

Pamukkale Journal of Sport Sciences

2018, Vol. 9, No. 2, 44-53

accepted: 12.05.2018

Investigations on participation and ownership of special field competences of physical education and sport teacher candidates

Murat Kangalgil¹, Fatih Ozgul¹

¹Cumhuriyet University, School of Physical Education and Sport, Sivas, Turkey

mkangalgil@gmail.com

Abstract

Competence is defined as having the knowledge, skills and attitude needed for a role (Balcı, 2005); teacher competencies are defined as the knowledge, skills and attitude that will enable teachers to fulfill the demands of their profession effectively and efficiently (MEB, 2008). When the teaching profession is thought of as a profession of specialization, it can be seen that special field education and qualifications should be sought in teacher candidates. In this study, we aim to determine the rates of participation in and possession of the physical education and sports special field competencies for Physical Education and Sport Teacher candidates with undergraduate education in the field of sport sciences obtainedthrough the Ministry of Education, Turkey. The research was conducted with a total of 1022 teacher candidates who had been educated in the highest grades of the physical education and sport teacher departments of 35 universities. In the study, the Physical Education Teacher Special Field competencies, which were put into effect by the Ministry of National Education and consist of six dimensions and 30 sub-competencies, were translated into the form of a measurement tool. In the analysis of the data, values were expressed using frequency and percentages and the t-test was used in binary comparisons. The significance level in the study was taken as 0.05. According to the findings of the research, the average participationscore of physical education and sports teacher candidates in teacher competencies was higher than the averagepossession score, andthe difference was found to be significant. When the teacher candidates' participation rates were evaluated according to gender, the difference between the average participation scores of male teacher candidates versus female teacher candidates was found to be significant. This difference stems from the high scores of male teacher candidates. When the rates of possession of competences of teacher candidates were evaluated according to gender, the difference between the average score of male candidates and the average score of female candidates was again found to be significant, and again, this difference stems from the high scores of male teacher candidates.

Keywords: Teacher candidate, physical education and sports, competency, special field competency

Teachers play a vitally important role in assisting young people to develop the skills and acquire the knowledge they need in a rapidly changing world. The competencies teachers need are constantly being discussed in Turkey, as they are elsewhere in the world, and it is known that in our country, one of the most important problems of the education system in recent years is teacher training and the quality of trained teachers. It has become important to assess whether teacher candidates have the necessary competencies for the teaching profession and how well equipped they are to begin teaching. It is necessary first to determine the competencies that teachers should have, and then to ensure that these competencies are acquired by teacher candidates and qualified teachers through pre-service and in-service training programs. It is also important constantly question and develop the role and qualifications of teachers. Teachers themselvesplay an important role in this process, and for this reason, the Ministry of National Education collaborates with universities and joint studies on teacher competencies continue. In the National Education Basic Law of Turkey, it is judged that the teaching profession is a "specialization profession"; the qualifications to be sought in prospective teachers comprise general culture, special field education and pedagogical formation, and the qualifications appropriate to these fields will be determined by the Ministry of National Education (meb.gov.tr-a).

The topic of teacher competencies is covered in the Basic Education Support Project (BESP) and entered into force through an agreement signed with the European Commission in 2000. The overall purpose of the project is: "To improve the quality of education and access to education by increasing the level of education in the perspective of poverty reduction, improving the living conditions of the population in the most disadvantaged rural and urban areas and taking the children, young people and adults into the scope of basic education who are out of education and to improve the supply of teachers". The Basic Education Support Project consists of five components: Teacher Education, Quality of Education, Management and Organization, Non-formal Education, and Communication. The responsibility for project work on the Teacher Training component belongs to the General Directorate of Teacher Training and Education (meb.gov.tr-a). The General Directorate has established a commission in coordination with foreign experts to draft teacher competencies. This commission has drafted general qualifications and special field competencies within the context of qualifications of the teaching profession (MEB, 2006). Next, "Teacher Proficiency General Competencies" and "Special Field Qualifications" were developed by the Ministry of National Education in order to be able to fulfill teacher competencies, including the knowledge / skills and attitude of teachers inservice and of teacher candidates (MEB, 2008). Physical Education and Sports Teacher competencies are included. The most fundamental reflection of teaching programs of this kindin the learning-teaching environment are teachers who are creative, intellectual, curious, researchoriented, innovative, able to work together, and competent to train self-confident students. Sönmez (2003: 2-3) sees the most important and basic elements of the school system during the education process as student, program, and teacher, defining the teacher as a "professional person who gives the desired behavior in the educational environment". This means that the teacher must be very well trained and have general and specific competences that fulfill the needs of the teaching profession. It is considered that the degree to which teachers possessthese competencies directly affects the quality of the educationtraining period. As the teaching profession is considered to require specialized knowledge and skills, people choosing this profession must have certain competencies in order to be able to fulfill the requirements of the profession (Sisman, 2005; 2009a).

In the literature, multiple terms are used to describe qualifications understood as teacher competences. Most preferred are: "qualification", "competency", "standard", "quality", "capacity", "characteristics",

and "effectiveness". Moreover, "adequacy", "efficiency", "capability", and "sufficiency" are also explained in terms of competence, efficiency, and productivity in the Turkish languageaccording to their place (Şişman, 2009a). While the concept of "teaching competences" is used in the Turkish literature, "teaching profession standards" is used in foreign sources. Teaching profession standards include teachers' professional qualifications and knowledge, understanding and skills (TED, 2009).

Competence is defined as having the knowledge, skills and attitude necessary to play a role (Balcı, 2005); teacher competencies are the knowledge, skills and attitude that enable teachers to fulfill the demands of their profession effectively and efficiently (MEB, 2008). Together with possessing general teacher competencies, teachers are expected to be very well acquainted with knowledge about the teaching field and to be able to facilitate students' learning. Teaching is at the forefront of professions that will not be excluded from change and development. Identification of teacher competences is extremely important, in particular, to determine what kind of teacher is wanted and to safeguard theprofession. However, there is uncertainty as to how to deal with these competences, since they are not addressed during the preparation of qualifications in order to be applied in the identified areas of possible use (Sisman, 2009b). The different applications that often come to the fore with teacher education in the Turkish Education System have brought with them difficulties of standardization in this area (Akyüz, 2003). In this context, it is essential for the teaching profession to define changesfor the age and the environment in which we now operate, and to establish continuous professional development goals that will be reflected in teaching practices. However, while emphasizing the aim of the competencies; "continuing the personal and professional development of teachers", "imagining a performance evaluation system to be conducted periodically to determine the need for teachers' development" and "increasing the quality of teachers' personal and professional development activities from the candidacy period" are considered by the ministry of nationaleducation (meb.gov.trc).

In order to help teachers to cope with the difficulties they face, the importance of teaching education has increased and new responsibilities have been assigned to teacher training institutions. Higher education institutions—in particular, universities—are prominent among the institutions that educate teachers in our country. The Higher Education Council (HEC – YÖK, in Turkish), is the organizing body for universities and develops programs. Teacher training programs have been established, comprising theoretical and practical courses offered to students and the aims and qualifications of the students have been determined; studies were carried out to assess teacher competences in specific areas, and according to the competences envisaged for teachers, programs were continuously updated. In Turkey, physical education and sports teachers are educated according to a standard program defined by YÖK, at physical education and sports colleges and sport sciences faculties. The courses in the programs and the content of those courses are arranged according to the competencies that teachers are expected to have. Teacher competencies must be acquired through theoretical and practical studies during the teacher training program, and teachers must reach the expected levels (YÖK, 1998). It is important that in physical education teacher programs, candidates are equipped with general teacher competences and specific field competences. Increasing the proficiency of physical education and sports teachers will, in the process, contribute to the success of education and training activities. This research aims to determine to what degreesenior undergraduate students in the field of sport sciences in Turkey have participated in and attained special field competencies in the area of physical education and sports, as defined by the Ministry of National Education.

Based on student opinions, this research focused on the degree of participation in and ownership of physical education and sport-specific field competencies. The data was analyzed using quantitative techniques designed and collected according to the screening model.

Research Group

The research was conducted with a total of 1022 teacher candidates educated in the physical education and sports teacher departments of 35 universities. Of the participants, 608 (%59.5) were male and 414 (%40.5) female. Participants' distribution by age was as follows: 132 (12.9%) under 21 years, 424 (41.5%) between 22 and 23 years, 309 (30.2%) between 24 and 25 years, 118 (11.5) between 26 and 27 years, and 39 (3.9%) aged 28 years and over.

Data Collection Tools

In the study, the physical education teachers' special field competencies, which are composed of six dimensions and 30 sub-competencies, put into effect by the Ministry of National Education, were used in the form of a scale. Research permission was obtained from the General Directorate of Innovation and Education Technologies of the Ministry of National Education (YEĞİTEK) for the use of Physical Education Course Special Field Competencies in the measurement tool. A preliminary study was conducted, and factor analysis was applied to the validity of the scale; expert opinion was consulted and the scale was adapted to suitthe scope of the study; the KMO measure was found to be .960 (p> 0.05). In the factor analysis of the main components using the Varimax transformation, 30 problems were collected under three factors; the percentage of disclosures in the total of the single factor was found to be 50.458 and the Cronbach alpha internal consistency coefficient (α) was .96. It is worth noting the high consistency in the values of the scale (Demircioğlu, 2011). The measurement tool was formed based on demographic information and information on teacher competencies. Demographic information included age, height, weight, income, etc. Multi-choice and gap-fillingquestions about teacher competencies consist of 5 Likert-type questions, designed to determine the degree of participation in and ownership of competences. In order to determine the levels of "participation in competences", for each question, 1 = "Absolutely Disagree", 2 = "Disagree", 3 = "No Opinion", 4 = "Agree" and 5 = "Absolutely Agree"; for "possessing competences" questions,1 = "Never", 2 = "Rarely", 3 = "Intermediate", 4 = "Frequently" and 5 = "Always".

	A DEGREE OF PARTICIPATION IN COMPETENCES				
EXPRESSIONS OF PHYSICAL EDUCATION AND SPORT TEACHER COMPETENCE	ABSOLUTELY DISAGREE	DISAGREE	NO OPINION	AGREE	ABSOLUTELY AGREE

B DEGREE OF POSSESSION OF COMPETENCES					
NEVER	RARELY	INTERMEDIATE	FREQUENTLY	ALWAYS	

Categories of degree of participation in and possession of competencies used in the scale.

Processing and Analysis of Data

In order to obtain permission to collect data from the Physical Education and Sport Teaching Departments of universities included in the research, the Rectorate of Cumhuriyet University was consulted. Written permission to collect data was then requested by the rectorate fromall the targeted universities. After receiving permission from the rectorates of 35 universities, during the second term of the 2015–2016 academic year, measurement tools were sent to the 35 institutions' Faculties of Sports Sciences, Schools of Physical Education and Sports, Physical Education and Sports Teaching Departments. The measuring instruments sent to the instructors and senior students assigned by the relevant departmentswere returned to the researcher upon completion. In the analysis of the data, values were expressed using frequency and percentages and the t-test statistic was used in binary comparisons. The significance level in the study was taken as 0.05.

RESULTS

In the research, participation in and ownership of special field competencies by physical education and sports teacher candidateswas expressed in the form of tables.

Table 1. The mean (\bar{x}) and standard deviation (Ss) values of participation and ownership grades of competences of physical education and sport teacher candidates

Physical Education Teacher Special Field Competences		Participation in Competencies		Possession Grades	
		Ss	\overline{x}	Ss	
A- Planning and Arranging the Teaching Process					
A1- Making an appropriate teaching plan	3.81	0.97	3.60	1.03	
A2- Organizing appropriate learning environments	3.93	0.94	3.72	0.98	
A3- Using appropriate tools and resources for the teaching process	4.03	0.95	3.85	1.01	
A4- Planning school teamwork	3.91	0.99	3.66	1.10	
A5- Using technological resources in the process of realizing the aims of teaching	3.89	1.01	3.72	1.08	
A6- Making plans for special needs students	3.89	1.06	3.60	1.15	
B- Providing and Sustaining Physical Performance Improvement					
B1- Developing basic and specialized movement knowledge and skills of students	3.89	1.00	3.76	1.04	
B2-Making students aware of regular physical activity and healthy lifestyles	3.96	0.98	3.88	1.02	
B3- Enabling students to participate in competitions and to conduct their work	3.98	0.95	3.82	1.07	
B4- Making students aware of healthy nutrition	4.01	0.97	3.85	1.06	
B5- Applying first aid rules for sports injuries	3.98	0.95	3.75	1.06	
B6- Developing students' leadership, responsibility, sharing and co-operation skills	4.05	0.91	3.94	0.99	
B7- Helping students to recognize nature and creating awareness of environmental conservation	3.98	0.95	3.86	1.02	
B8- Developing ability to ensure personal safety and attain preventive knowledge and skills	4.01	0.91	3.82	1.02	
B9- Fostering awareness and love of sports and sports organizations in students	4.06	0.96	3.91	1.00	
B10- Using educational games effectively in physical education classes and teaching	4.13	0.92	3.97	0.98	
B11- Organizing activities for students who need special education	3.99	0.98	3.73	1.13	
C- Celebrating national festivals in accordance with their meaning and important	ce				
C1- Reflecting the feelings and thoughts of Atatürk about physical education and sports	3.92	1.14	3.88	1.17	
C2- Performing sports events at national festivals and on special occasions	4.00	1.04	3.87	1.14	
D- Monitoring and Evaluating Development Performance					
D1- Determining the goals of measurement and evaluation applications	3.94	0.93	3.81	1.04	

Physical Education Teacher Special Field Competences		Participation in Competencies		Possession Grades	
	\overline{x}	Ss	\overline{x}	Ss	
D2- Using measurement-evaluation tools and methods	3.98	0.92	3.82	1.03	
D3- Interpreting measurement results and providing feedback to determine the physical development of the students	3.94	1.02	3.84	1.08	
E- Cooperation with School, Family and Society					
E1- Cooperating with parents and society in the mental, physical and spiritual development of students	3.89	1.07	3.79	1.13	
E2- Making students and the community aware of the significance and importance of national festivals and ceremonies and ofbecoming active participants	3.96	1.00	3.87	1.05	
E3- Developing ability in management and organization of national festivals and ceremonies	3.91	1.01	3.76	1.11	
E4- Enabling cooperation with society in transforming the school into a center of culture and learning	3.94	1.00	3.84	1.07	
F- Providing Professional Development					
F1- Determining professional competences	3.93	1.04	3.86	1.08	
F2- Providing personal and professional development of physical education course teaching	4.06	0.93	3.99	0.99	
F3- Learning to benefit from scientific research methods and techniques in applications for professional development	3.95	0.98	3.89	1.03	
F4- Leadership ability	4.20	0.94	4.18	1.00	

When Table 1 is examined, the average scores for the physical education and sport teacher candidates' participation in teacher competencies are higher than the average scores for the level of possession of the competencies.

Table 2. t-Test results between participation and ownership rates of competences

Situation	N	\overline{x}	Sd	t	p
Participation	1022	3.98	.66	243.63	0.001*
Possession	1022	3.83	.69	245.05	

^{*}p<.01

According to the results of the t-test in Table 2, the difference between the mean score for the prospective teachers' participation in the competences $(3.98 \pm .66)$ and for possession $(3.83 \pm .69)$ was found to be significant (p< .01). This difference is due to the high level of the participation scores.

Table 3. t-Test results between competence participation rates according to gender

	_
4.43	0.02*

In Table 3, the difference between the mean scores of participation in the competences by male teacher candidates $(4.01 \pm .63)$ and by female teacher candidates $(3.92 \pm .69)$ was found to be significant in the t-test results where the participation rates of teacher candidates were evaluated by gender (p< .05). This difference stems from the high scores of male teacher candidates.

Table 4. t-Test results between percentage of possession of competences according to gender

Gender	N	\overline{x}	Sd	t	p
Male	608	3.87	.67	2.36	0.01*
Female	414	3.76	.72		

*p<.05

In Table 4, the t-test results where the teacher candidates' competency ratios are evaluated according to gender, the differences between the mean scores for possession of the competences by the male teacher candidates $(3,85 \pm .41)$ and by the female teacher candidates $(3,83 \pm .41)$ were found to be significant (p < .05). This difference stems from the high scores of male teacher candidates.

DISCUSSION

According to the results of the research, the average participation scores of physical education and sport teacher candidates in teacher competencies $(3.98 \pm .66)$ were higher than the average scores $(3.83 \pm .69)$ for the possession of the competencies, and the difference between the means of the points was found to be significant (p < .01). This difference is due to the high participation scores of the teacher candidates. The research findings show that physical education and sport teacher candidates declared that they participated in the competencies determined by MEB for their fieldin large numbers; this can be interpreted as the adoption of physical education and sport-specific field competencies by prospective teachers.

Examining the literature in the field, it was not possible to find work done with physical education and sports teacher candidates regarding the possession of special field competencies, but work have been done with teacher candidates and teachers about general teacher competencies and teacher competencies in other fields. In our research, there are many reasons why the scores for possession of competence are lower than the participation scores. For example, prospective teachers may not have identified the competences in their field correctly, and providing information about competences as part of their undergraduate education could be considered. In this context, according to Book, Byers and Freeman (1983), it is important that teachers, in order to be able to do their job properly in terms of occupational competences, must be educated and observed in a school before beginning professional work as teachers—but this alone is not enough. The integration of theory and practice is of great importance in the acquisition of competences in teacher education. Teacher candidates are able to use the information from their undergraduate education in an efficient manner and supportive context in the professional setting, and they find that being able to apply their theoretical knowledge in the classroom before beginning professional service is very effective in acquiring new knowledge and skills. Candidates skilled in applying theoretical knowledgein their field will start in the profession trusting themselves more. Already, field education is an important element of teacher education programs. According to Ashton (1984), teacher training programs should help teachers acquire and develop the basic skills that provide confidence and motivation, such as human relations, communication and teaching skills.

Examining studies related to different branches of teaching in the literature, Fidan (2012)— who examined the science and technology special field competencies of both teachers and prospective teachers— stated that the professional teachers had higher levels of field competencies than teacher candidates. In Fidan's study, it was also found that gender did not affect science and technology teacher specific field competencies. Seferoğlu (2004) examined students' competency ratings in his

study and found that students assessed themselves moderately or well at a significant part of their qualifications. Demirtas, Cömert and Özer (2011) point out that teacher candidates who have a positive attitude towards the profession will try to improve their proficiency, will be able to evaluate themselves more objectively in terms of competence, and will work harder to make up for any shortcomings. According to Ashton (1984), one of the purposes of teacher training programs is to develop candidates' desire to improve their competency. Teacher candidates must be motivated and have the necessary confidence to perform effectivelyin class. The research of Gelen and Özer (2008) on the general competency of teacher candidates and teachers in the profession has shown that teacher candidates have the competences required by the profession at a higher level than the teachers. Allinder (1994) found that teachers with high self-teaching competency planned the teaching process better and made extensive preparations based on this plan, and that those teachers who showed sincere and enthusiastic motivation in relation to the teaching process were willing to apply different and innovative approaches, techniques and materials in their teaching. Çiltaş and Akıllı (2011) think that teachers should have the necessary teaching methods as well as good knowledge of their field. In the study conducted by Köroğlu and Sıvacı (2017) with teacher candidates, it was found thatthe classroom teaching and pre-school teaching program students group with the highest level of special field competency; the lowest level of special field competency was among the Primary Mathematics Teaching Program student group. Özer and Acar (2011), who compared general teacher competencies in research conducted with trainees (4th grade prospective teachers), determined that the students felt the most important competence for a teacher was "student recognition"; next, in this order, came area of learning, developmental monitoring and evaluation, personal and professional values, professional development, learning and teaching process, school family and community relations, and, lastly, program and content knowledge.

According to the results of the research, the difference between the average participation scores for male teachers $(4.01 \pm .63)$ and female teachers $(3.92 \pm .69)$ was significant (p< .05). This difference is due to the high scores of male teacher candidates. This situation can be interpreted as beingdue to the fact that male teacher candidates were more likely to accept the competences. When the literature is examined, no study can be found that was conducted with physical education and sports teacher candidates regarding participation in special field competencies. However, when Kangalgil (2014) conducted a study with qualified physical education and sports teachers, the male teachers' scores were higher than those of the female teacherswhen it came to participation in the competency, and the difference was found to be significant. This finding is in parallel with our research results.

When the status of possessing competency was examined in the research results in terms of gender variation, the difference between the mean scores of male teacher candidates $(3,85 \pm .41)$ and female teacher candidates $(3,83 \pm .41)$ was found to be significantly in favor of the males (p<.05). In a study conducted by Sünbül and Arslan (2006), there was a significant difference in favor of female teachers in competency point averages. According to that study, female teachers find themselves more qualified than male teachers. In the study conducted by Kangalgil (2014) with qualified physical education and sports teachers, the difference between male and female teachers' possession of competences was not found to be significant. These findings are not parallel to our research results.

CONCLUSION and SUGGESTIONS

Based on our research findings, the rates of participation of physical education and sport teacher candidates in Physical Education and Sport Special Field Competencies were found to be higher than the rates of possession of the competencies. Furthermore, when the research subjects' gender was

taken into account, the male teacher candidates' rates of participation in the competencies were found to be higher than the female teacher candidates' rates. These results can be interpreted as showing that physical education and sports teacher candidates are not fully equipped with specific field competencies nor fully prepared for teaching. Based on these results, it is considered that physical education and sports teachercandidates should update the information about the Physical Education and Sport Teacher Special Field Competencies of the Ministry of National Education and that the entry of high-level teachers into the field will increase the quality of the teaching profession, whileat the same time contributing to an increase in the quality of education.

According to the results of this study, the following suggestions are made, with the aim of guiding the work to be done from this point on:

- 1. Acquirement of competences can be regulated and ensured by updating the higher education programs that train teachers.
- 2. More progress can be made in undergraduate programs by cooperating with the Ministry of Education (MEB) and the Higher Education Council (YÖK) to ensure prospective teachers grasp and acquire the competences of physical education and sports special fields by the time they reach graduation.
- 3. Activities should be planned to providefuture physical education and sports teachers on the staff of higher education institutions with the necessary qualifications to train teacher candidates for the profession.
- 4. In this study, physical education lessons did not employ performance indicators related to special field competencies. Any subsequent work could include special area performance indicators.

References

- Akyüz, Y. (2003). *Teacher Training and Delivery Principles, Practices, Reflections in Education*: VII. Teacher Training Symposium in Contemporary Education Systems. 48-66 Ankara: Tekişik Publishing.
- Allinder, R. M. (1994). The Relationship Between Efficacy and The Instructional Practices of Special Education Teachers and Consultants. Teacher Education and Special Education: The *Journal of the Teacher Education Division of the Council for Exceptional Children*, 17(2), 86–95.
- Ashton PT. (1984). Teacher Efficacy: A Motivational Paradigm for Effective Teacher Education. *Journal of Teacher Education*, 35(5), 28–32.
- Balcı, A. (2005). *Explanatory Dictionary of Educational Management Terms*. Ankara: Tek Wood Printing Publishing Distribution.
- Book, C., Byers, J., Freeman, D. (1983). Student Expectations and Teacher Education Traditions with Which We Can and Cannot Live. *Journal of Teacher Education*. Vol. 34 (1), 9–13 https://doi.org/10.1177/002248718303400103
- Çiltaş, A., Akıllı, M. (2011). Pedagogical Competence of Teachers. *Mehmet Akif Ersoy University, Journal of Social Sciences* (3) 4, 64–72.
- Demircioğlu G. (2011). *Validity and Reliability* (E. Karip, Ed.) Measurement and Evaluation. Ankara: Pegem Academy.

- Demirtaş, H., Cömert, M., Özer, N. (2011). Teacher Candidates' Self-Efficacy Beliefs and Attitudes Towards the Job. *Education and Science*. (36) 159, 96–111.
- Fidan, M. (2012). Self-efficacy Perceptions of Science and Technology Special Field Competencies of Teachers and Teacher Candidates. (Unpublished Master's Thesis), Ahi Evran University Institute of Science and Technology.
- Gelen, İ., Özer, B. (2008). Assessment of Teacher Candidates and Teachers' Opinions about Levels of General Competencies in the Teaching Profession, *Mustafa Kemal University Journal of Social Sciences Institute*, 5 (9), 39–55.
- Köroğlu, M., Sıvacı, S. Y. (2017). Investigation of the Relationship between Teacher Candidates' Special Field Qualifications and Learning Styles. *Ahi Evran University Kırşehir Education Faculty Journal* (KEFAD) 18(1), 471–483.
- MEB (2006). General Competencies of the Teaching Profession. Ankara: General Directorate of Teacher Training and Education.
- MEB (2008). Teacher Competencies: General and Special Field Qualifications of Teacher Profession. Ankara: Directorate of State Books, 1st Edition.
- Meb.gov.tr.a -http://otmg.meb.gov.tr/YetGenel.html. Date of access: 05.04.2017
- Meb.gov.tr.b-http://oygm.meb.gov.tr/www/ogretmenlik-meslegi-genel-yeterlikleri/icerik/ Date of access: 14.09.2016
- Meb.gov.tr.c- http://meb.gov.tr/m/haber/13843/tr. Date of access: 05.10.2017
- Kangalgil, M. (2014). Participation of Physical Education Teachers in Special Field Competences and Examination of the Grades of Ownership. *Hacettepe University, Journal of Sports Sciences*, 25(2), 94–103.
- Özer, Y., Acar, M. (2011). A Scaling Study Using Binary Comparison Method on General Competencies of Teaching Profession. *Çukurova University Journal of Education Faculty*, 3(40), 89–101.
- Seferoğlu, S.S. (2004). Teacher Candidates' Self-Assessment in Terms of Teacher Competencies. *Hacettepe University Journal of Education Faculty*, 26, 131–140.
- Sönmez, V. (2003). Historical Basis of Education, Introduction to Teaching Profession. Ankara: Ann Publishing.
- Sünbül, A. M., Arslan, C. (2007). Development of a Teacher Proficiency Scale and a Research Example. *Selçuk University, Journal of Technical Education*. http://tef.selcuk.edu.tr/salan/ sunbul/f/f17.pdf. Date of Access: 21.09.2011
- Şişman, M. (2005). Introduction to Educational Sciences, Ankara: PegemA Publishing.
- Şişman, M. (2009a). Rethinking Teacher Qualifications. Turkish Homeland Journal, 29, 37-41.
- Şişman, M. (2009b). Teacher Competencies: A Modern Discourse and Rhetoric, İnönü University Journal of Education Faculty, 10(3), 63–82.
- TED (2009). Teacher Competencies. Ankara: Name Okan Matbaacılık.
- YÖK (1998). Faculty of Education Teacher Training Undergraduate Programs. Ankara.