THE RELATIONSHIP BETWEEN ATTITUDES OF PROSPECTIVE PHYSICAL EDUCATION TEACHERS TOWARDS EDUCATION TECHNOLOGIES AND COMPUTER SELF-EFFICACY BELIEFS

Yaprak KALEMOĞLU VAROL
Aksaray University, Physical Education and Sport School
Aksaray, Turkey
yaprak81@gmail.com

ABSTRACT
The aim of research is to investigate the relationship between attitudes of prospective physical education teacher towards education technologies and their computer self-efficacy beliefs. Relational research method has been used in the study. Study group consists of 337 prospective physical education teachers (M_{age}=21.57±1.72) in total, as 169 girl (50.1%) and 168 male (49.9%) students who get their education in the physical education department of four university. As tool of collecting data, "Technology Attitude Scale" and "Computer Self-Efficacy Belief Scale" have been used. In analysis, deductional statistics such as t-test belong to arithmetic mean differences, one-way analysis of variance, and correlation and regression analysis in independent groups alongside descriptive statistics. In research, it has been specified that attitudes towards education technologies has a medium level effect in on self-efficacy belief. It has also been seen that variables which constitute the sub-dimension of attitude towards technology explained 11% of total variance. In addition, it has been established that attitudes of prospective physical education teacher towards education technologies and their computer self-efficacy beliefs are in high level. While it has not been seen a meaningful difference in attitude towards technology depending on level of using computer and gender, it has been seen a meaningful difference according to having computer and class. On the other hand, it has not been seen a meaningful depending on gender in belief of computer self-sufficiency, it has been meaningful differences according to having computer variables and computer using level.
Keywords: Computer Self-Efficacy Beliefs, Attitudes Toward Educational Technology, Prospective Physical Education Teachers

INTRODUCTION

Advancements in science and technology are among the primary factors that affect structure of societies and, in particular, educational systems. Through rapid developments in technology, new equipment is being added to ones that would be able to use in education-learning process. The most important of these technological tools in education-learning activities in our day has been seen as computer (Akkoyunlu, 1998). With increasing function of computer in learning-teaching process, schools implement different applications with the aim of benefiting from computer technologies; all these studies express the importance of computer using skills (Askar & Umay, 2001). But Gawith (1995) has stated that one has the possibility not to that job if s/he has not got self-confidence even if s/he has ability to do. Bandura has expressed that success does not only depend on necessary skills to do a specific job, but it also requires effectively safe use of a skill (Qtd. in: Kurbanoglu, 2004). From this information, the effect of self-efficacy belief has got importance in revealing skills.

The concept of self-efficacy has been described as an individual's own judgement on himself about his/her capacity to organize and make successfully necessary activities to show a certain performance and a quality which is effective in constituting of behaviours (Bandura, 1997; Kear, 2000; Zimmerman, 1995). The belief of self-efficacy is a concept not about how an individual competent but his/her belief on his/her own abilities. This belief states how individuals feel themselves about a subject, what they thought, how they motivated themselves and how they behave (Akkoyunlu, Orhan & Umay, 2005). There are four basic sources determining self-efficacy. These resources: a) knowledge that individuals get their experiences, b) observations about other people's successful or unsuccessful practices, c) the effect of society on if s/he can be successful and d) psychological state regarding expectation achieving or being unsuccessful. Each source effects individuals' self-efficacy belief and self-efficacy belief has effect on performance by determining student's duty choice, strategy using and study insistence in relevant study (Bandura, 1994; Sewell & George, 2000).

The concept of self-efficacy has been adapted to many domains and has been used in different disciplines (Ekici, 2009; Kear, 2000; O'Leary, 1985; Schunk, 1985). A lof of studies have been carried out about computer self-efficacy belief which is one of the study fields (Sam, Othman & Nordin, 2005; Khorrami-Arani, 2001; Zehir-Topkaya, 2010; Karsten & Roth, 1998). Computer self- efficacy belief has been described as individual's own judgment regarding on him/her (Karsten & Roth, 1998). This belief effects expectation towards individual's computer using. Because individual whose self- efficacy belief is low will not find himself/herself efficacy in using computer and, therefore, will tend to use computer less. On the other hand, while high computer self-

efficacy increases individual's frequency of using technology it will decrease their computer related concerns (Khorrami-Arani, 2001). Studies on this subject have revealed that individuals whose computer self- efficacy belief are high have more willingness in participating activities relating computer and that it is easier for them to cope when they are challenged by a difficulty (Compeau & Higgins 1995; Karsten & Roth, 1998). In another study, it has been established that self- efficacy of students who get computer lesson during their education in high school and university regarding computer has improved positively (Miura, 1997, In: Askar and Umay, 2001). On the other hand, Murphy and his friends (1989) have stated that computer self- efficacy belief has a positive relationship with participating in activities regarding computer, hoping success, being consistent and patient when confronted with a negative situation regarding computer and computer performance. The study carried by Askar and Umay (2001) with prospective mathematics teacher has shown that students' self- efficacy beliefs against computer are low. Students' self-efficacy belief against computer has also given high relation with their computer experience and using frequency.

In literature, it has been expressed that self- efficacy towards a specific domain would affect those individuals' attitudes and behaviours towards that domain (Ipek & Acuner, 2011). As Yurdugul and Askar (2008) states, one of the main factors on success of students in a certain domain or forming a learning program design is "attitude" variable towards learning products. Attitudes form human behaviours with different ways, determines daily activities and forms behaviours like humans' accepting or leaving (Rikard & Banville, 2006).Various definitions made on literature on attitude concept and these definitions have expressed different sides of attitude concept. Smith (1968) describes attitude as "an inclination which attributed to an individual and which regularly constitutes his/her thinking, feeling and behaviours regarding a psychological event (Qtd. in Kagitcibasi, 1999). According to Safrit and Wood (1995); a situation is a special feeling felt against a situation, person or activity. Tezbasaran (1997) has expressed the attitude as inclination to make a reaction, either positive or negative, to certain object, situation, institution, concept or other people.

From this point, it could be said that, self- efficacy belief in individuals regarding computer will not be sufficient alone, however, attitude towards computer and therefore technology might have effect on computer self- efficacy belief. In terms of future of societies, all societies, particularly most developed ones, are in effort to give their individuals a quality education by using technology in education which is one of the most important domain in which technology was used (MEB, 2004). Technology was seen as an indicator of high quality in education by many educator, teacher, researcher, therefore the importance of technology integration in schools will increase. Therefore, in order to grow individuals who access to the knowledge and use this knowledge teachers have effectively to use technologic equipment (computer, internet, etc.) and have these skills (Erdemir & Bakirci, 2009). When considered all these results, the necessity of knowing students' attitudes and ideas towards technologic equipment (Yavuz & Coskun, 2008). That teachers who consist of human power source of educational system gain relevant sufficiency is important on the name of keeping up with time, developing technology, consisting of a future that has a high welfare level and growing students with this aim (Odabasi & Kabakci, 2007). That teacher use technology in learning environment will cause students' success to increase. The attitude and self-confidence of prospective teachers to use technology when they started their profession play an important role in whether students use technology in learning environment and therefore in student success (Christanse, 2002; McGrail, 2005). In various domains, studies were carried out with the aim of determining the attitudes of candidate teachers towards technology (Yavuz & Coskun, 2008; Yilmaz, Ulucan & Pehlivan, 2010; Erdemir, Bakirci & Eyduran, 2009; Teo, 2008; Ipek & Acuner, 2011). In the study carried by Yavuz and Coskun (2008) with primary school teachers, it has been established that students use technologic equipment in teaching to increase students' attitude positively and has been determined that students have positive ideas about using technology. In the study was carried out by Erdemir and his friends (2009) with students of primary school mathematics, science, social sciences, pre-school, class and Turkish teaching students, while prospective teachers do not feel themselves sufficient in using internet, computer with the aim of teaching, they stated that they were sufficient to use searching motors, can prepare simple materials, can't prepare complex and multi-purposeful teaching devices. Also, in the self- efficacy of using technology with the aim of teaching, it has been concluded that woman prospective teachers are in better level than man prospective teachers. Also, it has been expressed to the prospective teachers that with individual research and project home works which requires use of individual research and project home works this difference can be erased. In the studies which are carried by Teo (2008) with prospective teachers, it has been found that there was a positive relationship between attitude towards computer and attitude towards education technology. Yılmaz and his friends (2010), in their study they determined the attitude of prospective physical education teachers toward technology has determined that using technological materials in teaching affected students attitude scores in a positive way. In the study carried out by Ipek and Acuner (2011), it has been observed that the prospective primary school teachers' computer self- efficacy beliefs can be forecasted in a statistically meaningful level from their attitudes toward education technologies. On the other hand, it has been concluded that computer self-

efficacy beliefs of male prospective teachers are higher than that of females and that computer self- efficacy beliefs of prospective teachers who have a computer are higher than that of those who have not got.

When studies regarding attitudes investigated, it has been seen that studies were usually carried out with mathematics, science, social sciences and that prospective primary school teachers and studies on physical education is limited. In fact, that teachers' who will exercise the lesson attitudes towards technology, ideas, ability to use equipment is extremely important for getting maximum benefits at highest level from physical education lessons that play an important role in terms of realizing the aim of education within education system. Also Yaman (2007) has stated that physical education teachers have to develop their knowledge and skills in order to use computers as teaching tools and support and guide students to use these technologies for learning. Together with this, when considered that self- efficacy belief and attitude towards computer is important in terms of individuals' professional success (Ipek & Acuner, 2011); it has been thought that investigating the relationship between computer self- efficacy belief and education technology could be helpful. From this perspective, it has been aimed to investigate the attitude of prospective physical education teachers' toward using technologic equipment and to investigate computer self- efficacy according to other valuables (gender, class, having a computer and level of using computer) and to determine that attitude towards education technology, computer self- efficacy predicate power.

METHOD
In research, relational research model has been used. In research, relationship between attitude of prospective physical education teacher toward using technology in education and computer self- efficacy belief and whether or not relation has shown difference according to gender, class, having computer and level of using computer have been investigated.

Study Group
Research group was constituted by 337 prospective physical education teacher (M_{age}=21.57±1.72) who were chosen by random sample and who take their education at four universities' department of physical education and sport. Descriptive statistics belong to research group was given at Table 1.

Table 1. Descriptive statistics regarding the study group

Variables		N	%
Gender	Female	169	50,1
	Male	168	49,9
Grade	1. Grade	97	28,8
	2. Grade	67	19,9
	3. Grade	63	18,7
	4. Grade	110	32,6
Having computer	Yes	281	83,4
	No	56	16,6
Using computer level	High	91	27,0
	Middle	212	62,9
	Lower	34	10,1

Data Collection Tools
As tool for collecting, individual information form, "Technology Attitude Scale" and "Computer Self-Efficacy Belief Scale" have been used.

Individual Information Form: In this form, there are articles regarding students' features who participated in the research such as their class where they are taught, the situation of having computer and their level of using computer.
Technology Attitude Scale: The scale improved by Soner Yavuz (2005) has been constituted by 5 factors. Factors in scale has been named as "not using technological tools in education", "using technological tools in education", "the effects of technology in educational life", "teaching how to use technological tools" and "evaluating technological tools". In sample, there are 19 articles of which 6 are negative and 13 are positive. For instance, Cronbach Alpha reliability coefficient as .87. Articles in scale's total correlations estimated for item discrimination and item difficulty has changed between .24 - .68. Scale is 5 point Likert type scale in the way following (1) I definitely disagree, (2) I disagree, (3) I am neutral, (4) I agree, (5) I definitely agree. According to this, a value from 5 to 1 respectively is given to options of positive items while a value from 1 to 5 is given to negative options respectively, thus all options ere coded.

Computer Self-Efficacy Belief Scale: The scale developed by Askar and Umay (2001) is consisted by 18 items. For instance, Cronbach Alpha reliability coefficient was estimated as .71. Scale is 5 point Likert type scale which is graded as (1) is never, (5) is always for positive items and for negative items (1) is always, (5) is never. When items' discrimination was estimated, items discrimination of most of items is understood to be high.

Analysis of Data

Before analysing of research data, the distribution was seen. It has been determined research data suits to normal distribution by Kolmogorov-Smirnov of Lilliefors test, Histogram graphic and normal distribution curve and Skewness and Kurtosis. In research, primarily overall arithmetic value of items took place in each sub-scale was estimated and a score for that factor was determined. Analysis was carried via this factor points. In the analysis of data descriptive statistics (number, percentage, arithmetic medium and standard deviation); with the aim of determining difference between dependent and independent variables; and t Test and one-way variance analysis (One-Way-Anova) for independent groups; with the aim of determining relation Pearson Product Moment Correlation Co-efficient technique was used. In the one way variance analysis (Anova), Tukey post-hoc test was carried with the aim of finding in which groups are inter unit differences. Together with this, Multi Linear Regression Analysis was carried out with the aim of determining attitude toward education technologies' prediction power of computer self-sufficiency belief. In this analysis, each of attitude toward technology scale sub-factor scores has taken as dependent variable and computer self-sufficiency belief scale is taken as dependent variable. In the interpretation of data, 0.01 and 0.05 significant level was used. Research data was analysed with SPSS 17 program.

FINDINGS

Arithmetic medium and standard deviations regarding attitude of prospective physical education teacher toward education technologies and computer self- efficacy beliefs are given in Table 2.

Table 2. Attitude toward education technology and computer self-efficacy belief scores

Dimension	N	$\overline{X}$	SD
Technology attitude	337	72.48	12.168
Computer self-efficacy beliefs	337	61.29	9.996

When Table 2 is investigated, arithmetic medium of prospective physical education teachers was estimated $M_{self\text{-}efficacy}$=61.29 and medium score regarding attitudes toward education technologies was estimated as $M_{attitude}$=72.48.

Attitude and Computer Self-Efficacy Belief Toward According to Gender Variable

Primarily homogeneity test was carried out to determine whether computer self-efficacy beliefs and attitudes of prospective physical education teachers towards education technologies are differentiated according to gender variable and it has been seen that variances are homogeny. In this direction, t-test belong to arithmetic medium was carried out in independent groups (Table 3).

Table 3. Attitude toward education technologies and computer self-efficacy belief according to gender variable

Dimension	Gender	n	$\overline{X}$	SD	Df	t	p
Not using technological tools in education	Female	169	19.31	4.595	335	-0.766	.444
	Male	168	19.61	3.982			
Using technological tools in education	Female	169	15.37	3.332	335	1.010	.313
	Male	168	14.98	3.756			
The effects of technology in educational life	Female	169	14.92	2.709	335	-1.254	.211
	Male	168	15.56	6.012			
Teaching how to use technological tools	Female	169	14.71	3.778	335	-1.339	.182
	Male	168	15.22	3.278			
Evaluating technological tools	Female	169	7.62	1.876	335	.194	.846
	Male	168	7.58	1.714			
Technology attitude total	Female	169	71.94	11.422	335	-0.816	.415
	Male	168	73.02	12.888			
Computer self-efficacy beliefs	Female	169	60.85	10.138	335	-0.808	.420
	Male	168	61.73	9.861			

p>0.05

When Table 3 is investigated; in the total score of prospective physical education teachers toward education technologies (M_{male}=73.02; M_{female}=71,94) and in computer self-efficacy belief (M_{male}=61.73; M_{female}=60.85) a meaningful difference has not been seen according to gender (p>.05).

Computer Self-Efficacy Belief and Attitude towards Education Technology According to Grade Variable

Primarily homogeneity test was carried out to determine whether computer self-efficacy beliefs and attitudes of prospective physical education teachers towards education technologies are differentiated according to grade variable and it has been seen that variances are homogeny. In this direction, one-way variance analysis was made (ANOVA). (Table 4)

Tablo 4. Computer Self-Efficacy Belief and Attitude towards Education Technology According to Grade Variable

Dimension	Grade	n	$\overline{X}$	SD	Df	F	p	Tukey HSD
Not using technological tools in education	1	97	19.07	3.854	3	1.911	.127	
	2	67	19.26	4.863				
	3	63	20.63	4.151				
	4	110	19.34	4.333				
Using technological tools in education	1	97	14.93	3.529	3	2.956	.033	
	2	67	14.61	2.953				
	3	63	14.74	4.482				
	4	110	15.98	3.188				
The effects of technology in educational life	1	97	14.85	2.268	3	5.554	.001*	1 < 2 2 > 3 2 > 4
	2	67	17.26	8.640				
	3	63	14.47	3.078				
	4	110	14.80	2.948				
Teaching how to use technological tools	1	97	14.29	3.553	3	2.185	.090	
	2	67	14.89	3.477				
	3	63	15.68	3.775				
	4	110	15.19	3.374				
Evaluating technological tools	1	97	7.46	1.677	3	1.389	.246	
	2	67	7.35	1.524				
	3	63	7.61	1.772				
	4	110	7.86	2.034				
Technology attitude total	1	97	70.62	9.886	3	1.065	.364	
	2	67	73.40	14.852				
	3	63	73.15	11.119				
	4	110	73.18	12.733				
Computer self-efficacy beliefs	1	97	59.32	9.864	3	7.310	.000*	1<2 2>3
	2	67	65.23	12.094				
	3	63	58.34	9.712				
	4	110	62.30	7.813				

*p<0.05

When table 4 is investigated, attitude scale towards education technologies, in the sub-dimension "the effects of technology in educational life", it has been noted that there were important differences. According to this; medium score of first grade prospective physical education teachers ($\overline{X}$=14.85) is lower than that of second grade prospective teachers ($\overline{X}$=17.26). However, medium scores of candidates of second grade ($\overline{X}$=17.26) are higher than that of third ($\overline{X}$=14.47) and fourth grade ($\overline{X}$=14.80) prospective teachers are higher than medium scores.

Again, it has been determined that computer self-efficacy belief of prospective teachers has shown meaningful differences. According to this, it has been seen that medium scores of first grade prospective teachers ($\overline{X}$=59.32), is lower than that of second grade ($\overline{X}$=65.23), and medium scores of second grade prospective teachers ($\overline{X}$=65.23) is larger than that of third grade ($\overline{X}$=58.34).

Computer Self-Sufficiency Belief and Attitudes toward Education Technologies According to Level of Using Computer

Primarily homogeneity test was carried out to determine whether computer self-efficacy beliefs and attitudes of prospective physical education teachers towards education technologies are differentiated according to level of using computer variable and it has been seen that variances are homogeny. In this direction, one way variance analysis (ANOVA) has been carried (Table 5).

Tablo 5. Computer self-efficacy belief and attitudes toward education technologies according to level of using computer

Dimension	Düzey	n	$\overline{X}$	SD	Df	F	p	Tukey HSD
Not using technological tools in education	High	91	19.56	4.206	2	2.240	.108	
	Middle	212	19.69	3.931				
	Lower	34	18.02	6.210				
Using technological tools in education	High	91	14.59	3.744	2	2.329	.099	
	Middle	212	15.49	3.366				
	Lower	34	14.76	3.985				
The effects of technology in educational life	High	91	14.40	2.902	2	4.304	.014	
	Middle	212	15.80	5.264				
	Lower	34	14.00	3.954				
Teaching how to use technological tools	High	91	15.41	3.718	2	4.250	.015	
	Middle	212	15.02	3.263				
	Lower	34	13.38	4.334				
Evaluating technological tools	High	91	7.60	1.645	2	1.107	.332	
	Middle	212	7.66	1.726				
	Lower	34	7.17	2.479				
Technology attitude total	High	91	71.58	11.253	2	4.415	.013	
	Middle	212	73.69	11.771				
	Lower	34	67.35	15.411				
Computer self-efficacy beliefs	High	91	65.27	10.621	2	15.621	.000*	Y>O Y>D
	Middle	212	60.58	9.161				
	Lower	34	55.05	9.270				

*p<0.05

When table 4 is investigated, attitude scale towards education technologies, in the sub-dimension "the effects of technology in educational life", it has been noted that there were important differences.

It has been established that self-efficacy of prospective teachers has shown meaningful differences according to level of using computer. According to this, it has been seen that high scores of prospective teachers who can use computer ($\overline{X}$ =65.27) is larger than that of prospective teachers who can use computer in middle ($\overline{X}$ =60.58) and lower levels ($\overline{X}$ =55.05).

Computer Self-Efficacy Belief and Attitude toward Education Technologies According to Having Computer

Primarily homogeneity test was carried out to determine whether computer self-efficacy beliefs and attitudes of prospective physical education teachers towards education technologies are differentiated according to having computer variable and it has been seen that variances are homogeny. T-test was carried out belonged to arithmetical mediums in independent groups in this direction.

Table 6. Computer self-efficacy belief and attitude toward education technologies according to having computer

Dimension	Bilgisayar a Sahip	n	$\overline{X}$	SD	Df	t	p
Not using technological tools in education	Yes	281	19.72	4.150	335	2.211	.028
	No	56	18.33	4.855			
Using technological tools in education	Yes	281	15.39	3.420	335	2.533	.012
	No	56	14.08	4.001			
The effects of technology in educational life	Yes	281	15.32	4.859	335	.652	.515
	No	56	14.87	3.526			
Teaching how to use technological tools	Yes	281	15.27	3.266	335	3.667	.000*
	No	56	13.41	4.401			
Evaluating technological tools	Yes	281	7.83	1.661	335	5.502	.000*
	No	56	6.44	1.999			
Technology attitude total	Yes	281	73.54	11.652	335	3.652	.000*
	No	56	67.16	13.368			
Computer self-efficacy beliefs	Yes	281	62.25	9.660	335	4.046	.000*
	No	56	56.46	10.337			

p>0.05

When table 6 is investigated, it has been established that there was a meaningful differences in attitude scale total scores according to education technologies and sub-dimensions of "teaching how to use technological tools" and "evaluating technological tools". According to this, it has been seen that medium scores of prospective teacher who has a computer ($M_{teaching}$=15.27, $M_{evaluation}$=7.83, M_{total}=73.54) is larger than that of those who hasn't got a computer ($M_{teaching}$=13.41, $M_{evaluation}$=6.44, M_{total}=67.16). Meaningful differences have not been seen in other lower dimensions of attitude scales toward education technologies (p>.05).

It has been established that there are meaningful differences according to computer self-efficacy of prospective teachers according to variables of having computer According to this, medium scores of prospective teacher who have computer ($\overline{X}$=62.25) is higher than that of those who have not a computer ($\overline{X}$=56.46).

Relationship between Attitude toward Education Technologies and Computer Self-Efficacy Belief

The relationship between computer self-efficacy beliefs and attitudes of prospective physical education teachers toward education technologies has been tried to be determined and analysis results were given in Table 7.

Table 7. Relationship between Attitude toward Education Technologies and Computer Self-Efficacy Belief

Variables	A	B	C	D	E	F
Not using technological tools in education (A)	1					
Using technological tools in education (B)	.134*	1				
The effects of technology in educational life (C)	.179**	.388**	1			
Teaching how to use technological tools (D)	.296**	.578**	.248**	1		
Evaluating technological tools (E)	.208**	.561**	.300**	.648**	1	
Computer self-efficacy beliefs (F)	.223**	.347**	.088	.281**	.191**	1
Mean	19.49	15.17	15.24	14.96	7.60	61.29
Standart Deviations	4.298	3.550	4.662	3.542	1.795	9.996

*p<0.05 **p<0.01

When Table 7 is examined, it has been seen that "not using technological tools in education" (r=.223; p<.01), "teaching how to use technological tools" (r=.281; p<.01) and "evaluating technological tools" (r=.191, p<.01) sub-dimensions of attitude scale toward education technologies have a relationship with computer self-efficacy

belief in lower level and positive way. However, it has been stated that "using technological tools in education" (r=.347; p<.01) sub-dimension has a positive relationship with computer self-efficacy belief in middle level.

It has been tried to determine predicting power of computer self-efficacy believes and attitudes toward education technologies and results of analysis is given in Table 8. In analysis, each of sub-factor points of attitude scales toward education technologies was taken as independent variable; computer self-efficacy belief was taken as dependent variable.

Table 8. The result of analysis regarding predicting computer self-efficacy belief

Variables	B	Standard Error	ß	t	p	Dual r	Partial r
Constant	42.388	3.236		13.099	.000		
Not using technological tools in education	0.383	0.127	0.165	3.006	.003**	.223	.163
Using technological tools in education	0.445	0.195	0.158	2.278	.023	.247	.124
The effects of technology in educational life	-0.075	0.122	-0.035	-0.616	.539	.088	-.034
Teaching how to use technological tools	0.479	0.209	0.170	2.288	.023	.281	.125
Evaluating technological tools	-0.175	0.399	-0.031	-0.438	.662	.191	-.024
R= 0.338		R²= 0.114					
F= 8.543		p= .000					

**p<0.01

When findings in Table 8 is investigated, prediction equation of sub-dimensions of attitude scale toward education technologies is important (R=0.338; p<.01). Variables consisting sub-dimension of attitude scale explains %11 of total variance. The relative order of importance of predictive variables according to standardized regression coefficient (ß) is in the following way: teaching how to use technological tools, not using technological tools in education, using technological tools in education, the effects of technology in educational life and evaluating technological tools

When the results regarding meaningful of regression coefficient is investigated, it has been seen that the sub-dimension of "not using technological tools in education" is an important and meaningful predictive on computer self-sufficiency believes. It has been seen that the sub-dimensions of "Teaching how to use technological tools", "using technological tools in education", "the effects of technology in educational life" and "evaluating technological tools" are not meaningful and important predictive.

CONCLUSION
According to findings obtained in research, the attitudes prospective physical education teachers toward education technology realized in high level (Table 2). This finding has shown parallelism with some studied in which attitudes toward education technology was determined (Yavuz & Coskun, 2008; Arslan, 2008; Basarici & Ural, 2009; Yılmaz et al., 2010). On the other hand, another finding obtained from research, computer self-efficacy beliefs have realized in prospective physical education teachers in high level again (Table 2). While this result shows parallelism with some study results (Arslan, 2008; Orhan, 2005); does not coincide with some studies' results (Askar & Umay, 2001; Yilmaz, Gercek, Koseoglu & Soran, 2006) When considered that self-efficacy belief directly created a positive effect on intention to use computer and accept technology (Hu, Clark & Ma, 2003), it could be said that qualities of prospective physical education teachers to use computer and knowledge technologies on their lessons in future and various education qualities could be higher.

It has not been seen a meaningful difference between male and female prospective teachers when their attitudes toward education technologies was considered (Table 3). This finding has shown parallelism with many studies (Ipek & Acuner, 2011; Basarici & Ural, 2009; Celik & Bindak, 2005; Yilmaz et. al, 2007). In a similar way, it has not been seen a meaningful difference between males and females when computer self-efficacy beliefs of prospective teachers are investigated (Table 3). While this finding shows similarity with many studies (Yilmaz and et. al, 2006; Ozcelik & Kurt, 2007), it does not coincide with results of many others (Cetin, 2008; Busch, 1995; Tekinarslan, 2008; Erdemir, Bakirci & Eyduran, 2009; Orhan & Akkoyunlu, 2003). Cetin (2008), in his study he carried out with prospective primary school teachers, has stated a meaningful difference in favour of male prospective teacher in computer self-efficacy beliefs scores. In a similar way, it has been observed in study

carried out by Tekinarslan (2008) with prospective teachers who receive education in different department in education faculty that self-efficacy of males are higher than that of females in basic technology skills and advance computer technology. As different from other studies, in the studies carried out by Erdemir and et al. with prospective teachers who receive education in departments of primary school mathematics, science, social sciences, pre-school, school and Turkish teaching it has been established that computer self-efficacy beliefs of female prospective teachers are higher than that of male. But when it is considered that the studies which do not coincide with research finding are high in number, it is needed that too many studies have to be carried out in order to determine whether computer self-efficacy beliefs are differentiated according to gender.

It has not been seen a meaningful difference in   attitudes of prospective physical education teachers toward education technologies except for sub-dimension of "the effects of technology in educational life" when it is considered according to class variable (Table 4). In sub-dimension of "the effects of technology in educational life", it has been seen that medium scores of first grade prospective teacher is lower than that of second grade. Medium scores of second grade prospective teacher have been estimated as higher than that of both third and fourth grade prospective teachers. Obay and Ozgen (2008) has established that taking lesson of teaching technologies and material improving has created a positive effect in attitudes of prospective teachers toward education technologies positively in their study in which they assessed the attitudes of prospective teachers toward education technology. When it is thought that computer lesson is given at second grade and teaching technologies lesson is given at third grade, the finding we obtained from our study is an unexpected study. It could be thought that this result was caused by positive experiences of prospective physical education teachers regarding education technologies in previous years.

When computer self-efficacy beliefs of prospective physical education teachers are investigated in terms of variable of class, it has been seen that medium score of first grade prospective teachers are lower than that of second grade prospective teachers. However, it has been seen that medium score of second grade prospective teachers are higher than that of third grade teachers (Table 4). In the study carried out by Cetin, it has been seen that self-efficacy beliefs of candidates of class teaching regarding computer has changed according to the class in which they receive education in a meaningful way. Conversely, Yilmaz and his friends (2006) have not established a meaningful difference between computer self-efficacy beliefs of biology teaching students according to class in which they receive their education. Askar and Umay (2001) have expressed that inexperience and inadequate using of computer has caused that students' self-efficacy against computer is low. Since it is informed that computer self-efficacy is closely related to using computer (Hu and et. al., 2003; Decker, 1998), it can be thought that second grade prospective teachers take computer lesson which is compulsory at second grade and that computer take place in every stage of our lives as a result of rapid spread of computer technologies.

It has not been seen meaningful differences in terms of level of using computer in sub-dimensions and total scores of attitude scale of prospective physical education teachers toward education technologies (Table 5). When computer self-efficacy beliefs of prospective teachers are investigated in terms of level of using computer, it has been seen that medium scores of prospective teachers who can use computer in high level is larger than that of prospective teacher who can use the computer at middle and lower level (Table 5).

It has been established that there are meaningful differences according to situation of having a computer in sub-dimensions of "teaching how to use technological tools" and "evaluating technological tools" with attitude scale total score toward education technologies of prospective physical education teachers. According to this; it has been seen that prospective teachers having computer are larger than that of those who have not got a computer (Table 6). When the computer self-efficacy beliefs is investigated according to situation of having a computer, the medium scores of prospective teachers who have a computer is higher than that of those who have not got a computer. This finding has shown parallelism with the result of many studies (Askar & Umay, 2001; Celik & Bindak, 2005; Ipek & Acuner, 2011; Tekinarslan, 2008). Since computer self-efficacy is closely related with using computer (Hu et al., 2001; Decker, 1998) and ,as Askar and Umay (2001) stated, inexperience and using computer in inadequate level, that individuals who have computer have a high self-efficacy is an expected situation.

When relationship between sub-dimensions of attitude scales toward education technologies and self-efficacy belief was investigated (Table 7), it has been seen that the sub-dimensions of "not using technological tools in education", "teaching how to use technological tools" and "evaluating technological tools" have a lower level positive relation. However, it has been stated that the sub-dimension of "using technological tools in education" have a middle level positive relation with computer self-sufficiency belief. In a similar way, in the study carried

out by Arslan (2008), it has been found a positive and middle level relationship between self-efficacy and attitude toward realizing computer supported education.

In research, it has been determined that sub-dimensions of attitude scale towards education technologies have an effect magnitude in a middle level on computer self-efficacy belief (Table 8). Also, the effect of level of attitude toward education technologies on computer self-efficacy belief is explained with a rate of 11%. In the light of all these results, it has been determined that computer self-efficacy beliefs have an effect magnitude on attitude toward education technologies in low level. This result has shown similarity with the study carried out by Ipek and Acuner (2011) with candidates of class teaching, it has been seen that the attitude of prospective teacher toward education technologies could explain only 3% of variance in computer self-efficacy beliefs. In their study with prospective primary school teacher and social science teachers, Usta and Korkmaz (2010) has shown that a positive increase was seen in attitudes toward using technology in education. Again in a similar way, it has been concluded that there is a middle level and positive relation between computer self-efficacy beliefs and attitudes of prospective teachers toward computer supported education. From this point of view, if there is an increasing in attitude or self-efficacy belief it could be said that the other would decrease in case of decreasing. It also could be said that steps to be taken to increase the self-efficacy belief or attitude would increase the other; the factors that would decrease a variable would decrease the other. Therefore, it is needed to consider this relationship while regulating education environments.

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