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Killing two birds with one stone: establishing professional communication among teachers

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Abstract

The purpose of this paper is to present ways of improving the quality of teaching in schools by enhancing professional development of teachers through providing professional communication among them and guiding them to work together, creating an environment in which they share experiences and support each other. Literature on the improvement of the teaching profession suggests that professional development is a necessity for better teaching and better schools. Therefore, supporting the continual development of teachers is important. However, in order to improve the quality of teaching, teachers should be given opportunities to grow professionally. Although traditional forms of professional development are quite common, they are widely criticized as being ineffective. On the other hand, reform type professional development activities provide teachers opportunities for professional development within a regular work day. Those types of professional development may be more likely to make connections with classroom teaching, and may also be easier to sustain over time. It can be concluded that, no single strategy will always work in every school, for every teacher, all of the time. Therefore, customization of the programs according to the needs of the program participants is needed.

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1. Background

Teachers and the quality of their teaching have always been considered important issues in education and are likely to keep their significance in the future. Studies emphasize the fact that student performance will not improve if the quality of teaching is not improved (Seferoglu, 2001; Loucks-Horsley et al., 1987). However, the quality of teaching in schools cannot be significantly improved without improving the quality of teachers. A teacher who has opportunities to learn and to grow can provide more opportunities for young people. Therefore, supporting the continual development of teachers is important to improving the quality of teachers and the quality of their teaching.

It can be claimed that having effective schools is important for progress of a country. Since teachers are trained in teacher training institutions, those institutions have great responsibility in reaching this goal. However, in order for teachers to have certain qualifications, some standards need to be put in effect. Therefore, the relationship between quality and standards need to be questioned as well.

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Standards in teacher training can be examined in both international and local perspectives. In terms of international perspectives, the standards developed by The International Society for Technology in Education (ISTE) for teachers can be given as an example. ISTE developed a set of standards for teachers. Those standards, The National Educational Teaching Standards for Teachers (NETS-T), can be summarized as follows (ISTE, 2008):

- Facilitating and Inspiring Student Learning and Creativity
- Designing and Developing Digital-Age Learning Experiences and Assessments
- Modeling Digital-Age Work and Learning
- Promoting and Modeling Digital Citizenship and Responsibility
- Engaging in Professional Growth and Leadership

These standards were first developed in 2000. However, since the technology itself and the way technology used in education has changed, in 2008 standards were redesigned to reflect those changes.

In terms of local perspectives, the work done by the Ministry of National Education (MONE) on teacher competencies can be given as an example (MONE, 2008). MONE developed a set of competencies for teachers of different grade levels. The competencies comprise of two parts, "General Competencies for the Teaching Profession", and "Subject Matter Competencies". General Competencies for the Teaching Profession can be defined as determining the knowledge, skills and attitudes for teachers that they should be equipped with to respond to the evolving challenges of our times. Subject Matter Competencies, which are subject-specific competencies, on the other hand, developed for teachers of 16 disciplines that are being thought in the K-8 levels including special education. The work on those competencies started in late 1990's, and finished in late 2000. During this process, competencies have been changed three times.

During past decades, a considerable body of literature has emerged on professional development, teacher learning, and teacher change. Studies tell us that a teacher who has opportunities to learn and to grow can provide more opportunities for young people. Therefore, supporting the continual development of teachers is important to improving the quality of teachers and the quality of their teaching.

The purpose of this paper is to present ways of improving the quality of teaching in schools by enhancing professional development of teachers through providing professional communication among them and guiding them to work together, creating an environment in which they share experiences and support and help each other.

2. Discussion

2.1. The Concept of Professional Development and Its' Importance

The concept of professional development, defined as the knowledge, skills, abilities and necessary conditions for teacher learning on the job has been one of the most important factors in improving education efforts. Literature on the improvement of the teaching profession suggests that professional development is a necessity for better teaching and better schools because "If the teacher is also learning, teaching takes on a new quality" (Darling-Hammond, 1987; Zumwalt, 1986; Lieberman & Miller, 1984). Therefore, to improve the quality of teaching, teachers should be given opportunities to grow professionally.

Professional development is needed in every profession simply because professional success usually generates greater professional success. When teachers experience success, they gain greater confidence in their own abilities to make a difference in the lives of their own students. As a result they look for other ways to make themselves even more effective.

During the past decades there has been growing interest in new types of professional development activities. Some researchers call new types of professional development activities as "reform type", such as a study group, teacher network, mentoring, committee or task force, internship, individual research project, or teacher research center (Desimone et al., 2002, Garet et al., 2001, Garet et al., 1999).

2.2. Reform Types of Professional Development Activities

Reform type professional development activities differ from traditional professional development activities in several ways. According to Garet et al. (2001) reform activities often take place during the regular school day. In fact, some reform activities, such as mentoring and coaching, take place, at least in part, during the process of classroom instruction. By locating opportunities for professional development within a teacher's regular work day, those types of professional development may be more likely than traditional forms to make connections with classroom teaching. In addition, those activities may also be easier to sustain over time.

Loucks-Horsley et al. (1987) discussed specific professional development strategies with different purposes. According to her for the primary purpose of building teacher knowledge, recommended strategies are: engaging in the kinds of learning that teachers are expected to practice with their students; participating in workshops, institutes, courses, and seminars; interacting in person or through electronic means with other teachers to discuss topics of common interest; and using various kinds of technology to learn content and pedagogy.

Although traditional forms of professional development are quite common, they are widely criticized as being ineffective (Garet et al., 2001; Garet, Birman, Porter, 1999) in providing teachers with sufficient time, activities, and content necessary for increasing teacher's knowledge and fostering meaningful changes in their classroom practice. Shulman & Sparks (1992) also argued that the continual deepening of knowledge and skills is an integral part of any profession. Teaching is no exception. He claims that generic professional development approaches are insufficient in so many ways. Shulman's statement echoed by Darling-Hammond and McLaughlin (1995) stating that traditional notions of in-service training or dissemination need to be replaced by opportunities for knowledge sharing based in real situations. They suggest that teachers need opportunities to share what they know, discuss what they want to learn, and connect new concepts and strategies to their own unique contexts.

Research has shown that one-time professional development workshops are often outside of the context of the school, not typically aligned with ongoing practice, and do not reliably lead to changes in classroom teaching (Center for Technology in Learning, 2009, Loucks-Horsley, et al., 1987). Learning from practice allows important components of effective professional development to occur.

- Learning from practice gives teachers time to collaborate with other teachers and school colleagues.
- Learning from practice allows more sustained learning and professional development to occur since it becomes part of the work rather than an additional piece of work.
- Learning from practice allows work to be well integrated in a very meaningful, concrete way that addresses specific problems teachers have in their own classroom.

On the other hand, teachers have different interests, and these interests should be used in productive ways by giving them appropriate guidance and support. Teachers should be encouraged to interact in a productive way, articulating their philosophy, sharing ideas, and helping each other to develop.

In order to provide professional communication among teachers and to guide them to work together, creating an environment in which sharing and supporting each other, helping each other are the basic norms is essential. When such an environment is provided, teaching becomes fulfilling, rewarding, enjoyable, and satisfactory profession. Peer support is becomes very important in creating such environments. Mentor teaching and peer coaching techniques, study groups, teacher networks seem most appropriate for creating such an environment.

2.2.1. Reform Types of Professional Development: Mentoring and Peer-Coaching

Mentoring and coaching, take place, at least in part, during the process of classroom instruction or during regularly scheduled teacher planning time. By locating opportunities for professional development within a teacher's regular work day, these types of activities may help teachers to make connections with classroom teaching. Professional development activities which are based on peer support may be more responsive to how teachers learn, may have more influence on changing teaching practice, and may be more responsive to teachers' needs and goals.

Darling-Hammond (1984) suggests that the surest way to improved instruction is a formal system of teachers helping teachers. She states that "every recent evaluation of the growing number of mentor teacher programs underscores the usefulness of having teachers help other teachers."

Mentoring: Mentoring can be defined as a nurturing process, in which a more skilled or more experienced person, serving as a role model, teaches, sponsors, encourages, counsels, and befriends a less skilled or less experienced person for the purpose of promoting the latter's professional and/or personal development (Anderson and Shannon, 1988). Mentoring functions are carried out within the context of an ongoing, caring relationship between the mentor and protégé.

In mentoring, forms of assistance given to new and colleague teachers, include giving information related to procedures, guidelines, or expectations of the school district, locating materials or other resources, giving information about teaching strategies or the instructional process. Forms of assistance given to new and colleague teachers also include, offering support through empathic listening and by sharing experiences, giving guidance and ideas related to discipline, or to scheduling, planning, and organizing the school day, helping teachers by arranging, organizing or analyzing the physical setting of classroom, and teaching while the new or colleague teacher observes.

Peer Coaching: Peer coaching is one teacher helping another teacher improve his/her instructional skills or develop a new teaching practice. It is not an evaluative, judgmental procedure, but instead a non-threatening, positive experience designed to help teachers become more effective at what they do (Showers, 1985). There are numerous forms of coaching that can help teachers help each other learn (Bybee and Loucks-Horsley, 2000).

Mentoring and Peer Coaching: Although most peer coaching programs are directed toward experienced teachers and most mentoring programs are for the purpose of improving the induction of new teachers, both programs aim to help teachers to increase their expertise, and, thus, the improvement of the quality of education.

Main goals in peer coaching and mentor teaching can be summarized as improving communication and collaboration among teachers, assessing teachers' professional needs and concerns, improving teachers' awareness of professional development, breaking down the psychological walls between classrooms, and give teachers opportunity to share their experiences, facilitating teacher learning, and creating an environment of trust and respect (Seferoglu, 1996).

Professional development activities can be examined form different perspectives. One of these perspectives can be called as core features. In order to understand the importance of the relationship between professional development and improving teaching those features need to be examined as well.

2.3. Core Features of Professional Development

2.3.1. Core Features: Collective Participation

There is a growing interest in professional development that is designed for groups of teachers from the same school, department, or grade level (Garet et al., 2001). Professional development designed for groups of teachers may have a number of potential advantages. For example, teachers who work together are more likely to have the opportunity to discuss concepts, skills, and problems that arise during their professional development experiences. Teachers who are from the same school, department, or grade are likely to share common curriculum materials, course offerings, and assessment requirements. Through joint professional development activities, teachers from the same school may be able to integrate what they learn with other aspects of their instructional context. In addition, teachers who share the same students can discuss students' needs across classes and grade levels.

Garet et al. (2001) noted that by focusing on a group of teachers from the same school, professional development may help sustain changes in practice over time, as some teachers leave the school's teaching force and other new teachers join the faculty. Professional development may also help contribute to a shared professional culture, in which teachers in a school or teachers who teach the same grade or subject develop a common understanding of instructional goals, methods, problems, and solutions.

Collective participation in the same activity can provide a forum for debate and improving understanding, which increases teachers' capacity to grow. Knapp (1997) emphasizes that change in classroom teaching is a problem of individual learning as well as organizational learning, and that organizational routines and establishing a culture supportive of reform instruction can facilitate individual change efforts.

2.3.2. Core Features: Promoting Active Learning

A second core feature of professional development concerns the opportunities provided by the professional development activity for teachers to become actively engaged in meaningful discussion, planning, and practice. Active learning as a core feature for professional development may have four dimensions. These dimensions are observing and being observed teaching, planning for classroom implementation, reviewing student work, and presenting, leading, and writing. Garet et al., (2001) explain those dimensions in the following way:

Observing and being observed: One element of active learning is the opportunity for teachers to observe expert teachers, be observed teaching in their own classroom, and receive constructive feedback. These opportunities can take a variety of forms such as providing feedback on videotaped lessons, having teachers visit each others' classrooms to observe lessons, having activity leaders, lead teachers, mentors, and coaches observe classroom teachers and engage in reflective discussions about the goals of a lesson, the tasks employed, teaching strategies, and student learning.

Planning for classroom implementation: A second element of active learning involves the opportunity to link the ideas introduced during professional development experiences to the teaching context in which teachers work. The introduction of new approaches may have different implications depending on the curriculum in place in a teacher's school, the specific textbooks adopted in the teachers' classrooms, and the required assessments in the teachers' districts. Also, the characteristics of the students enrolled in the teachers' classrooms, including the material covered in previous grades and students' expectations for classroom instruction, may affect the implementation of new teaching approaches.

Reviewing student work: Another element of active learning is the opportunity to examine and review student work. By examining students' written responses to problems, for example, teachers may gain an understanding of students' assumptions, reasoning and solution strategies. Also, examining and discussing examples of student work may help teachers develop skills in diagnosing student problems and designing lessons at an appropriate level of difficulty.

Presenting, leading, and writing: Apart from opportunities to observe teaching, plan classroom implementation, and review student work, professional development activities may also offer teachers the opportunity to give presentations, lead discussions, and produce written work. Active participation of this kind may improve outcomes by permitting teachers to delve more deeply into the substantive issues introduced (Garet et al., 2001, pp. 925-926).

2.3.3. Core Features: Fostering Coherence

Another core feature of professional development is about coherence among the activities offered. Professional development for teachers is frequently criticized on the ground that the activities are disconnected from one another. Garet et al. (2001) claims that a professional development activity is more likely to be effective in improving teachers' knowledge and skills if it forms a coherent part of a wider set of opportunities for teacher learning and development. Therefore, professional development activities should build on what teachers have already learned, emphasize content and pedagogy aligned with standards, support teachers in developing sustained, ongoing, professional communication with other teachers who are also trying to improve their teaching.

2.3.4. Core Features: Promoting Technology Use in Schools

Research on ICT training: ICT training has beneficial results in teacher usage and instructional behaviors. The frequency with which information technology is used in the classroom is affected by the availability of hardware, by adequate training to enable the educator, and the level of administrative encouragement. Increasing the familiarity and involvement of teachers with ICT is the most effective way to influence attitudes about information technologies in classrooms. Therefore, it can be said that adequate training is important in terms of developing positive attitudes about use of technology, and using it in appropriate and effective ways.

A number of factors which can prevent teachers from using technology can be summarized as follows (Mumtaz, 2000):

- lack of teaching experience with ICT
- lack of on-site support for teachers using technology
- lack of help supervising children when using computers

- lack of ICT specialist teachers to teach students computer skills
- lack of computer availability
- lack of time required to successfully integrate technology into the curriculum
- lack of financial support.

Characteristics of teachers who successfully made use of ICT indicate that those teachers have a positive rather than negative attitude towards ICT. Teachers who have positive attitudes towards ICT itself will be positively disposed towards using it in the classroom. In addition, teachers who preferred directive styles of teaching tended to rate their own competence as low and made use of helpers with ICT. Teachers need to have high motivation and commitment to their students' learning and to their own development as teachers. However the support they received in their schools and access they have in their schools to sufficient quantities of technology may effect this motivation and commitments in a negative way.

In the light of those obstacles and characteristics of teachers, it can be claimed that for the success of ICT in the schools, the relationship of pre-service/in-service training and knowledge of ICT and learning principles should be examined.

2.3.5. Core Features: Providing Professional Development for Effective Technology Use

Educational technology is not transformative on its own (Rodriguez, 2000). It requires the assistance of educators who integrate technology into the curriculum, align it with student learning goals, and use it for engaged learning projects. Teacher quality is the factor that matters most for student learning. Therefore, professional development for teachers becomes the key issue in using technology to improve the quality of learning in the classroom.

When teachers begin to use new instructional technology, there is often a period of time when they feel lost and unsure what to do with the new technology. This has been documented as a common stage and can last from six months to two years. Ongoing support can help decrease this "lost time." (Center for Technology in Learning, 2009). In addition, providing sustained support through mentors or coaches improves the implementation of innovations as well.

Online Professional Development: One way technology can help in professional development is by providing teachers online sites to use to interact with other teachers or professional development providers to support their work. Due to some constraints in traditional professional development activities, such as time and distance, online professional development activities are drawing people's attention. Online professional development can benefit teachers in many ways. For example, online professional development can allow more teachers to participate since travel is not necessary. It can also bring in expertise not normally available within a school, and it can provide justin-time help, making it more job-embedded and in context as teachers need it. In addition, online teacher professional development efforts can be sustained over months and years.

3. Conclusions

If and when an environment where teachers share and exchange ideas is created, then improvement in the quality of teaching can occur. Interaction is a key to empowering teachers as professionals. When teachers have the opportunity to analyze their work under supportive conditions, they find such reviews to be productive and rewarding. When teachers help teachers to increase their effectiveness, everyone wins, most of all, the students.

Traditional forms of professional development are quite common in educational settings. However, they are widely criticized as being ineffective. Reform type professional development activities, on the other hand, such as a study group, teacher network, mentoring, committee or task force, internship, individual research project, or teacher research center are viewed as new ways for improving education, teachers and teaching. These reform types differ from traditional professional development activities in several ways. For example, by locating opportunities for professional development within a teacher's regular work day, those types of professional development may be more likely than traditional forms to make connections with classroom teaching, and may also be easier to sustain over time.

In order to understand the relationship between professional development and improving teaching some features such as "collective participation, promoting active learning, fostering coherence, promoting technology use in schools, and providing professional development for effective technology use" need to be examined. These features will make reform type professional development activities more functional and effective.

The lack of professional communication between administrators, supervisors and teachers, and among teachers, may pose one of the main problems in the school culture, in terms of professional growth. Therefore, teachers should not be left alone, because school improvements begin with teachers, not with specific ideas, curriculum or organizational or structural changes. Finally, no single strategy will always work in every school, for every teacher, all of the time. Customization of the programs according to the needs of the program participants is necessary for the success of programs of teacher learning or professional development.

3.1. Suggestions for further research

There is a clear need to new, systematic research on the effectiveness of alternative strategies for professional development. Research on teaching, and learning, concludes that more research studies are needed to determine the efficacy of various types of professional development activities, including pre-service and in-service seminars, workshops, and summer institutes. Studies should include professional development activities that are extended over time in order to identify the processes and mechanisms that contribute to the development of teachers' learning communities.

References

- Anderson, E. M., & Shannon, A. L. (1988). Toward a conceptualization of mentoring. Journal of Teacher Education, 39(1), 38-42.
- Bybee, R. W., & Loucks-Horsley, S. (2000). Advancing technology education: The role of professional development. *The Technology Teacher*, October 2000, 31-34. [Available online at: http://www.iteaconnect.org/TAA/LinkedFiles/Articles/TTTpdf/2000-01Volume60/bybeehorsley_oct00.pdf] Retrieved on September 26, 2010.
- Center for Technology in Learning (2009). Systemic vs. one-time teacher professional development: What does research say? Research Note 15.

 Menlo Park, CA: The Center for Technology in Learning, SRI International. [Available online at: http://education.ti.com/sites/US/downloads/pdf/research_note_15_pd.pdf] Retrieved on September 26, 2010.
- Darling-Hammond, L, & McLaughlin, M. W. (1995). Policies that support professional development in an era of reform. *Phi Delta Kappan*, 76(8), 597–604. [Available online at: http://www.oest.oas.org/iten/documentos/Investigacion/randd-engaged-darling.pdf] Retrieved on September 26, 2010.
- Darling-Hammond, L. (1987). Who should provide instructional leadership? The case for teacher involvement. Unpublished manuscript. Washington, DC: Education and Human Resources Department, Rand Corporation.
- Darling-Hammond, L. (1984). Beyond the commission reports: The coming crisis in teaching. Santa Monica, CA: Rand
- Desimone, L., Porter, A. C., Garet, M. S., Yoon, K. S., & Birman, B. F. (2002). Effects of professional development on teachers' instruction: Results from a three-year longitudinal study. *Educational Evaluation and Policy Analysis*, 24(2), 81-112. [Available online at: http://www.jstor.org/stable/pdfplus/3594138.pdf] Retrieved on September 26, 2010.
- Garet, M. S., Porter, A. C., Desimone, L., Birman, B. F., & Yoon, K. S. (2001). What makes professional development effective? Results from a national sample of teachers. *American Educational Research Journal*, 38(4), 915-945. [Available online at: http://www.jstor.org/stable/pdfplus/3202507.pdf] Retrieved on September 26, 2010.
- Garet, M. S., Birman, B. F., & Porter, A. C. (1999). Designing effective professional development: Lessons from the Eisenhower Program. Washington, DC: American Institutes for Research. [Available online at: http://www2.ed.gov/inits/teachers/eisenhower/designlessons.pdf] Retrieved on September 26, 2010.
- International Society for Technology Education (ISTE) (2008). The ISTE national educational technology standards (NETS*T) and performance indicators for teachers. [Available online at: http://www.iste.org/Libraries/PDFs/NETS_for_Teachers_2008_EN.sflb.ashx] Retrieved on September 26, 2010.
- Loucks-Horsley, S., Harding, C. K., Arbuckle, M. A., Murray, L. B., Dubea, C., & Williams, M. K. (1987). Continuing to learn: A guidebook for teacher development. Andover, MA: The Regional Laboratory for Educational Improvement of the Northeast and Islands.
- Lieberman, A., & Miller, L. (Eds.). (1984). *Teachers, their world, and their work: Implications for school improvement.* Alexandria, VA: Association for Supervision and Curriculum Development.

- Knapp, M. S. (1997). Between systemic reforms and the mathematics and science classroom: The dynamics of innovation, implementation, and professional learning. Review of Educational Research, 67(2), 227-266. [Available online at: http://www.jstor.org/stable/pdfplus/1170627.pdf] Retrieved on September 26, 2010.
- Ministry of National Education (MONE) (2008). *Teacher Competencies. Generic Teaching Profession Competencies. Subject Matter Competencies.* Ankara: Öğretmen Yetiştirme ve Eğitimi Genel Müdürlüğü. [Available online at: http://otmg.meb.gov.tr/Calismalar.html] Retrieved on September 26, 2010.
- Mumtaz, S. (2000). Factors affecting teachers' use of information and communications technology: A review of the literature. *Journal of Information Technology for Teacher Education*, 9(3), 319-341.
- Rodriguez, G. (2000). Critical issue: Providing professional development for effective technology use. Washington, DC: North Central Regional Educational Laboratory. [Available online at: http://www.ncrel.org/sdrs/areas/issues/methods/technlgy/te1000.htm] Retrieved on September 26, 2010.
- Seferoglu, S. S. (2001). Elementary school teachers' perceptions of professional development. *Hacettepe University Journal of Education*, 20, 117-125.
- Seferoglu, S. S. (1996). Elementary school teacher development: A study of professional development opportunities in Turkish schools. Unpublished doctoral dissertation. Columbia University, Teachers College, New York, USA.
- Showers, B. (1985). Teachers coaching teachers. Educational Leadership, 42(7), 43-48.
- Shulman L., & Sparks, D. (1992). Merging content knowledge and pedagogy: An interview with Lee Shulman. *Journal of staff development,* 13(1), 14-16. [Available online at: http://www.learningforward.org/news/jsd/shulman131.cfm] Retrieved on September 26, 2010.
- Zumwalt, K. K. (Ed.). (1986). Improving teaching. Alexandria, VA: Association for Supervision and Curriculum Development.