Full Length Research Paper

Competencies in teacher education: Preservice teachers' perceptions about competencies and their attitudes*

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Accepted 18 February, 2013

This study aims to identify the general teaching competency levels and professional attitudes of preservice teachers who are to graduate from four-year education faculties. It was conducted with a total of 379 senior-year students who were attending Pamukkale University Education Faculty during the spring term of the 2008 to 2009 academic year. The dependent variables of the study were general teaching profession competencies and professional attitude levels, while the independent variables were gender, type of high school attended, department of study and academic success. Data were collected by using the "general teaching competencies self-assessment form" and the "scale for attitudes towards the teaching profession". The results showed a positive and meaningful relationship between general teaching competency perceptions and attitudes towards the profession.

Key words: Teacher education, preservice teacher, generic teacher competencies, attitude.

INTRODUCTION

Teachers are the key elements of maximizing the quality of education, improving schools and successfully implementing curricula. In addition, teachers are the people who raise individuals that shape the future of a country. Therefore, there are qualities that teachers who have a role in the education and character development of children need. Every country has standards which specify the qualities that teachers should have and aims to equip preservice teachers with these standards throughout their training.

It is expected to be higher relationship amongst teacher competencies and attitudes because if individuals have knowledge, understanding and skills about teaching, they should have high attitudes about teaching profession. General competencies and attitudes are essential to enhance the quality of the teaching profession. This will

only be possible if the competencies are known and they can be taught to pre and inservice teachers through education and training programs. Feedback from research is needed to identify the competency level of preservice teachers at the time of graduation. It is therefore thought that more studies are needed on the necessity, implementation and improvement of the general competencies of the teaching profession finalized by the Ministry.

This study aims to examine preservice teachers' perceptions of general teaching competencies and their attitudes towards the profession in relation to certain variables, and identify the relationship between perceptions of competencies and attitudes towards the profession. In the study, female and male preservice teachers' scores were compared to examine the Turkish assumption that teaching is a woman's job. To find out

the effectiveness of teacher training high schools' curricula and their contrubutions for preservice teacher, the type of high school difference was testted. Department of study and GPA were independent variables investigated to understand the differences amongst various teaching subjects, competency perceptions and attitudes. The following questions were studied:

- 1. Do preservice teachers' perceptions of their levels of general teaching competencies vary with respect to gender, type of school attended, department of study and GPA?
- 2. Do preservice teachers' teaching profession attitude levels vary with respect to gender, type of school attended, department of study and GPA?
- 3. Is there a meaningful relationship between the general competencies of the teaching profession and attitudes towards the profession?

Literature review

Berliner (1984) argues that professional standards are developed as assumptions that define what students should know and be able to do (cited in Delandshere and Arens, 2001). Defined as the "general knowledge, skills and attitudes needed to effectively and efficiently fulfill the requirements of the teaching profession" (MEB, 2006: vii), the concept of teacher competencies emerged for the first time in the 1890s, but gained importance and became a topic of publication in the 1960s and 1970s (Struyven and De Meyst, 2010). The last decade has seen an increase in professional standards which are named as competencies in secondary and higher education. In the 1990s, many professional standards were developed for teachers. For instance, the USA (NBPTS, 2001), (quoted in Koster and Dengerink, 2008) UK (TDA, http://www.tda.gov.uk/teachers/ professional standards. aspx) and Australia (http://education.gld.gov.au/staff/ development/standards/standards.html) esta-blished competencies to improve the quality of the teaching profession.

In the USA, national professional standards are treated as universal standards and implemented in diverse settings regardless of local knowledge, culture and social problems (Delandshere and Petrosky, 2004). In England, teacher competencies were revised in 1997 by the Teacher Education Agency by referring to the concept of standards (Bleach, 2000). Revised for the last time in 2007, these standards have three main parts: professional characteristics, professional knowledge, and professional skills. In order for all preservice teachers to identify their strengths and priorities for when they become teachers in the future (Gay, 2007), they need to consider the standards in the "Practice of Teaching". In Holland, a standard set of improvement efforts was initiated based on teacher competencies including

communication, social and ethical values, instruction and methods, and organizational skills. This framework is divided into four constructs where teachers play a role with the students, their colleagues, the environment, and on their own (Storey, 2006; cited in Pantic and Wubbles, 2010). In Belgium in 1998, the Ministry of Education mentioned to the teacher training institute its request for competencies to be included in teacher training programs to help identify a professional profile and basic competencies. While basic competencies were defined as the minimum competencies that preservice teachers should possess at the end of their training, professional profiles were defined as the "ideal teacher" or "aims" that will enable practicing teachers to pursue professional development opportunities (Struyven and De Meyst, 2010).

Similar to the efforts in many countries aiming to enhance the quality of the teaching profession, many innovations have also taken part in Turkey during the process of accession to the EU. In 2000, the General Directorate of Teacher Training and Education undertook teacher training efforts, which constituted one of the five components of the Support Project for Basic Education (SPBE) that came into effect with the agreement signed between the EU Commission and the Turkish government (MEB, 2006). Initiated with the cooperation of foreign experts in 2004, the competencies of five countries (England, USA, Australia, Ireland and the Seychelles) were examined to establish a common understanding of related concepts and terms, and the general competencies for the teaching profession were specified in 2006.

General competencies for the teaching profession has 6 main competency areas: Personal and professional values - professional development, knowing the student, the process of learning and teaching, monitoring and evaluating learning and development, school-family and society relationships, curriculum and content knowledge, with 31 sub-competencies and 221 performance indicators (MEB, 2006). In 2004, a pilot study was implemented in 6 provinces and the general competencies were defined as aforementioned. However, it is not clear what was done after this to ensure that teachers adopt these competencies.

The literature includes various studies on the implementation, dimensions and significance of competencies. Struyven and De Meyst (2010) asked the views of teacher educators (51) and preservice elementary school teachers (218) on the implementation of competencies in competency-based teacher training. According to their findings, certain competencies (the teacher as a guide in learning and development, the teacher as a field expert, etc.) clearly exist in the policies and practices of educational institutions but other competencies (the teacher cooperating with families, the teacher as a mem-ber of education committees, etc.) were implemented only rarely. Teacher educators have proposed four different approaches to the implementation of competencies:

Deficiencies in 1) teaching practice, 2) planning of education institutions' policies and programs, 3) the process of curriculum development, and 4) implementation of competencies. Preservice teachers state that the perception and curriculum adaptation of competencies vary from an institution to another, which necessitates different arrangements between teacher education institutions. In addition, it is also argued that competency implementation methods at schools are not clear enough to teachers or preservice teachers.

Pantic and Wubbels (2010) developed a questionnaire in Serbia about the importance of competencies in teacher training and obtained the views of 370 teachers and teacher educators. Their respondents revealed four competency dimensions: 1) values and raising children, 2) understanding the educational system and contributing to its development, 3) field knowledge, pedagogy and curriculum, and 4) self evaluation and professional development. The questionnaires showed that the lowest score belonged to the competency called "teacher involvement in the development of the national education system", while the highest score belonged to "teacher identity and professional development". The researchers stated that competencies include teacher knowledge, skills, values and beliefs.

In a study where preservice teachers evaluated themselves with regard to teacher competencies, Seferoğlu (2004) worked with senior year students at the Department of Computer Education and Instructional Technologies. This study used the scale developed by Mahiroğlu (2004) in which the respondents evaluated themselves as weak, moderate, good or excellent in relation to the competencies chosen. The results showed that the participants rated themselves as moderate or good in the majority of the competencies. No meaningful difference existed between the genders, different types of high schools attended, or other variables of school success. Köksal (2008) conducted a qualitative study entitled "The Evaluation of the General Competencies of the Teaching Profession by Teachers, Principals and Ministry Officials" to evaluate the pilot study which was conducted during the competency development process. Interviews held with teachers and principals from pilot schools in Ankara, and ministry officials revealed that the work undertaken made a positive contribution to teachers, schools, the Ministry and the quality of education. Therefore, it was decided that the practice would continue throughout Turkey on a voluntary basis.

"Attitude can be defined as an acquired internal state that affects individuals' personal activity preferences towards a group of things, individuals, events and various situations" (Senemoğlu, 2009: 419). Professional attitude, on the other hand, "develops when individuals load thoughts and feelings to their profession with the experiences gained through their professional lives and reflect these in their behaviors over time" (Can, 1987: 160). Teacher education aims to give preservice teachers a

positive attitude towards the profession, and enable them to fulfill their jobs with enjoyment and will. Knowing that they have a positive attitude towards the profession may offer a clue that when they become teachers, they will sincerely display personal qualities such as moti-vating students, focusing on success and professionalism as well as the professional qualities of planning instructional activities, making use of instructional methods and techniques, establishing effective communication, managing the classroom, using time effectively and evaluating learning (Demirel, 2009).

The literature includes many studies that have examined the attitudes of teachers and preservice teachers towards the profession with regard to different variables. While some of the studies which focus on gender (Aşkar and Erden, 1987; Tanrıöğen, 1997; Oral, 2004; Üstün et al., 2004; Çakır, 2005; Çapri and Çelikkaleli, 2008) have found more positive attitudes among female preservice teachers, some others (Sürücü, 1997; Cakır et al., 2006; Davran, 2006) have concluded that males have more positive attitudes. Similarly, the literature also includes inconclusive research results about the variable of the department of study. Oral (2004) and Çakır et al., (2006) found that department caused a difference in the attitudes of preservice teachers towards the profession; however, Çapri and Çelikkaleli (2008) and Demirtaş et al., (2011) concluded that it did not.

METHOD

This is a descriptive study aiming to identify preservice teachers' perceptions of their own general teaching competency levels and their attitude levels towards the profession. The dependent variables of the study are the general teaching competencies and attitude towards profession levels. The independent variables are gender, type of school attended, department of study and GPA.

Population and sample

The study was conducted with 379 senior year students who were attending Pamukkale University Education Faculty's Departments of Science Education, Preschool Education, Elementary Education, Social Studies Education, and Turkish Education during the 2008 to 2009 academic year. The characteristics of the preservice teachers who participated in the study are shown in Table 1.

Data collection tools

Data were collected in this study by using the "General Teaching Profession Competencies Self-Assessment Form" and the "Scale for Attitudes towards the Teaching Profession". Developed by the Ministry of Education (2005), the "General Teaching Profession Competencies Self-Assessment Form" is a 31-item scale with six main competency areas that include sub competencies. The main competency areas are "Personal and Professional Values-Professional Development", "Knowing the Student", "Instructional Process", "Monitoring and Evaluating Learning and Development", "Relationships between the School, Family and Society" and "Curriculum" and Content Knowledge". The Cronbach Alpha

Table 1. Participant characteristics with respect to the variables.

Variable	N	%
Gender		
Female	227	59.9
Male	152	40.1
Total	379	100
Teaching subject		
Social Sciences Education	57	15
Elementary Science Education	64	16.9
Turkish Education	56	14.8
Elementary Education	147	38.8
Preschool Education	55	14.5
Total	379	100
Type of high school		
Teacher High School	22	5.8
Other	357	94.2
Total	379	100
General teaching profession		
0-1.99	11	2.9
2-2.49	124	32.7
2.50-2.99	128	33.8
3-3.49	94	24.8
3.50-4	22	5.8
Total	379	100

coefficient of the scale is .85. The data collected for this study led to the Alpha coefficient of .92.

Developed by Başbay et al., (2009), the "Scale for Attitudes towards the Teaching Profession" is a 5-point Likert type scale with 20 items. The scale has 10 positive and 10 negative statements. Each attitude statement is followed by the alternatives "Disagree completely", "Disagree", "Undecided", "Agree" and "Agree completely". Scoring was as follows: Disagree completely=1, Disagree=2, Undecided=3, Agree=4 and Agree completely=5. Negative items were inversely scored. The Cronbach alpha coefficient of the scale is .93. The data collected for this study led to the alpha coefficient of .92.

Data analysis

Data were analyzed by using the SPSS 16 statistical package. Of descriptive statistics, frequencies and percentage distributions were used. In order to test the significance of the difference between gender and type of school attended and mean scores from the scales, independent samples t-test was used. In order to test the significance of the difference between department and GPA and mean scores from the scales, independent samples single factor analysis of variance (one-way ANOVA) was used. The relationship between the mean scores from the General Teaching Profession Competencies Self-Assessment Form and preservice teachers' attitudes towards the teaching profession scores was calculated by

using Pearson Correlation coefficient.

FINDINGS

The findings are listed in relation to the research questions. Thus, general teaching profession competencies, attitudes towards the profession and the relationship between the two were examined. Preservice teachers' self-assessment of their general teaching profession competencies and their perceptions towards attitudes for the profession were examined in relation to gender and the t-test results are given in Table 2.

Table 2 shows a meaningful difference between general teaching profession competencies and the gender of preservice teachers [t(377)=- 2.55, p=0.01<0.05]. The arithmetic means reveal that female preservice teachers' professional competency perceptions (X=157.58) were higher than those of male preservice teachers (X=152.76). Preservice teachers' attitudes towards the teaching profession vary by gender [t(377)=-4,70, p=0.00<0.05]. The arithmetic means show that female preservice teachers' attitudes for the profession (x=84.29) were more positive

Table 2. t-test results of preservice teachers' general teaching profession competencies and perceptions of attitudes in relation to gender.

Variable	Gender	N	Х	S	SD	t	р
Competency	Male	152	152.76	19.55	377	-2/55	0.01*
,,,	Female	227	157.58	16.91		_, _,	
Attitude	Male	152	78.62	12.66	377	-4.70	0.00*
Attitude	Female	227	84.29	10.65	311	-4.70	0.00

Note: * p< .05.

Table 3. t-test results of preservice teachers' general teaching profession competencies and perceptions of attitudes in relation to type of school attended.

Variable	Type of high school	N	Х	S	SD	t	р
Competency	Other Teacher high school	357 22	155.72 154.45	17.90 22.21	377	0.31	0.75
Attitude	Other	357	82.25	11.67	377	1.57	0.11

Table 4. ANOVA results of preservice teachers' perceptions of general teaching profession competencies and attitudes in relation to the department of study.

Variable	Source	Sum of squares	SD	Mean square	F	р
	Between groups	2662.757	4	665.689	2.044	0.08
Competency	Within groups	121803.6	374	325.678		
	Total	124466.3	378			
	Between groups	690.18	4	172.545	1.239	0.294
Attitude	Within groups	52093.65	374	139.288		
	Total	52783.83	378			

than male preservice teachers (x=78.62).

Preservice teachers' perceptions of general teaching profession competencies and attitudes towards the profession were examined in relation to the type of school they attended and the t-test results are presented in Table 3.

As shown in Table 3, no significant difference exists between the type of high school that preservice teachers graduated from and their perceptions of teacher competencies [t(377)=0.31, p=0.75>0.05]. Similarly, there was no difference between the type of high school that the participants attended and their attitudes towards the teaching profession [t(377)=1.57, p=0.11>0.05].

The results of the ANOVA conducted to test whether preservice teachers' levels of general teaching profession competencies and attitudes towards the profession vary meaningfully with respect to the department of study are shown in Table 4. Table 4 shows no meaningful difference between pre-service teachers' department of study and their teaching profession competency perceptions [F(4-374)=2,044, p=0.08>0.05]. Similarly, no meaningful

difference exists between preservice teachers' department and their attitudes for the teaching profession [F(4-374)=1.239, p=0.294>0.05].

The results of the ANOVA conducted to test whether preservice teachers' levels of general teaching profession competencies and attitudes towards the profession vary meaningfully with respect to their GPA are shown in Table 5.

As shown in Table 5, no meaningful difference existed between preservice teachers' GPA and their teaching profession competency perceptions [F(4-374)=0.804, p=0.52>0.05]. No difference existed between preservice teachers' GPA and their attitudes towards the teaching profession either [F(4-374)=2,453, p=0.05].

The Pearson Correlation Coefficient was calculated to examine the level of the relationship between preservice teachers' attitudes towards the teaching profession and their general teaching profession competencies. Correlation results are presented in Table 6.

As can be seen from Table 6, there is a moderate, positive and meaningful relationship between preservice

Variable	Source	Sum of squares	SD	Mean square	F	р
	Between groups	1060.55	4	265.139	0.804	0.52
Competency	Within groups	123405.8	374	329.962		
	Total	124466.3	378			
	Between groups	1349.397	4	337.349	2.453	0.05
Attitude	Within groups	51434.43	374	137.525		
	Total	52783.83	378			

Table 5. ANOVA results of preservice teachers' perceptions of general teaching profession competencies and attitudes in relation to GPA.

Table 6. The correlation between preservice teachers' attitudes towards the profession and their general teaching competencies.

Attitudes	Attitudes	Competencies
Pearson correlation	1	.355**
Sig. (2-tailed)	-	.000
N	379	379
Competencies		
Pearson correlation	.355**	1
Sig. (2-tailed)	.000	-
N	379	379

Correlation is significant at the 0.01 level (2-tailed).

teachers' attitudes towards the teaching profession and their general teaching competencies (r=0.355, p<0.05).

DISCUSSION AND CONCLUSION

This study helped identify the general teaching profession competency levels and professional attitudes of preservice teachers who are graduating from four-year education faculties. The findings show that preservice teachers do possess general teaching competencies and develop a positive attitude towards the profession.

According to the findings, female preservice teachers have higher beliefs in possessing professional competencies than males. Even though this finding corroborates those of Çakır et al., (2004) and Çapri and Çelikkaleli (2008), they are in contrast to those of Çakır et al., (2006) and Davran (2006). Davran (2006) also studied preservice teachers and found a statistical difference in favor of males between the pre and post teaching practice competency levels of male and female preservice teachers. The finding in the present study that female preservice teachers have higher perceptions of professional competencies reveals that they feel better about possessing the "general knowledge, skills and attitudes" that exist in the definition of general teaching competencies.

Similarly, female preservice teachers were found to have a better attitude towards the teaching profession. In some studies about attitude in the teaching profession (Aşkar and Erden, 1987; Tanrıöğen, 1997; Oral, 2004; Üstün et al., 2004; Çakır, 2005; Çapri and Çelikkaleli, 2008) the results have been in favor of females, while in others (Sürücü, 1997; Çakır et al., 2006; Davran, 2006) there have been results in favor of males. Even though an effective undergraduate program would be expected not to create a difference between the two genders, the Turkish assumption that "teaching is a woman's job" may have affected individuals' attitudes towards their profession.

No meaningful difference was found in the general teaching competencies and attitudes towards the profession of preservice teachers who graduated from teacher training high schools and others. Seferoğlu (2004) examined the teaching competency levels and perceptions of preservice teachers, and likewise found no difference as regards the type of high school. No difference between preservice teachers who graduated from teacher training high schools and others has not been an expected finding. The former are institutions attended by students who decide to enter the teaching profession at an early age, where they learn about the profession and instruction. No difference between the general competencies and professional attitudes of these preservice teachers and others reveals deficiencies with post-elementary education guidance towards a profession and the curricula of teacher training high schools. This may suggest that either students do not choose these schools willingly or courses about professional knowledge do not create a positive difference in students' perceptions of their own competencies or attitudes towards the teaching profession.

The department of study was found to cause no meaningful difference in preservice teachers' competency perceptions. Davran (2006) reached a contrary finding in a study conducted with preservice teachers and found a difference between the competency levels of participants from different departments. Similarly, the professional attitudes of preservice teachers were found not to vary by the department of study. There are studies in the literature with similar and contrary findings. Oral (2004) and Çakır

et al. (2006) concluded that department of study creates a difference in preservice teachers' professional attitudes, while Çapri and Çelikkaleli (2008) and Demirtaş et al. (2011) found that it does not. Even though preservice teachers will work with children from different age groups when they graduate, it is a positive finding for the quality of education given at education faculties that the training received in different departments do not cause a difference in competency perceptions and attitudes.

Preservice teachers' GPA was also found not to cause a difference in their competency perceptions and attitudes. This finding is similar to that of Seferoğlu (2004). In a study where preservice teachers evaluated themselves with respect to teacher competencies, their academic success was not found to cause a meaningful difference in their competency perceptions.

The findings reveal a moderate, positive and meaningful relationship between the participants' attitudes towards the teaching profession and their general teaching competency perceptions. However, a higher relationship was expected between professional competencies and attitude because individuals with knowledge and skills in the teaching profession and a high perception of their own competency would be expected to have developed strong positive attitudes towards the profession.

According to the results of the study, preservice teachers had high perceptions of the "general teaching profession competencies" developed by the Ministry of Education and mentioned in the literature. In the future, descriptive studies may be held to identify the positive and negative perceptions of preservice teachers in different competency dimensions, and experimental studies may be conducted to explore the extent to which these competencies are put into practice and amend deficiencies. Feedback from such studies may help the improvement of professional knowledge course content at education faculties and general competencies. General competencies are only presented theoretically in some professional knowledge courses. In order to see how preservice teachers implement this theoretical knowledge, competencies may become an assessment criterion in the "teaching practice" course. Seeing that they can implement professional knowledge and skills in practice may encourage preservice teachers to develop more positive attitudes towards the profession.

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