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# AN ANALYSIS OF PHYSICAL EDUCATION AND SPORTS TEACHERS' USE OF TECHNOLOGY STATES TO REACH INFORMATION

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#### **ABSTRACT**

This study aims to determine of physical education and sports teachers' use state of tools. The research population consists of physical education and sports teachers working at middle schools in Mugla province in 2010-2011 school year. 30 physical education and sports teachers in 17 schools located in Mugla province constitute of a sample of the research. At the beginning of the study, "Technology Attitude Scale" developed by Yavuz (2005) was applied to the teachers. Later, working groups were created, and teachers were asked to carry out technology-assisted project studies. Cronbach's alpha coefficient was calculated as 0,88. The collected data was analyzed using SPSS 14 package program. Frequency and percentage analysis were applied to determine the results. According to the analysis made, 53% stated: "Education can be given via the internet.", 63% stated: "computers and projection devices should be used.", 62% stated: "Technological tools have an impact on student motivation.", 77% stated: "When certain sections of the course are recorded with a camera, it is possible to see the deficiencies and mistakes of the students.", 87% stated: "The use of existing technology allows the development of new technologies.", 60% stated: "

It will be easier with technology to comprehend lessons that are difficult to understand.", 94% stated: "Students need to be given preliminary information about the use of new technologies.", and 67% stated: "Technological tools can be successful when appealing all sensory organs." At the end of the research, A Technology Attitude Scale was found to be significantly higher. It is thought that teachers' use the technological materials in teaching affects the attitude scores positively.

Key Words: Technology, Physical Education, Teacher, Information

## **INTRODUCTION**

In today's world, where technology becomes a necessity rather than a privilege, people need to acquire knowledge, skills, attitudes, and habits to adapt to ever-changing and developing technology, understand the technology and take advantage of its opportunities. Through education, it is aimed to equip individuals with information access, information editing, information evaluation, information presentation and communication skills. For these fundamental goals to be fulfilled, learning-teaching processes must be efficient and lasting as to learner(Pala, 2006).

For this, that learning activities appeal to many sensory organs, and the necessity of using visual and audio means in education are indisputable facts. In the study of learners' learning styles, the learning environment in which the students with audiovisual and kinesthetic learning styles were found to be an important factor in learning their preferences. Considering the learning styles of learners, contrary to traditional teaching methods, developing and implementing student-centered instructional activities and designing learning environments in which the students will be capable is one of the primary goals of modern education understanding. In this sense, nowadays the concept of educational technology has an essential role in the education systems of the countries(Yılmaz, 2008).

Educational technology is defined as the application of scientific knowledge about how people learn to teach and to solve learning problems; a system consisting of personnel, tools, materials processes and methods in order to transform teaching theories into the most productive and active applications; systematic strategy applications and techniques derived from behavioral or physical science concepts and other information for solving instructional problems (Usun, 2000). As it is understood from the definitions, education technology means a systematic and holistic approach to teaching and learning processes, and equipment becomes one of the essential items involved in this process(Boydak, 2006). Especially in the modern education concept, the teacher is the person who plans the teaching and training processes considering the individual differences and knows how to reach the aim by choosing the suitable tools to be used in this process. Because science and technology are rapidly developing today, it is not the case that transferring and teaching the information through traditional teaching methods.

#### **METHODS**

This study aims to determine of physical education and sports teachers' use state of tools. The research population consists of physical education and sports teachers working at middle schools in Mugla province in 2010-2011 school year. 30 physical education and sports teachers in 17 schools located in Mugla province constitute of a sample of the research.

At the beginning of the study, "A Technology Attitude Scale" developed by Yavuz (2005) was applied to the teachers. Later, working groups were created, and teachers were asked to carry out technology-assisted project studies. Cronbach's alpha coefficient was calculated as 0,88.

The collected data was analyzed using SPSS 14 package program. Frequency and percentage analysis were applied to determine the results.

## **RESULTS**

Table 1: The frequency and percentage table of the proposition: "The use of the Internet in the teaching process is nothing more than a waste of time."

Proposition		Strongly Disagree		Disagree Neutral		utral	Agree		Strongly Agree	
	f	%	F	%	f	%	f	%	f	%
The use of the Internet in the teaching process is nothing more than a	11	36,7	12	40,0	3	10,0	1	3,3	3	10,0
waste of time.										

Of the physical education teachers who participated in the survey, eleven people who constituted 36.7% stated: "strongly disagree," twelve people who constituted 40% stated: "disagree," three people who constituted 10% stated: "neutral," one person who constituted 3,3% stated: "agree," and three people who constituted 10% stated: "strongly agree."

Table 2: The frequency and percentage of the proposition: "The use of technological tools does not affect student motivation."

Proposition	Strongly Disagree		Disa	Disagree Neutral		Agree		Strongly Agree		
	f	%	F	%	f	%	f	%	f	%
The use of technological tools does not affect student motivation.	8	26,7	11	36,7	8	26,7	1	3,3	2	6,7

Of the physical education teachers who participated in the survey, eight people who constituted 26,7% stated: "strongly disagree," eleven people who constituted 36,7% stated: "disagree," eight people who constituted 26,7% stated: "neutral," one person who constituted 3,3% stated: "agree," and two people who constituted 6,7% stated: "strongly agree."

Table 3: The frequency and percentage of the proposition: "Video recording of certain parts of the lesson with the camera allows students to see their deficiencies and mistakes."

Proposition	Strongly Disagree		Disa	igree	Ne	utral	Agree		Strongly Agree	
	f	%	F	%	f	%	f	%	f	%
Video										
recording of										
certain parts										
of the lesson										
with the										
camera	1	3,3	3	10,0	3	10,0	19	63,3	4	13,3
allows	•	3,3	J	10,0	5	10,0	1)	05,5	•	13,3
students to										
see their										
deficiencies										
and										
mistakes.										

Of the physical education teachers who participated in the survey, one person who constituted 3,3% stated: "strongly disagree," three people who constituted 10% stated: "disagree," three people who constituted 10% stated: "neutral," nineteen people who constituted 63,3% stated: "agree," and four people who constituted 13,3% stated: "strongly disagree."

Table 4: The frequency and percentage of the proposition: Students should be given basic lessons on computer literacy."

Proposition	Strongly Disagree		Neut	Neutral		Agree		Strongly Agree	
	f	%	f	%	f	%	f	%	
Students should be given basic lessons on computer literacy	1	3,3	7	23,3	18	60,0	4	13,3	

Of the physical education teachers who participated in the survey, one person who constituted 3,3% stated: "strongly disagree," seven people who constituted 23,3% stated: "neutral," eighteen people who constituted 60% stated: "agree," and four people who constituted 13,3% stated: "strongly agree."

Table 5: The frequency and percentage of the proposition: "With the use of technology will make it easier to comprehend lessons that are difficult to understand."

Proposition	Disagree		Neut	Neutral		Agree		Strongly Agree	
	f	%	F	%	f	%	f	%	
With the use of technology will make it easier to comprehend lessons that are difficult to understand.	2	6,7	10	33,3	16	53,3	2	6,7	

Of the physical education teachers who participated in the survey, two people who constituted 6,7% stated: "strongly disagree," ten people who constituted 33,3% stated: "neutral," sixteen people who constituted 53,3% stated: "agree," two people who constituted 6,7% stated: "strongly agree."

Table6: The frequency and percentage of the proposition: "Computer-assisted instruction should frequently be given during the course."

Proposition	Disagree		Neut	ral	Agree Stro Agre		ongly ee	
	f	%	F	%	f	%	f	%
Computer- assisted instruction should frequently be given during the course.	4	13,3	17	56,7	8	26,7	1	3,3

Of the physical education teachers who participated in the survey, four people who constituted 13,3% stated: "disagree," seventeen people who constituted 56,7% stated: "neutral," eight people who constituted 26,7% stated: "agree," one person who constituted 3,3% stated: "strongly agree."

Table7: The frequency and percentage of the proposition: "Students should be informed about the use of new technologies."

Proposition	Neutral		Agree		Strongly Agree	
	f	%	f	%	f	%
Students should be informed about the use of new technologies.	2	6,7	23	76,7	5	16,7

Of the physical education teachers who participated in the survey, two people who constituted 6,7% stated: "neutral," twenty-three people who constituted 76,7 stated: "agree," and five people who constituted 16,7% stated: "strongly agree."

Table 8: The frequency and percentage of the proposition: "The use of new technologies should be increased with teacher education."

Proposition	Neutral		Agree		Strongly Agree	
	f	%	F	%	f	%
The use of new technologies should be increased with teacher education.	4	13,3	6	20,0	20	66,7

Of the physical education teachers who participated in the survey, four people who constituted 13,3% stated: "neutral," six people who constituted 20% stated: "agree," and twenty people who constituted 66,7% stated: "strongly agree."

Table9: The frequency and percentage of the proposition: "Technological tools only succeed when appealing to all sensory organs."

Proposition	Disagree		Neut	Neutral		Agree		Strongly Agree	
	f	%	f	%	f	%	f	%	
Technological tools only succeed when appealing to all sensory organs.	3	10,0	7	23,3	18	60,0	2	6,7	

Of the physical education teachers who participated in the survey, three people who constituted 10% stated: "disagree," seven people who constituted 23,3% stated: "neutral," eighteen people who constituted 60% stated: "agree," and two people who constituted 6,7% stated: "strongly agree."

#### DISCUSSION AND CONCLUSION

With this research, the attitudes and thoughts of physical education teachers towards the use of technological equipment in education have been determined. As a result of the research, it was determined that the use of technological tools in education, the effects of technology on education life, and the teaching of the use of technological tools have positive attitudes. As a result of the technology-supported project studies, it was determined that the teachers had positive attitudes towards the use of technological tools in educational activities. In other words, it is understood that technology-supported project studies have improved the attitudes of the physical education teachers towards technology, positively(Akkoyunlu, 1995).

As a concordant result, it has been determined that teachers have a positive opinion on the use of technology as a result of interviews with teachers. It has been determined that the technology perception that teachers have is in the form of inventions that facilitate the life of many people such as communication, transportation, and education. It has also been determined that technological tools such as a computer, overhead projector, a projection device, television, DVD, slide machine, tape recorder should be used in the teaching process. With these tools used, the lessons have become more enjoyable, the visual materials have made it easier to understand, saving time and their positive ideas have been determined. Teachers, however, they have emphasized that technology should play an auxiliary role in teaching and should not be turned into an aim of teaching. When we look at literature, there are studies that similar results are obtained(Yalın, 2007).

Yilmaz (2005) determined in his study which evaluating the effect of the use of technology on students' success and attitude that technological tools have a positive effect on students' achievement and attitude. Sevindik (2006) found that the use of smart classes in higher education has a positive effect on the academic achievement and attitudes of students. Gunter, Gunter, and Wiens (1998) found that teachers' attitudes towards computer work and learning, as well as attitudes toward technology, were non-worrying and more positive after the in-service course. They found in their studies about the effects of computer-assisted instruction, and interactive video applications on learning performance and attitude that only computer-assisted education was the most effective method, and it significantly affected the attitude of teachers who had a low ability. Yilmaz (2007) determined that the students in the physical education teacher program have positive attitudes towards using computers, and those with more computer experience have more positive attitudes. Yavuz ve Coşkun (2008), determined in the study which evaluating the attitude and thought of physical education teachers in respect of using technology in education that teachers' use technological tools in teaching affects students'attitude positively. They also determined in their interviews that the teachers have a positive opinion about using technology. Yilmaz (2008) found that physical education sports instructors have positive attitudes towards technology and that a large part of them do not participate in a technology related course and that they think that the technological equipment they are studying is inadequate.

#### RECOMMENDATIONS

Based on the results of the study and other relevant research results, some suggestions were developed:

Increasing technological equipment in all schools encourages teachers to use technological materials in their theoretical and practical courses.

In-service training programs can be organized for teachers on technological developments and effective use of technological tools and equipment.

Teaching technology and material development course taught in the physical education teacher education program should be given with theoretical and practical activities at the level to increase the technology and information literacy of the teacher candidates appropriate to the nature of physical education and sports.

Attention should be given to researches aimed at determining the effectiveness levels of technology tools and equipment used in educational activities.

Since the study group is limited, the work to be done with the physical education teachers working in different provinces may bring different dimensions to the subject.

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