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Connecting Theory and Practice in Teacher Education: A Case Study*

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Abstract

Teachers have many problems transferring theoretical knowledge into practice. That's why teacher educators seek ways for connecting theory and practice in their pre-service teacher education programs. This study describes the activities and the effects of these activities for connecting theory and practice, as well as the recommendations of major stakeholders concerning the activities in the Teaching and Learning Literacy II and Teaching and Learning Numeracy courses in the Elementary Teacher Education Program at the University of Washington, Seattle. 11 instructors, 6 cooperating teachers, and 60 teacher candidates provided the data for this study. The research techniques of the study included document analysis, unstructured interviews with the participants, observations in the partner schools, and surveys. The data was analyzed by administering content analysis. The results of the study revealed that direct instruction by the instructors, observing an instructor's teaching with real students, preparing lesson plans, rehearsing for specific teaching methods with small groups, self-assessment or group discussions during rehearsals, as well as doing assignments are all effective for connecting theory and practice. These activities provide teacher candidates with an understanding of the knowledge of teaching methods, how to conduct teaching methods in real classes, how to make some reflections on their practice, and how to improve their teaching performance.

Keywords

Connecting Theory and Practice, Methods Courses, Reflective Thinking, Teacher Education, Teacher Education Program.

Universities are often criticized for implementing teacher education programs disconnected from any real practice (Beck & Kosnik, 2002; Fraser, 2007; Levine, 2011; Muğaloğlu & Doğanca, 2009). In fact, teacher education programs that link theoretical courses to field experiences are more effective than those which don't do this (National Academy of Education, 2005). Some institutions attempt to emphasize practice in their teacher education programs (Levine, 2011; Dilit International House, 2013a, 2013b). For example, in Dilit (Divulgazione Lingua Italiana) Teacher Education Center, teacher candidates practice with real students in small groups and as such, experience how to solve problems in a real teaching and learning context (Lampert, Beasley, Ghousseini, Kazemi, & Franke, 2010). The practices of teacher candidates are video recorded and can be watched through a closed circuit television system (Lampert & Graziani, 2009).

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In the literature, there are few studies about methods courses and their effects on teacher education (Ör., Abell & Bryan, 1997; Boyd et al., 2008; Hart, 2006; Steiner & Rozen, 2004). Abell and Bryan (1997) found that teacher candidates conceptualized their knowledge about teaching and learning science in methods courses which allowed them to engage in self-reflection and take a role as a science learner. Hart (2006) indicated that teacher candidates in teaching mathematics courses through the 'Engage-Explore-Explain' model were more descriptive, analytical and reflective with their teaching abilities.

In the case of this study [University of Washington (UW), Seattle], methods courses are taught in partner schools rather than on the university campus. Teacher education programs at UW, Seattle yield teacher candidates who can connect theory and practice. The most distinctive point of the programs is that teacher candidates teach real students in real time during their methods courses (Zeichner & McDonald, 2011).

The methods courses of the Elementary Teacher Education Program in state universities in Turkey are encoded as theoretical courses (Yükseköğretim Kurulu [Board of Higher Education], 2013). These courses are also not included in the University-School Cooperation Protocol (Milli Eğitim Bakanlığı [MEB], 2012). The study of Kilimci (2006) introduced that teaching methods like computer-assisted learning, individual learning, questioning, discussion, lecturing, problem solving and group studies should be applied to the Elementary Teacher Education Programs in Turkey. However, many teacher educators figured out the importance of connecting teaching methods with real life and of studying with real students (Bilir, 2011; Dilit International House, 2013b; Kazemi, Franke, & Lampert, 2009; Kumral, 2010; Şahin & Kartal, 2013).

In Turkey, a few foundation universities (e.g., Bahçeşehir Üniversitesi, 2013; Türk Eğitim Derneği Üniversitesi, 2013) apply some activities so that teacher candidates can connect theory and practice. Just as in the Village Institutes, there were some teacher education programs which focused on practice in Turkey in the past (Akyüz, 2012; Çelik, 2000). But today there are many lessons to be learned from the UW teacher education programs about linkage theory and practice for teacher education in Turkey. As Stake (2000) stated, the case studies give institutions an opportunity to carry out similar studies and to perform self-assessment.

The aim of this study is to describe the activities applied in two methods courses in UW, Seattle's Elementary Teacher Education Program concerning the connection of theory and practice. The research questions are: (1) "What kinds of activities are applied in method courses for providing teacher candidates the ability to connect theory and practice?" (2) "What are the impacts of the method courses on connecting theory and practice?" and (3) "What activities should be applied in the method courses to improve the connection of theory with practice?"

Method

The case study design is used for a single case (Stake, 2000; Yıldırım & Şimşek, 2013; Yin, 2002). The case is limited with the *Teaching and Learning Literacy II* and *Teaching and Learning Numeracy* courses in the Elementary Teacher Education Program in UW, Seattle.

General Overview on the Case

UW (2013) was founded in 1861. UW's College of Education is ranked the 10th best Education Faculty for 2014 (U.S. News and World Report, 2014). Elementary teacher education in UW, Seattle lasts four quarters, 12 months in total. The main principles of the program emphasize field studies and teaching practices, connecting theory and research and teaching practices, and cooperating with schools and society (UW, 2012a). Teacher candidates have to complete 24 credits in methods courses as part of the 64 total credits required for graduation (UW, 2012b).

Study Group

11 instructors, 6 cooperating teachers and 60 teacher candidates in two cohorts participated in the study. The researcher observed some activities in which all the participants took some roles; they implemented unstructured interviews with five instructors, two cooperating teachers and four teacher candidates; and applied a survey to seven instructors, three cooperating teachers and 35 teacher candidates in two cohorts.

Instruments and Process

The data collection instruments of the study were the observation form and the surveys. The researcher developed these instruments. In three of the partner schools, observations were made via the observation form, four times for each course, totaling eight

observations. During each observation, the researcher joined a different teacher candidate group. The surveys were applied to the instructors and cooperating teachers via e–mail. The survey of the teacher candidates was handed out and collected during their extracurricular time. 35 teacher candidates filled out the survey. The researcher performed the unstructured interviews with the instructors, cooperating teachers, and teacher candidates during the data collection process. Since the researcher is not from the UW, Seattle, the risk of having any prejudice against a member of the study group was minimized (Creswell, 2002).

Data Analysis

Content analysis was administered on the data. The data was analyzed using the same code list as Miles & Huberman (1994). Some codes were added to the beginning of the code list during the analysis process. After the coded data was read one more time by comparing it against the code list, some codes were changed. The codes were then grouped and four themes were defined for the second research question (Bogdan & Biklen, 1998).

Results

The results of the study have been presented in relation to the research questions.

Activities which are Effective for Connecting Theory and Practice

Effective activities for connecting theory and practice in the *Teaching and Learning in Literacy II* course are direct instructions from the instructor, preparing lesson plans, rehearsing instructional activities with a student or in a small or large group, self-assessment, and group discussions. In the *Teaching and Learning Numeracy* course, effective activities for connecting theory and practice are direct instructions from the instructor, preparing lesson plans, rehearsing instructional activities in a small or large group, self-assessment and group discussions.

The Effects of Methods Courses on Connecting Theory and Practice for Teacher Candidates

Learning the Theoretical Knowledge about Teaching Methods: Participants stated that the readings, direct instruction from the instructors, and preparing a lesson plan have more impact on learning theoretical knowledge. These activities help teacher candidates to comprehend the process of a specific teaching method and why it is preferred as well as the learning characteristics of real students. Teacher candidates learn some information about teaching methods at a certain level before they plan their teaching. While they practice the plan, they think about the real conditions of teaching and learning. Thus, they learn teaching methods at higher levels.

Transferring Theoretical Knowledge about Teaching Methods into Real Classes: To observe instructors as they teach real students is very useful for teacher candidates in transferring theory to real classes. Even the participants indicated that this activity is more beneficial and effective than preparing a lesson plan and practicing it. The main achievement of teacher candidates is that they plan and practice appropriate teaching activities for real students.

Reflective Thinking about Teaching: The most effective activities for reflective thinking in the methods courses are group discussions, self-assessments and assignments. These activities provide teacher candidates with the opportunity to analyze their teaching and learning knowledge as well as their experiences, and they can define the type of teacher they want to be. Also, teacher candidates prefer group discussions over individual reflection and they prefer to explain their opinions verbally rather than written.

Improving Teaching Performance: For teacher candidates, feedback from other participants in the methods courses is more effective for improving their teaching performance. Therefore, group discussions are a more prominent activity in this aspect. This kind of activity or feedback allows them to hear what they should change in their lesson plans and in their practice.

Suggestions for Teacher Candidates to Connect Theory and Practice

The instructors, cooperating teachers and teacher candidates highly agree with most of the suggestions in the surveys. The highest agreement among the participant groups is with the 'Instructors should be well-educated in subject-matter and in pedagogy.' The rates of agreement for 'Teacher candidates should work in very small groups (2-4 teacher candidates)' and 'Teacher candidates ask the students to give them feedback about their teaching.' were lower than the others.

Discussion

The results of the study indicate that the participants try to take the responsibilities of applying the syllabi for their methods courses. The instructors prepared the syllabus for each course in teams. In the middle of the quarter; the director of teacher education, the coordinator for the Elementary Teacher Education Program (ELTEP), the instructors, cooperating teachers and other staff of the program came together in an ELTEP division meeting. They discussed the effects of the syllabi with regard to practice and made some suggestions for the future. These types of activities can contribute to helping all the participants internalize and implement the teacher education program.

The results revealed that the activities of the methods courses moderately contributed to the teacher candidates connecting theory and practice. Beck and Kosnik (2002) and Dooly and Sadler (2013) reached the same results as in this study. Another result of the study is that direct instructions from the instructor and the instructor teaching with real students are very effective in connecting theory and practice. Similar results were reached in other studies (Abell & Bryan, 1997; Barr, Watts-Taffe, & Yokota, 2000; Fletcher, Mandigo, & Kosnik, 2013; Grossman et al., 2000). These results indicate that teacher candidates rely on the teaching competency of the instructors.

The results of the study state that some activities in the methods courses are effective in improving reflective thinking and the teaching performances of teacher candidates. In fact, reflective thinking improves teaching performance (Cruickshank, Bainer, & Metcalf, 1995; Ovens, 2000; Postlethwaite & Haggarty, 2012). Hammond and Collins (1991) also emphasized that reflective thinking helps teacher candidates to connect theory and practice. However as Halim, Buang, and Meerah (2011) noted, reflective thinking does not guarantee an ability to connect theory and practice.

Some results of the study show that the activities in methods courses need to be developed in order to connect theory and practice. For instance, teacher candidates are less self-sufficient and less desiring of some activities where they are required to use writing skills. In fact, writing is an essential activity for teaching and learning reflective thinking (Wilson & Jan, 1993). Koç's (2012) study proves that writing some texts for theses dilemmas is a crucial activity for connecting theory and practice. In addition, teacher candidates join group discussions more actively than individual studies for reflection on their teaching practices. Dooly and Sadler (2013) also emphasize that group discussions have a positive effect on reflective thinking.

Teacher educators believe that team work is a very important point in teacher education programs for connecting theory and practice. This is because well-qualified staff (directors, coordinators, instructors, cooperating teachers, and teacher candidates) strengthen the linkage between theory and practice (Guo & Pungur, 2008). Hume (2012) states that a lack of confidence and incompetency in the teaching of cooperating teachers can hinder the supporting of teacher candidates. As Russell, McPherson, and Martin (2001) point out, cooperation among stakeholders is one of the common properties of an effective teacher education program. Moreover, Beck and Kosnik (2002) and Russell et al. (2001) emphasized that for quality and continuity of team work, administrative support is required.

Consequently, the Elementary Teacher Education Program in UW, Seattle is a good case study for connecting theory and practice. This study draws four main components of a teacher education program: team work, qualified staff, effective planning, and administrative support. In addition, programs can be developed for teaching reflective thinking to teacher candidates.

Teacher educators have the ability to connect theory and practice in their teacher education programs. They should analyze their needs, understand their facilities, and formulate their goals and objectives. As a result the structure of the programs can be improved in terms of connecting theory and practice. For example, a program's practice hours are increased so that teacher candidates can learn theory more easily (Manzar-Abbas & Lu, 2013), or activities which improve the connection between theory and practice can be applied throughout the entire program (Beck & Kosnik, 2002). Additionally, the main thesis of the program could be 'theory is essential and effective in all practices' (Crossouard & Pryor, 2012). Teacher candidates can have roles in the active researches in the teacher education programs (Muğaloğlu & Doğanca, 2009). Furthermore, there are many research problems related to connecting theory and practice in teacher education which can be studied by teacher educators. Yıldırım (2013) also considers the balance between theory and practice in teacher education programs among prior research problems, and he suggests researching the effect of balancing between theory and practice in the teacher education programs on the qualifications of the graduates.

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