INVESTIGATION OF PRIMARY SCHOOL TEACHER CANDIDATES PERFECTIONS TO USE WEB 2.0 TOOLS[1]

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ABSTRACT

Web 2.0 tools have many contributions to educational technology. The more teachers use web 2.0 tools, the more students will benefit from these contributions. Web 2.0 tools can be used in many processes from lectures to evaluation processes. Therefore, web 2.0 tools are of great importance in education. For this reason, teachers should be qualified to use web 2.0 tools. For the presence of qualified teachers, first of all, teacher candidates should be employed. In the study, it is aimed to reveal the competencies of primary school teacher candidates in using web 2.0 technologies. For this purpose, it has been examined whether there is a difference in the competencies of using web 2.0 tools according to gender, computer ownership and computer usage level. Our research was prepared in the general screening model, which is one of the quantitative research methods. The sample of the study consisted of the students of Fırat University, Department of Primary School Teaching. The data collection tool of the research is likert type scale. The analysis of the data obtained from this scale was also carried out by the SPSS software. As a result of the analyzes, no significant difference was observed in terms of gender in the ability to use web 2.0 tools. Significant differences were observed in computer ownership and computer usage levels. According to the results we obtained from our study, it is recommended to try to reduce the difference in the competencies of using web 2.0 tools between female and male primary school teacher candidates with various trainings, improving the level of computer usage of teacher candidates, and providing computers for students in order to reduce the difference in computer ownership.

Keywords: WEB 2.0, Technology, Education, Educational Technology.

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INTRODUCTION

Technology is evolving rapidly. Today is a era of change. Today, technology has lifted the boundaries. Many areas of life are affected by technology. Technology contributes a lot to education. There has been innovations in education through the development of technology (Sagedhi, 2019). There is no more traditional teaching (Yavuz and Coşkun, 2008). The

development of technology has changed roles in education. The system in which the teacher is at the center of the training has been replaced by a system that the student is in the center and the teacher guides. And technology is a great deal of convenience to our life. Many challenges and obstacles in education have been eliminated or facilitated by technology. One of the benefits of technological advancements is that the individual can access resources at any time and place (Bishop and Verleger, 2013). With the advancement of technology, the student will be able to reach the teacher any time. Education is no longer just a classroom environment. Technology has been involved in class and in the important parts of our lives (Akpınar, Aktamış, & Ergin, 2005). The traditional tools used in the past are replaced by technological tools.

Web technologies have been included in various tools used in education. Web 2.0 is a leading application in education technologies (Genç, 2010). The concept of Web 2.0 was first used by Tim O'Reilly (O'Reilly, 2005). Web 2.0 provides many conveniences. Web 2.0 does not include only one application (Horzum, 2010). Web 2.0 tools created with technological advances have many uses . There are different web 2.0 tools that meet different needs. Web 1.0 tools were used before Web 2.0 tools. The difference between Web 2.0 tools and web 1.0 tools is that web 2.0 activate the user (O'Reilly, 2007). Web 1.0 tools put the user in a passive position.With Web 2.0 tools, users are no longer passive (Ajjan & Hartshorne, 2008). The user has become the information shareer. Thanks to Web 2.0 tools, educational environments can be enriched by mutual interaction between users. (Adcock & Bolick, 2011). Web 2.0 tools will eliminate boredom in education. (Korucu and Sezer, 2016). With Web2.0 tools, the internet becomes an interactive environment (Horzum, 2010). Web2.0 technology is user-centered (Karaman et al., 2008). In addition, web 2.0 tools facilitate the achievement of goals. (Elmas and Geban, 2012). Thanks to Web 2.0, individuals can get out of their passive perception of content and make the necessary changes according to their needs (Techataweewan, 2012). Web 2.0 tools are capable of increasing communication between teacher and student (Nandhini, 2016). Students can reach the teacher whenever they want. In addition, the teacher will be able to get out of the position of only transmitting information and reach the students when they are not at school.According to Şimşek (2002), the use of technology and technology tools in education provides convenience to the teacher. The teacher will be able to create lecture content and homework content thanks to web 2.0 tools. One of the conveniences provided by Web 2.0 tools is that some tools can be used for a very small price and some tools are free (Boulos et al., 2006).

The categories of web 2.0 applications and a few related examples are available through literature. (İşbulan et al., 2020; Sadık, 2020; Kazancı and Dönmez, 2013; Elmas and Geban 2012; Çelebi and Satırlı, 2021).

Category	Tools
Measuring and evaluation tools	Top Hat, Testmoz,
Animation tools	GoAnimate, Voki
Photo and video editing tools	Adobe Spark, Youtube
Social media tools	EBA, Twitter
Web page preparation tools	Weebly, Blogger
Virtual class applications	Edmodo, Edpuzzle
Online survey tools	Survey Monkey
EBook preparation tools	My Storybook
Virtual reality applications	Taleblazer
Panel creation applications	Aurasma, Blendspace
Presentation tools	Nearpod,Powtoon
Maths tools	Matific
Story and book writing applications	Storyboard That
Maps	Google Maps
Encoding Tools	Code.Org
Puzzle and test tools	Puzzlemaker, Kahoot
Remote Management Tools	Zoom
3D Tools	Unity 3D
Gaming tools	Funbrain, Dustbin

The fact that technology is centered in many areas of our lives has made it necessary for people to use technological tools. With evolving technology, people need to know how to access and use information (Kop & Hill, 2008). They must have the necessary technological skills for this.It is important that teachers in the 21 st Century can use technology to raise students (Çakır and Yıldırım, 2009). In spite of the advances in education technologies, it is available in teachers who are still committed to traditional methods (Elmas, Demirdöğen & Geban, 2011). Teachers need to adapt to changing conditions and improve their ability to use technology (Türkmen, Pedersen & McCarty, 2007). The sooner people learn how to use technology, the better it will be for them. Learning at an early age will give them more control over these skills. The new generation has

many skills to have. In order to have a say in the 21st century, individuals should not only have a diploma, but also have 21st century skills. (Uluyol and Eryılmaz, 2015). These skills make individuals good citizens and qualified business people (Ananiadou and Claro, 2009).
21st century skills are made up of three main titles.
These are;
1.) Learning and innovation skills
2.) Information, media and technology skills
3.) Life and career skills.
(Kylonen, 2012).

Teachers play a key role in helping individuals acquire these skills at an early age. In the course of bringing information, media and technology skills to students, the teacher should care about the use of technology. At this point, the web 2.0 tools are involved. Web 2.0 tools are important in education. In order for technology use to begin at a young age, primary school teachers must use the web 2.0 tools in lectures (Korucu and Karalar, 2017). In order to have teachers with these qualifications, teacher candidates at universities should be provided with the necessary technological skills (Çağıltay et al., 2007).

Looking at the literature, no study has been found that directly examines the primary school teacher candidates competencies in using web 2.0 tools.The main purpose of this research is to determine the competencies of primary school teacher candidates to use web 2.0 tools.

Aim of the Research
The purpose of this research is to determine the competencies of primary school teacher candidates to use web 2.0 tools. For this purpose, we will try to find answers to the following questions:

1.Do the competencies of the primary school teacher candidates to use the web 2.0 tools vary by gender?
2.Do the competencies of the primary school teacher candidates to use the web 2.0 tools vary depending on their computer ownership status?
3.Do the competencies of the primary school teacher candidates to use the web 2.0 tools vary depending on the levels of computer use?

METHOD
Design
Our research was prepared in the screening model from quantitative research methods. The approach that describes situations that happened in the past or that still continues is called the screening model. (Karasar, 2008). The regulations on the sample are called the screening model (Karasar, 2005). This method has been used to determine the competencies of the primary school teacher candidates to use the web 2.0 tools.

Participants
The research area was created by the primary school teacher candidates who continued their education and education in the Faculty of Education. The sample consisted of the students of Fırat University, Department of Primary School Teaching.

Data Collection Tool
The "Web 2.0 Tools Utilization Capability Scale" developed by Çelik (2020) was used with the permission of the researcher. The scale consists of 39 substances and is a 5-type lyert scale.

Data collection
The data of the study was obtained from the students of the primary school teacher who were studying at Fırat University through scale and survey. The data is collected with a questionnaire with demographic information and a scale form that measures the capability of using web 2.0 tools. The participants have filled out these forms on a voluntary basis.
Analysis of the data was carried out through the SPSS 22 package program. For the purpose of the research, necessary descriptive analyzes such as "frequency", "arithmetic average", "percent" were performed. In addition, the independent group t-test and ANOVA were applied. In the event of an ANOVA test with significant differences, LSD analysis was performed and which groups had significant differences.

FINDINGS
In this section, the findings are analyzed and interpreted.
The frequency and percentage of gender, computer ownership, and computer use level

	Category	f	%	Total
Gender	Woman	133	70,3	100
	Man	56	29,7	
Computer ownership	I have a computer	112	59,6	100
	I don't have a computer	76	40,4	
Computer use level	Bad	59	31,3	100
	Medium	85	45,2	
	Good	44	23,5	

Table 2. 70.3% of the participants involved in the study are women and 29.7% are men. Based on the computer ownership, 59.6% of respondents have computers, while 40.4% do not have

computers. When we look at the computer use level, 31.3% of them have the level of bad , 45.2% have the level of middle , 23.5% have the level of good (Table 2).

Opinion of the primary school teacher candidates on the web 2.0 tools
Table 3 provides feedback on the web 2.0 tools of the primary school teacher candidates.
Table 3. Competency levels for participants' web 2.0 tools

	Never	Rarely	Sometimes	Often	Always	X	ss
			%				
With web 2.0 tools, I can design time and space-independent learning environments. (For example, Edmodo, Google Classroom…)	42,3	25	21,6	7,2	3,8	2,05	1,13
I can create effective presentations with web 2.0 tools. (Like Prezi, Powtoon, Buncee, Emaze…)	33,7	23,6	22,1	14,9	5,8	2,35	1,24
With web 2.0 tools, i can present knowledge and concepts in a mind map. (Like Wisemapping, Pooplet, SpiderScribe, Gocongr…)	37,5	28,8	18,8	11,1	3,8	2,14	1,15
I can create animation activities with web 2.0 tools. (Like Vyond, Voki…)	35,6	32,7	17,3	9,1	5,3	2,15	1,16
I can make digital boards with web 2.0 tools. (Like Padlet, Bendspace, Lino TI…)	39,4	26,9	18,8	11,1	3,8	2,12	1,16
I can make posters with web 2.0 tools. (Like Word art, Sketch toy…)	31,3	26,9	24,5	11,1	6,3	2,34	1,20
I can make caricature with web 2.0 tools. (Like make Beliefs Comix, Toondoo…)	41,8	23,1	21,2	9,6	4,3	2,11	1,18
I can create digital stories with web 2.0 tools. (Like Storyjumper, Storybird, Pixton…)	35,1	26,0	20,2	13,5	5,3	2,27	1,22
I can do virtual writing with web 2.0 tools. (Like Wattpad, Blogger…)	31,3	26,9	23,6	12,0	5,3	2,32	1,19
I can add audio to stories I write with web 2.0 tools. (Storyjumper.. sort of)	33,2	25,0	20,2	15,9	5,8	2,36	1,25
I can create a blog with web 2.0 tools. (Like Blogger, Tumblr…)	34,6	25,5	24,0	10,6	5,3	2,26	1,19
I can do a digital test with web 2.0 tools. (Like Kahoot, Plickers, Socrative…)	31,3	26,0	22,1	14,4	6,3	2,38	1,23
I can create puzzles with web 2.0 tools. (Like Mentimeter, Flipquiz…)	37,5	26,0	22,6	8,7	5,3	2,18	1,18
I can create puzzles with web 2.0 tools. (Like Pazillmaker, LearningApss...)	36,5	27,4	19,2	9,6	5,3	2,18	1,19
I can design educational games in my field with web 2.0 tools. (Like Kahoot, Plickers, Socrati, ThinkLink, LearningApss…)	35,6	26,9	18,8	11,1	7,7	2,28	1,26

I can make open-ended exams with web 2.0 tools. (Like Kahoot, Socrative, Mentimeter, Quizziz…)	29,8	21,6	22,6	13,9	11,5	2,55	1,35
I can make short-answer exams with web 2.0 tools. (Like Kahoot, Socrative, Mentimeter, Quizziz…)	29,8	21,6	22,1	13,9	12,0	2,56	1,36
I can prepare classroom assessment applications with web 2.0 tools. (Like Kahoot, Socrative, Mentimeter, Quizziz…)	30,8	19,7	22,6	15,4	10,6	2,58	1,47
With web 2.0 tools, i can make the lecture fun.	26,9	26,0	20,7	14,9	11,5	2,58	1,33
I can create a banners with web 2.0 tools. (Like Easelly, Visme, Creately…)	34,1	27,9	19,2	11,5	7,2	2,29	1,25
I can make infographic with web 2.0 tools. (Such as Pictochart, Venngage…)	39,9	28,8	18,3	8,7	4,3	2,08	1,14
With web 2.0 tools, I can design augmented reality events. (Like Quiver, Morfo, Urasma…)	41,8	26,9	16,3	8,7	5,8	2,09	1,20
With web 2.0 tools, I can manage remote learning activities. (Like Moodle, Adobe Connect…)	37,0	22,1	23,1	11,1	6,7	2,28	1,25
I can edit my photos with web 2.0 tools. (Such as Gimps, Photostory, OpenShot…)	30,8	26,0	19,7	12,0	11,1	2,46	1,33
I can create movies with web 2.0 tools. (Like Mowimaker, Photostory…)	38,0	25,5	21,6	8,7	5,8	2,18	1,20
I can edit my videos with web 2.0 tools. (Like Mowimaker, Photostory, Safeshare, Filmora…)	34,6	24,5	23,6	8,7	8,7	2,32	1,26
With web 2.0 tools, i can remove unwanted add-ons from my videos. (Like Safeshare…)	38,5	26,0	17,8	11,5	6,3	2,21	1,24
I can record audio with web 2.0 tools. (Like Vocaro)	32,7	29,3	14,9	13,9	8,7	2,36	1,30
I can add videos to the mind maps i create with web 2.0 tools. (Like Wisemapping, Poplet…)	36,1	27,4	19,2	10,1	7,2	2,25	1,24
I can add audio to the mind maps i create with web 2.0 tools. (Like Wisemapping, Poplet)	37,0	24,5	20,7	11,1	6,3	2,24	1,23
I can add pictures to the mind maps i create with web 2.0 tools. (Like Wisemapping, Poplet…)	35,6	22,6	23,1	13,0	5,8	2,30	1,24
I can add text to the mind maps i create with web 2.0 tools. (Like Wisemapping, Poplet…)	37,0	24,5	20,2	12,5	5,8	2,25	1,23
I can use the applications i create with web 2.0 tools in the course.	30,3	25,5	20,2	13,5	10,1	2,47	1,32
With web 2.0 tools, i can get students to attend classes.	26,4	20,7	26,9	14,4	10,1	2,60	1,30
With web tools, i can make the lecture fun.	26,9	21,2	25,0	14,9	12,0	2,63	1,34
I can design a lesson with web 2.0 tools.	26,4	24,0	26,9	12,0	9,6	2,53	1,27
I can create riddle events with web 2.0 tools. (Like Riddle…)	30,8	29,3	22,6	9,1	8,2	2,34	1,23
I can create surveys with web 2.0 tools. (Survey, Monkey, Jetanket…)	31,7	25,5	21,6	12,5	8,7	2,40	1,28
I can participate in a discussion with web 2.0 tools.	34,1	26,4	20,7	10,6	8,2	2,32	1,26

The question-based competency levels for the competencies of the primary school teacher candidates to use the web 2.0 tools are provided in Table 3. When the first three items with high average are examined, they think that they can make the course fun ($\bar{x}$=2.63), enable student

PONTE

participation in the courses ($\overline{x}$=2.60), and prepare classroom assessment applications ($\overline{x}$=2.58), thanks to the applications they have created with web2.0 tools. However, few of the class teacher candidates have answered "often" or "always".

Test results for gender-based competencies of primary school teacher candidates to use web 2.0 tools

Table 4 shows the results of the competencies of the primary school teacher candidates to use the web 2.0 tools according to gender.

Table 4. Results of gender-related T-test of the competencies of primary teacher candidates to use web 2.0 tools

Woman	133	95,08	38,52		
				-,669	,504
Man	56	99,17	38,13		

According to the results of the gender-related T-test of the competence of the primary school teacher candidates to use web 2.0 tools, a difference in favor of men ($\overline{x}$=4.09) has been detected. However, this difference was not meaningful (p>0.05) (Table 4). The analysis concluded that there was no difference in gender factor.

Test results for computer ownership -based competencies of primary school teacher candidates to use web 2.0 tools

Table 5 provides T-test analysis results based on the computer availability of the competencies of primary school teacher candidates to use web 2.0 tools.

Table 5. t-test results for having a computer

	Computer ownership	f	$\overline{x}$	ss	t	p
I have a computer		112	105,00	37,16		
					3,84	,000
I don't have a computer		76	83,84	36,88		

A difference in favor of those who have a computer ($\overline{x}$=21.16) has been detected as a result of the t-test of the ability of the class teacher candidates to use the web 2.0 tools based on the factor of having a computer. It has also been concluded that this difference makes sense (p<0.05). According to these results, the computer ownership factor may have an impact on the ability to use web 2.0 tools for primary school teacher candidates.

Descriptive analysis of the competencies of primary school teacher candidates to use web 2.0 tools based on computer use level

Table 6 provides descriptive analysis of the competencies of primary school teacher candidates to use web 2.0 tools based on their computer use levels.

Table 6. Descriptive analysis of the competencies of primary school teacher candidates to use web 2.0 tools based on computer use levels

Computer usage levels	f	$\bar{x}$	ss
Bad	59	78,59	42,55
Middle	85	98,83	33,72
Good	44	116,04	29,76
total	188	96,51	38,33

When Table 6 is examined, the highest average belongs to the primary school teacher candidates who have a good level of using the computer ($\bar{x}$= 116.04). The lowest average belongs to the primary school teacher candidates with bad computer usage level ($\bar{x}$=78.59). The average of the primary school teacher candidates with medium level of computer use was found to be $\bar{x}$= 98.83.

3.6. ANOVA analysis results of the competencies of primary school teacher candidates to use web 2.0 tools based on computer usage levels

Table 7 provides ANOVA analysis results based on the computer usage levels of the competencies of the primary teacher candidates to use the web 2.0 tools.

Table 7. Results of ANOVA analysis of the competencies of primary school teacher candidates to use web 2.0 tools based on computer usage levels

	Squares total	sd	Squares average	F	p
Among the groups	36191,138	2	18095,569		
Inside of the groups	238677,840	185	1290,150	14,026	,000
Total	274868,979	187			

Table 7 was determined that the differences between the averages of primary teacher candidates who were grouped by the level of use of the computer were significant as a result of the ANOVA analysis (p<0.05, F=14.026).

Multiple comparison results of primary school teachers' competencies in using web 2.0 tools according to their computer usage levels.

Table 8 provides multiple comparison results based on the levels of computer usage of the competencies of Class teacher candidates to use web 2.0 tools.

Table 8. Multiple comparison results for the levels of computer use of the ability of primary school teacher candidates to use web 2.0 tools

Computer use levels		Computer use levels	Average difference	standard error
	bad	middle	-20,24207*	6,08648
		good	-37,45223*	7,15462
Computer use levels	middle	bad	20,24207*	6,08648
		good	-17,21016*	6,67082
	good	bad	37,45223*	7,15462
		middle	17,21016*	6,67082

The multi-benchmark found that the class teacher candidates with a good level of computer use were significantly higher than the class teacher candidates with a moderate and poor level of use of the computer (Table 8). According to these results, the levels of use of computers for classroom teachers may have an impact on the ability to use web 2.0 tools.

DISCUSSION, RESULTS AND SUGGESTIONS

According to the results obtained from this research on the students of the primary school teacher who continue to study and study at Elâzig Fırat University there was no significant difference in gender, but there was a significant difference between the levels of having a computer and using computers. When we look at the gender factor, male class teacher candidates have higher averages than female primary school teacher candidates. But that no significant difference Similar to our study, in the research of Demirezen and Keleş (2020) on examining the technopedagogical content knowledge competencies of teachers according to various variables, no significant difference was found in the proficiency levels of the participants by gender. In their study, Özçelik and Kurt (2007) did not find a significant difference between teachers computer self-efficacy levels according to the gender variable.In the İşman (2002) research, he found no significant difference between the use of education technologies according to gender of teachers. Yılmaz (2016) research found no significant difference between the technology attitum scores of teachers in education according to gender. In Seferoğlu and Akbıyık (2005) concluded in their study that self-efficacy perceptions towards computers did not change according to gender. As the reason for the no significant difference, we can conclude that equality of opportunity in education is provided today.However, if there is a difference in averages, we can comment that opportunity equality is not fully achieved, and we need to implement a variety of solutions to reduce the difference in averages. For example, a variety of technology trainings can be given for women that we can

consider positive discrimination. In some studies, different results have been achieved from the results we have achieved. Yaman (2007) stated that women approached more positively than men in his study to determine Turkish teacher candidates competence and perceptions on the use of technology in Turkish teaching.Hashim and Musthapa (2004) have indicated that female students are more positive in working and learning with computers. Som-Vural (2016) the study of digital citizenship indicators from the perspective of university students found significant differences in women's interest. Galpin & Sander (2007) in their research, women teachers are more sensitive to using computer and teaching technology in education than male teachers . Dargut and Çelik (2014) found a significant difference in favor of women in their study to determine the attitudes of Turkish teacher candidates towards the use of technology in teaching.For results that have significant differences in favor of women, we need to investigate the underlying causes and try to reduce these differences by providing various trainings for men. And the underlying problems need to be resolved. In the study of Shapka and Ferrari (2003) in which they investigated the attitudes of teacher candidates towards computers, they stated that the attitudes of men towards computers were not superior to women.Kubiatko et al.. (2010) in their study on the use of teacher candidates and information and communication technologies, they concluded that male teacher candidates have high attitude scores from female teacher candidates. In the study of Çetin (2008) in which he examined the self-efficacy perceptions of the primary school teacher candidates at Marmara University, a significant difference was found in the self-efficacy perception scores of the pre-service classroom teachers according to gender.This significant difference has been made in favor of men. Şahin and Namlı (2019) found that the attitudes of male teacher candidates were more positive in their study on examining the attitudes of teacher candidates to use technology in education. Uyduran (2018) found a significant difference according to gender in his study in which he examined the level of use of information technologies by primary school teachers. And this difference is in favor of men. It can be said that the reason for the differences in favor of men is that men show more interest in technology than women and that they are more intertwined with technology due to their social roles.

When we look at the variable of having a computer, the average of the primary school teacher candidates who have a computer is higher than the primary school teacher candidates who don't have a computer. And the difference between them was found to be significant.Similar to the results in our work, Özcan (2021) stated that teachers with computers have more competence than those who do not have the computer. Aktürk and Delen (2020) stated that the technology acceptance level of teachers who use computers in education is higher than those who do not. Ngeno et al.. (2020) indicates that teachers need to be more exposed to computers and technology to increase their technology capacity. In Inan and Lowther (2010) research, teachers access to computers has been effective in technology integration into education. Yılmaz and Koparan (2015) stated that teachers with computers have higher beliefs in their studies of computer technology use in maths teaching. Kara (2011) stated that the fact that teachers who work in primary schools have computers has a positive effect on their attitudes to use technology in education.

When we look at computer usage levels, primary school teacher candidates with a good level of computing are more average than teachers with medium and poor computer usage. And this

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difference was found in the favor of a primary school teacher candidate with a good level of computer use. According to this, it can be said that the level of using web 2.0 tools of primary school teacher candidates is higher in those with a high level of computer use. Similar to the results of our study, Aypay and Özbaşı (2008) state that those with a high level of computer use increase their competence in using technology. Ateş and Altun (2008) determined that computer teacher candidates attitudes towards remote education differ according to their computer use skills. Based on these results, we can recommend improving the levels of use of the teachers.

Suggestions

The following recommendations may be made as a result of this research, which aims to determine the competencies of class teacher candidates to use web 2.0 tools.
• Training should be provided to improve the levels of use of the computer for the prospective teachers.
• Teacher candidates ability to use the web 2.0 tools may be given the ideas of teacher candidates for their deficiency and needs.
• Technology should be used in the education process and teacher candidates should be given practical skills.
• Technology-related learning content should be prepared on a variety of platforms for teacher candidates.
• Web 2.0 tools should be used to conduct the lectures.
• It is important to identify the attitudes of teacher candidates against web 2.0 tools and to organize pre-service training environments.
• For students in universities, classes with computers should be created.
• Courses on the use of web 2.0 tools should be given at universities.
• The average difference in the ability to use web 2.0 tools between female and male class teacher candidates should be reduced by providing a variety of assignments and activities to any primary school teacher candidate who needs it.
• Environments where teacher candidates can use web 2.0 tools in universities should be prepared.
• Primary school teacher candidates should make presentations with web 2.0 applications in the lessons.
• Primary school teacher candidates should be intertwined with technology.

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