these younger experts can become mentors in other schools or can help extend the program of Professional Development Schools to other teachers colleges (Gaible & Burns, 2005).

**What are the barriers to implementation of effective professional development?**
Fifield and Kedzior (2004) identified the main barriers to implementation of effective professional development:

**• The structure of professional development and teachers' time:** Teachers may hesitate to commit time to professional development that extends beyond the regular school day and year. They often prefer one-day workshops during the school year to extended commitments during the summer (Birman, Desimone, Garet, Porter, & Yoon, 2001; as cited in Fifield & Kedzior, 2004, p.4).

**• The content of professional development:** Professional development that focuses on subject matter content and classroom practices can meet with resistance. Even in supportive environments, some individuals may be uncomfortable sharing their understandings and beliefs with colleagues and supervisors (Birman, Desimone, Garet, Porter, & Yoon, 2001; as cited in Fifield & Kedzior, 2004, p.4).

**• School factors:** It is challenging and time-consuming to design and implement professional development that incorporates multiple characteristics of high quality. As instructional leaders and institutional change agents, school administrators and policy makers must address school-level obstacles to teachers' efforts to improve their practices. Among these obstacles is the rigid structure of teachers' work days, which allows too little time for individual and collaborative work toward instructional improvement (Birman, Desimone, Garet, Porter, & Yoon, 2001; as cited in Fifield & Kedzior, 2004, p.4).

**• District Factors:** "Teachers often perceive that district reforms are fragmented and uncoordinated, and this likely…impedes voluntary participation in professional development..." (Supovitz & Zief, 2000, p. 3).

**• Costs:** High quality professional development is expensive, perhaps more than twice the amount that districts typically spend per teacher. (Birman, Desimone, Garet, Porter, & Yoon, 2001; as cited in Fifield & Kedzior, 2004, p.4).

**Why is professional development important for us?**
According to Mitskova (2010), professional development is significant since it;

- allows the creation of conditions for lifelong learning for all, regardless of age, including special efforts directed of disabled persons, those not otherwise involved in the educational system and migrants as a tool for their social integration;
- provides opportunities for acquisition or renewal of basic knowledge and skills in specific, thorough, professional and academic area, the area of information technologies, foreign languages, technological culture and social relations;
- has significant influence on the beliefs of the teacher and his teacher practice;
- affects student learning and the implementation of educational reforms;
- has an impact on the establishment of teacher connection, strengthening teamwork and cooperation in the classroom, the school at local, national and wider;
- influences the determination of goals (specific, realistic and variables) and the tasks of teaching and learning;
- changes the teaching methods, forms, strategies;
- changes the position and role of subjective factors in the learning process.

**CONCLUSION**
Teacher professional development is about professional and personal growth teacher, an ongoing process that starts from the beginning of preparation for the profession and continue until the end of life, a process that is realized in different ways, which involves training of teachers with new knowledge, skills, strategies in the respective areas of competence and application of appropriate technology (Jovanova-Mitskova, 2010). Teachers need to participate in professional development activities not just for their own professional and personal development, but to also increase student learning, school improvement and the quality of the education system (Ozdemir, 2013). High-quality teacher training is possible only through a good model of teacher training. The core elements of a teacher training model that determine its success consist of its design, its implementation and management and the assessment modes that are used during the training (Zhu, 2013). Professional development

that seeks to support teaching as an ongoing inquiry into more effective classroom practice must overcome several significant barriers to change (Fifield & Kedzior, 2004). Teacher professional development is important because it has significant influence on teacher beliefs and practices, affect student learning and the implementation of educational reform, have influenced the establishment of teacher connection, strengthening teamwork and cooperation in the classroom, local school, national and wider, affecting the determination of goals (specific, realistic and variables) and the tasks of teaching and learning (Jovanova-Mitskova, 2010).

In Turkey, there has been various activities and programs organized by central and local education authorities for the quality and ongoing professional development of teachers. They are planned and organized at central by The Ministry of National Education and Provincial Directorate for National Education and rarely by the schools. Most of the professional development activities for teachers are in the form of in-service training seminars covering specific subjects of education, courses, workshops and conferences (Ozdemir, 2013). Currently, Turkish Ministry of Education has stated new regulations for professional development in 2023 Turkey Education Vision. In this vision, it is emphasized that skills workshops are established in all schools, the curriculum is organized according to the interests, abilities and temperaments of the students, teachers and school principals will have MA degree and teacher training programs become weighted. It can be said that this regulation is important for not only teachers' own professional development but also having effective learning for students.

## REFERENCES

Almeida, S. C. (2015). *Environmental education in a climate of reform: Understanding teacher educators' perspectives*. Springer.

Avalos, B. (2011). Teacher professional development in teaching and teacher education over ten years. *Teaching and teacher education*, *27*(1), 10-20.

Bayar, A. (2014). The Components of Effective Professional Development Activities in Terms of Teachers' Perspective. *Online Submission*, *6*(2), 319-327.

Bubb, S., & Earley, P. (2007). *Leading & managing continuing professional development: Developing people, developing schools*. Sage.

Fifield, S., & Kedzior, M. (2004). Teacher professional development.

Gaible, E., & Burns, M. (2005). Using Technology to Train Teachers: Appropriate Uses of ICT for Teacher Professional Development in Developing Countries. *Online Submission*.

Ganser, T. (2000). An ambitious vision of professional development for teachers. *NASSP bulletin*, *84*(618), 6-12.

Girvan, C., Conneely, C., & Tangney, B. (2016). Extending experiential learning in teacher professional development. *Teaching and Teacher Education*, *58*, 129-139.

Glatthorn, A. (1987). Cooperative professional development: Peer-centered options for teacher growth. *Educational leadership*, *45*(3), 31-35.

Gregson, J. A., & Sturko, P. A. (2007). Teachers as adult learners: Re-conceptualizing professional development. *Journal of Adult Education*, *36*(1), 1-18.

Guskey, T. R. (2002). Professional development and teacher change. *Teachers and teaching*, *8*(3), 381-391.

Hargreaves, D. H. (1998). *Creative professionalism: The role of teachers in the knowledge society* (Vol. 22). Demos.

Hooker, M. (2008). Models and best practices in teacher professional development.

Jones, M. (2001). Mentors' perceptions of their roles in school-based teacher training in England and Germany. *Journal of Education for Teaching*, *27*(1), 75-94.

Jovanova-Mitkovska, S. (2010). The need of continuous professional teacher development. *Procedia- Social and Behavioral Sciences, vol. 2, No 2, p. 2921-2926*, *2*(2), 2921-2926.

Maynard, T., & Furlong, J. (1993). Learning to teach and models of mentoring. In D. McIntyre, H. Hagger, & M. Wilkin (Eds.), *Mentoring: Perspectives on school-based teacher education.* London: Kogan Page.

Nauman, S. (2018). Applying and Evaluating Teacher Professional Development Models–A Case Study of a Pakistani School. *International Journal of Experiential Learning & Case Studies*, *2*(2), 20-33.

Noor, N. A. M. (2017). The Relationship Between Models Of Teachers Professional Development And Teachers' Instructional Practices In The Classrooms In The Primary Schools In The State Of Selangor, Malaysia. *International Journal*, *2*(5), 120-132.

Özdemir, S. M. (2013). Exploring the Turkish Teachers' Professional Development Experiences and Their Needs for Professional Development. *Online Submission*, *3*(4), 250-264.

Rhoton, J., & Stiles, K. E. (2002). Exploring the professional development design process: Bringing an abstract framework into practice. *Science Educator*, *11*(1), 1-8.

Richards, J. C., & Farrell, T. S. C. (2005). *Professional development for language teachers: Strategies for teacher learning*. Ernst Klett Sprachen.

Shaw, R. 1992. *Teacher training in secondary schools*. London: Kogan Page.

Sparks, D., & Loucks-Horsley, S. (1989). Five models of staff development. *Journal of staff development*, *10*(4), 40-57.

Villegas-Reimers, E. (2003). *Teacher professional development: an international review of the literature*. Paris: International Institute for Educational Planning.

Wise, A. E. (2001). Creating a High-Quality Teaching Force. *Educational Leadership*, *58*(4), 18-21.

Yoon, K. S., Duncan, T., Lee, S. W. Y., Scarloss, B., & Shapley, K. L. (2007). Reviewing the Evidence on How Teacher Professional Development Affects Student Achievement. Issues & Answers. REL 2007-No. 033. *Regional Educational Laboratory Southwest (NJ1)*.

Yuvayapan F. (2013). Teacher Development: Critical Friends Group. (Master Thesis, Çağ University, Mersin, Turkey).

Zepeda, S. J. (2008). *Professional development*. New York: Eye on Education.

Zhu, X. (2013). Discussion of the reconstruction of rural teacher training configuration in China. In X. Zhu, & K. Zeichner, New frontiers of educational research: Preparing teachers for the 21st century (pp. 79-97). New York: Springer-Verlag Berlin Heidelberg.