Osmangazi Journal of Educational Research **Volume 10 (Special Issue) 2023**

100th Anniversary of the Republic of Türkiye

RESEARCH Open Access

Suggested Citation: Arslan, M., & Demirci, C. (2023). Web 2.0 Rapid Content Development Self-Efficacy Perception Levels of English Teachers. *Osmangazi Journal of Educational Research* (Special Issue), 318-338.

Submitted: 28/09/2023 **Revised:** 23/10/2023 **Accepted:** 25/10/2023 **DOI: 10.59409/ojer.1367573**

Web 2.0 Rapid Content Development Self-Efficacy Perception Levels of English Teachers

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Abstract. The aim of this research is to determine the Web 2.0 rapid content development self-efficacy perception levels of English teachers. In this study general survey model, one of the quantitative research methods, was used as the research design. For this purpose, "Web 2.0 Rapid Content Development Self-Efficacy Scale for Educational Purposes" was used to obtain quantitative data. The research group consists of English teachers working at different schools and levels in Konya city center and its districts. In this study, Mann Whitney-U and Kruskal Wallis tests, which are non-parametric tests, were used because the data collected in the study did not meet the assumption of normal distribution. According to the results of the research, there was no significant difference in any of the Web 2.0 rapid content development self-efficacy perception levels of English teachers according to the variables of gender, working time and school level. In different studies, the working group can be expanded, and experimental studies can be included. When the results obtained from the study are analyzed in general, it is seen that English teachers are competent in developing content using Web 2.0 applications. In this context, it is important for curriculum developers to prepare programs in which technology-supported content can be integrated more while creating new curricula in order to achieve positive results in the field of education.

Keywords. Web 2.0, Self-efficacy, Educational technology, Instructional technology

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Note: *This article is adapted from a master's thesis.

In recent years, technology has been widely used in all areas of education. For this reason, teachers and administrators are expected to review their own technological knowledge and integrate technology into their education curricula (Büyükyavuz & İnal, 2012). Considering that the contribution of technology to education and education to technology is parallel, it is necessary to benefit from technological innovations in every field of education as a requirement of the age. It is almost impossible to think independently of two areas that overlap so much. Innovations in the field of technology bring new perspectives to the education process and enable the curriculum to change and develop. Educational technology is defined by AECT (Association for Educational Communications and Technology) as "ethical practices and studies done by creating, using and managing appropriate technological resources and processes to increase performance and facilitate learning" (2004). In many studies, it has been stated that the contribution of technology to education is at a high level. Delen and Bulut (2011, p. 311), based on the results of PISA 2009 for Turkey, found a positive relationship between the use of ICT and the success of students. According to Hopson, Simms, and Knezek (2002, p. 109) "technology is a key to preparing students to meet the needs of the 21st century and to participate effectively in the work environment of today's society". When an appropriate online activity process to be created with Web 2.0 technologies is combined with face-to-face education, it will enable the creation of a powerful and effective blended learning model (Deperlioğlu & Köse, 2010).

The term Web 2.0 was first introduced to the literature by Tim O'Reilly at a conference on Web technologies in 2004 and has since been accepted as "a radical change from the monopolistic and static use of the Internet to more effective and interactive change" (Enonbun, 2010, p. 18). The usage area of Web 2.0 technologies is expanding rapidly day by day. Web 2.0 technologies make the users' interaction, collaborative work and access to information easy. These features have been pioneering to use of Web 2.0 technologies and its standards in the field of education (Deperlioğlu & Köse, 2010). Teachers need to develop themselves in the field of technology in order to use Web 2.0 tools effectively and efficiently in education. In this context, information should be provided about the self-efficacy levels of teachers to produce content with Web 2.0 tools.

According to Bandura (1977, p. 194) "the perception of self-efficacy is the feeling of having the skills that individuals need to cope with a task. Success is not only having the skills to accomplish a job, but also using these skills effectively and safely". The concept of teacher self-efficacy can be defined as the capacity of teachers to develop methods suitable for the learning levels of students with different learning skills or low motivation and to cope with teaching problems (Küçükyılmaz &

Duban, 2006, p. 4). Tschannen-Moran and Woolfolk Hoy (2001, p. 783) defined teacher self-efficacy as a teacher's belief in his or her efficacy to impart desired target behaviors to a student. Studies show that teachers who do not develop self-efficacy beliefs have difficulty in solving the problems they encounter in the teaching process. For this reason, they have problems in their relations with their students and they prefer more traditional teaching methods. Contrary to this situation, teachers with high self-efficacy beliefs can find different solutions to problems and support their lessons with more student-centered and technology use instead of traditional methods (Henson, 2001, p. 8). Using, teaching and acquiring Web 2.0 tools in the classroom allows the ability to observe and interact with the environment, which is very relevant to their needs (Lemke et al., 2009). Web 2.0 self-efficacy beliefs are extremely important for teachers and a strong spread of how effective their use averages in their classrooms (Abbitt, 2011). As important as academic studies on content knowledge are in the training process of teachers, it is equally important to train teachers who are self-confident, have high self-efficacy, and can find practical and functional solutions to the problems they encounter. Teachers with high self-efficacy can both communicate better with their students and adapt more easily to the teaching methods required by the age because they are open to innovations. Besides, it can create collaborative and highly interactive learning environments, Web 2.0 applications also provide social learning environments and help improve the use of technology. For this reason, Web 2.0 applications should be included especially in teaching practice courses.

When our education system is examined, foreign language education is a serious problem that has been going on for years in Turkey and is tried to be solved by designing different teaching programs. In order for foreign language education to be effective and efficient, many different areas such as student readiness, teacher qualifications, school environment, tools and equipment used in foreign language education, methods used, and technology use in education must coexist. However, one of the most important factors for effective language education to occur is to attract students' attention and reveal their desire to learn a foreign language. The best way to do this is to increase the motivation of students and remove their prejudices against learning a foreign language. In order to achieve this, it is necessary to make the best use of the world of technology, where new developments are experienced every day, in the field of education. In order for this to happen, teachers especially need to develop themselves technologically and be able to use educational technologies efficiently in their lessons.

In order to develop teachers' self-efficacy in the field of technology, activities such as making comments, multiple interactions and observing different experiences should be included, especially

in practice lessons. The use of Web 2.0 applications in lessons will both contribute to the development of teachers' self-efficacy and help to create more social, collaborative, highly interactive and participatory lesson environments (Durusoy, 2011). Furthermore, digital technology can help create immersive and authentic tasks. Students can work with real-world problems and, due to the simplifed access to information, also deal with a variety of new problems. In this way, the tasks become relevant and meaningful to the students, which Walkington and Bernacki (2018) emphasize as a crucial aspect of personalized instruction.

The developments in the field of Computer and Communication Technologies (ICT) are closely followed by the Ministry of National Education and it is aimed to be used in all areas of education. For this purpose, it is important to provide adequate infrastructure in educational institutions. In this context, it is aimed to use educational technologies effectively by students and teachers. “However, the technological development of learning environments alone may not be sufficient to increase the quality of educational activities in these environments” (Sezgin, Erdoğan, & Erdoğan, 2017, p.196). In order for the existing resources to be efficient and effective, the most responsibility falls on the teachers. Teachers' attitudes towards educational technologies and their frequency of use significantly affect success in education.

The use of Web 2.0 applications, the popularity of which is increasing day by day, plays an important role in making students love foreign language learning. There are web 2.0 applications used for many different purposes in the education and training process. When these applications are preferred, their suitability for the purpose of the course and the desired outcomes are taken into consideration. Web 2.0 applications are used by teachers for many different purposes such as measurement and evaluation, game creation, presentation preparation, digital story preparation, survey preparation, 3D tools, digital board preparation, animation preparation, mind mapping. With Web 2.0 applications, more entertaining lessons can be designed, students' interest and motivation in the lesson can be increased, and thus a more permanent learning can be achieved. According to Coşgun & Savaş (2019), ICT integration in language classrooms makes language classes more interactive, flexible, and innovative due to various online resources as tools for valuable professional development. Harris and Rea (2009, p. 137) stated that Web 2.0 technologies have expanded classrooms and made the world itself a classroom. Grosseck (2009, p. 478) lists the advantages of using Web 2.0 applications in education as follows;

- Reduction of costs,
- Flexibility in choosing technologies,
- Easy and fast access to information anytime and anywhere,
- Integrating Web 2.0 technologies into teaching-learning activities,
- Provision of information and collaboration opportunities by social bookmarking services,
- Control access to resources by authenticating users,
- Share accumulated experiences and resources (blogs, microblogs, wikis, flickr, youtube),
- Platform independence; a computer with a browser and internet connection is sufficient,
- Compatibility with elements of the educational field and current contextual dynamics;
- Ease of use (minimum skills in using the Internet),
- Reliability over a long period of use,
- Less time and energy spent searching and managing information,
- Focusing mainly on didactic innovation, not on technology,
- Creating digital content.

In summary, in-class or out-of-class activities prepared with Web 2.0 applications help students acquire all four language skills that constitute the basic basis of foreign language education. In this study, the competencies of English teachers to develop fast content with Web 2.0 applications were investigated. For this purpose, answers to the following problems and sub-problems were sought.

1. What is the Web 2.0 rapid content development self-efficacy perception level of English teachers?

a) Do English teachers' educational Web 2.0 rapid content development self-efficacy perception levels change according to the gender variable?

b) Do English teachers' Web 2.0 rapid content development self-efficacy perception levels change according to their working time in the profession?

c) Do English teachers' Web 2.0 rapid content development self-efficacy perception levels change according to the type of school they work in?

Method

Research Design

This study was produced from the quantitative research method part of a comprehensive master's thesis using a mixed research method. General survey model, one of the quantitative research methods, was used as the research design. With the general survey model, it is aimed to reach a general judgment about a sample group that can represent the universe in a universe with a large number of members (Karasar, 2005).

Sample Group

The scale used to collect data was applied to English teachers working in primary, secondary and high school schools in Konya. If the whole universe cannot be reached in a study, a study group (sample) can be selected to represent the universe. This will make it easier for the researcher to continue his research (Ural & Kılıç, 2010). For this reason, English teachers working at different schools and levels in Konya were included in the study as a sample group. In the selection of the sample, no restrictions were made in areas such as age, seniority, level of employment (primary school, secondary school, high school) and gender. A total of 225 English teachers; 161 women, 64 men, participated in the study. Demographic characteristics of the participants are given in Table 1.

Table 1.

Demographic Characteristics of the Participants

		n	%
Gender	Female	161	71.6
	Male	64	28.4
	Total	225	100
Working experience in the profession	1-5	18	8
	6-10	47	20.9
	11-15	61	27.1
	16-20	64	28.4
	21 years and above	35	15.6
	Total	225	100
School level you work at	Primary School	29	12.9
	Secondary School	124	55.1
	High School	72	32.0
	Total	225	100

As can be seen in Table 1, 71.6% of the English teachers participating in the research are women and 28.4% are men. When we look at the working experience of the participants in the profession, it is seen that 8% of them are 1-5 years, 20.9% are 6-10 years, 27.1% are 16-20 years and 15.6% are 21 years or more. According to these results, it is seen that the highest participation in the survey is made by teachers who have worked for 11-20 years. When the school level is examined, it is seen that 12.9% of the participants are primary school teachers, 55.1% are secondary school teachers and 32% are high school teachers.

Data Collection Tools and Methods

The 'Educational Web 2.0 Rapid Content Development Self-Efficacy Perception Scale' developed by Birişçi, Kul, Aksu, Akaslan, and Çelik (2018) was used to collect data. The developed scale consists of 21 items under 3 factors. These factors are; preparation, presentation and evaluation. A 5-point Likert-type rating was used in the scale. The items in the scale are as follows; 5= 'I am very competent', 4= 'I am sufficient', 3= 'I am moderately competent', 2= 'I am inadequate', and 1= 'I am very inadequate'. The possible scores for this scale range from 21 to 105. According to this, the high scores that people get from “EW2RCDSPS” mean that they have a high level of self-efficacy perceptions in terms of using Web 2.0 tools educationally. The reliability and validity scores of the original scale used in the study are as follows; The Cronbach's Alpha reliability coefficient obtained for the entire scale was calculated as .955, .935 for the preparation sub-dimension, .854 for the sharing sub-dimension, and .848 for the measurement and evaluation sub-dimension. According to this result, the reliability of the scale and its sub-dimensions is high. After the EFA and CFA analyzes of the scale, it was stated that the scale had construct validity.

Data Collection Process

The scale used to collect the data was converted into a questionnaire in two parts via Google Forms and sent to the participants via e-mail and the data were collected online. The first part was prepared as the "Teacher Information Form", which includes demographic information, namely, the participants' gender, seniority year and the type of school they worked at, and the second part was prepared to include scale items. Participants were informed by stating that participation in the survey was on a voluntary basis and no special information was requested.

Data Analysis

The data obtained from the scale applied to English teachers were analyzed and interpreted through the SPSS 23 package program. Descriptive statistical methods such as number, percentage,

mean and standard deviation were used for the analysis of the data. In line with the data obtained, teachers' self-efficacy in developing fast content with Web 2.0 applications was evaluated according to gender, seniority and school types.

Results

In the study in which English teachers' Web 2.0 applications and rapid content development self-efficacy perception levels were investigated, the "Web 2.0 Rapid Content Development Self-Efficacy Scale for Educational Purposes" was applied to the teachers. First of all, three different normality analyses were performed in order to understand whether the obtained data showed a normal distribution. While performing the normality analysis, the whole scale and its sub-factors consisting of "preparation, presentation and evaluation" sections were examined separately. Table 2 shows the results of the normality analysis.

Table 2.

Normality Analysis Results of the Web 2.0 Rapid Content Development Self-Efficacy Scale for Educational Purposes

Analysis	Scale Mean	1^{st} Factor	2^{nd} Factor	3^{rd} Factor
Skewness/Kurtosis Analysis	+/+	+/+	+/+	+/+
Kolmogorov-Smirnova Analysis	-	-	-	-
Frequency Distribution Chart	-	-	-	-

(+): Normal Distribution (Parametric)

(-): Non-Normal Distribution (Non-parametric)

As can be seen in Table 2, the scale was evaluated as a whole with its sub-dimensions, and as a result of the analyses made, the data did not show a normal distribution according to the "skewness-kurtosis" values. According to “Kolmogorov-Smirnova” values and “histogram” graphs, it was determined that the data did not show normal distribution, that is, they were non-parametric. The analyses made are analyzed in detail in Tables 3, 4 and 5.

Table 3.

Skewness-Kurtosis Analysis Results of Sub-Dimensions for Web 2.0 Rapid Content Development Self-Efficacy Scale for Educational Purposes

		Statistic	Std. Error
Preparation Mean	Skewness	-0.446	0.162
	Kurtosis	0.783	0.323
Presentation Mean	Skewness	-0.687	0.162
	Kurtosis	0.886	0.323
Evaluation Mean	Skewness	-0.463	0.162
	Kurtosis	0.516	0.323

Table 4.

Skewness-Kurtosis Analysis Results for the Web 2.0 Rapid Content Development Self-Efficacy Scale for Educational Purposes

		Statistic	Std. Error
Total Mean	Skewness	-0.443	0.162
	Kurtosis	0.831	0.323

When Tables 3 and 4 are examined, since the Skewness-Kurtosis values of the total and sub-dimensions of the scale are between -1 and +1, the data show a normal distribution according to these tests. According to Büyüköztürk (2011, p. 21), if the arithmetic mean, median and mode are close to each other in the distribution of scores in a data set, and if the Skewness - Kurtosis values are between -1 and +1, it can be said that the scores show a normal distribution. However, since it cannot be assumed that the data are normally distributed based on only one analysis, other analysis results are also considered.

Table 5.

Kolmogorov-Smirnova and Shapiro-Wilk Analysis Results for Web 2.0 Rapid Content Development Self-Efficacy Scale for Educational Purposes and Its Sub-Dimensions

	Kolmogorov-Smirnova			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Preparation	0.127	225	0	0.932	225	0
Presentation	0.16	225	0	0.882	225	0
Evaluation	0.152	225	0	0.906	225	0
Total Mean	0.114	225	0	0.924	225	0

If the sample size is greater than 35, the Kolmogorov-Smirnov test (McKillup, 2012, p. 77) and if it is small, the Shapiro-Wilk test should be considered (Shapiro and Wilk, 1965, p. 594). Since the sample size was larger than 35, Kolmogorov-Smirnova test results were taken into consideration in the study. According to the results of the analysis, it is seen that the data are not normally distributed because the self-efficacy perception scores of the teachers participating in the research were Sig.=.0 and p<.05.

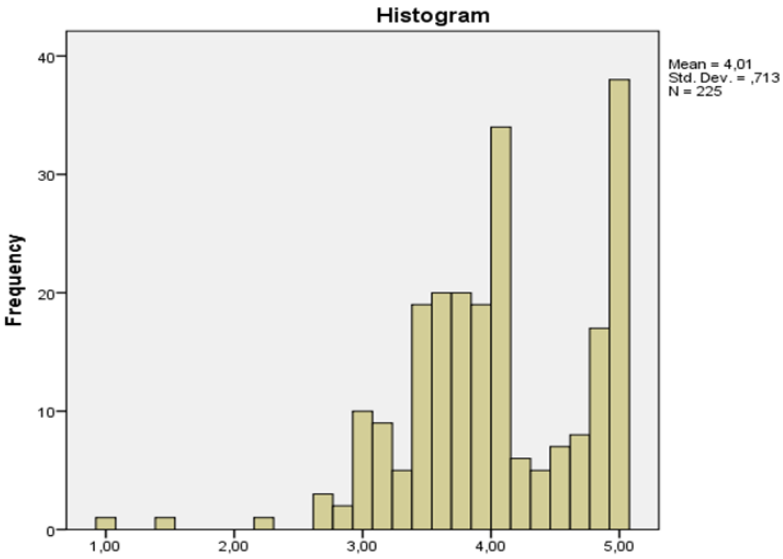

Figure 1. Histogram Chart for the Preparation Sub-Dimension of the Web 2.0 Rapid Content Development Self-Efficacy Scale for Educational Purposes

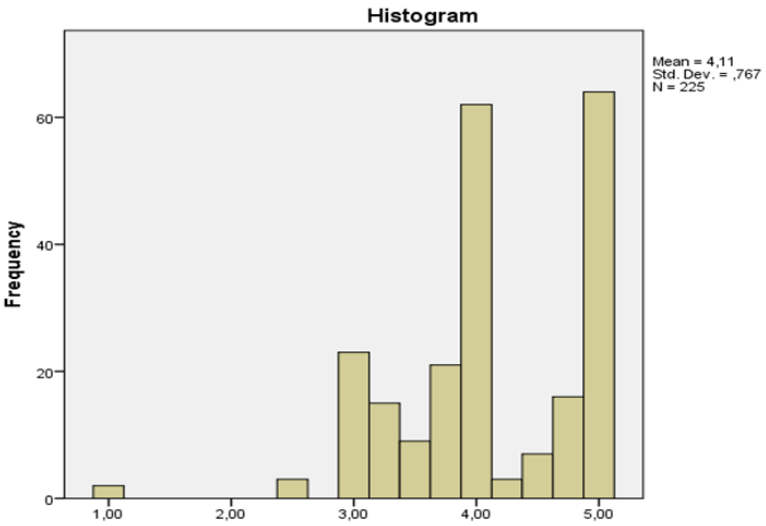

Figure 2. Histogram Chart for the Presentation Sub-Dimension of the Web 2.0 Rapid Content Development Self-Efficacy Scale for Educational Purposes

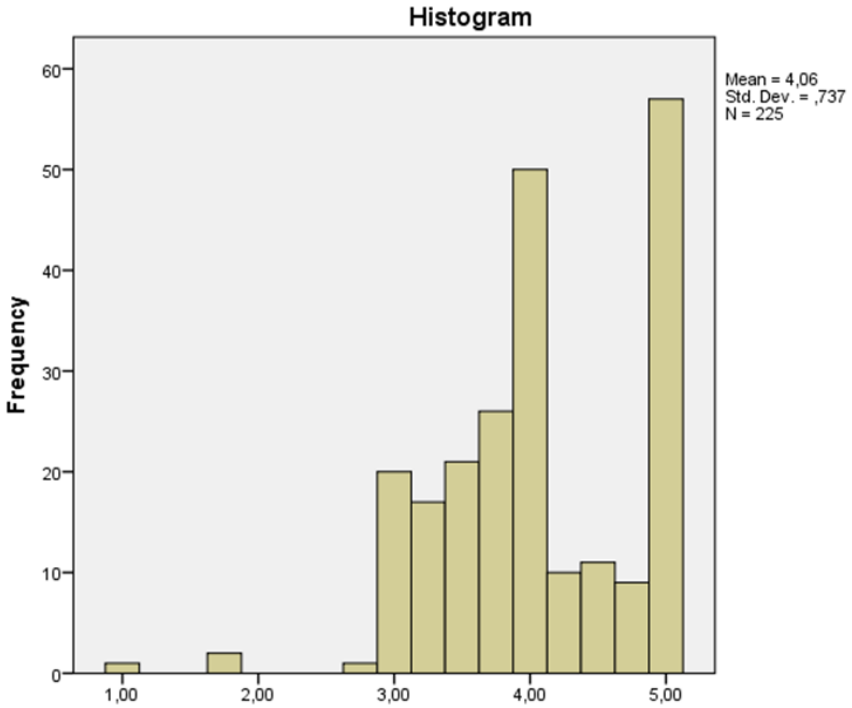

Figure 3. Histogram Chart for the Evaluation Sub-Dimension of the Web 2.0 Rapid Content Development Self-Efficacy Scale for Educational Purposes

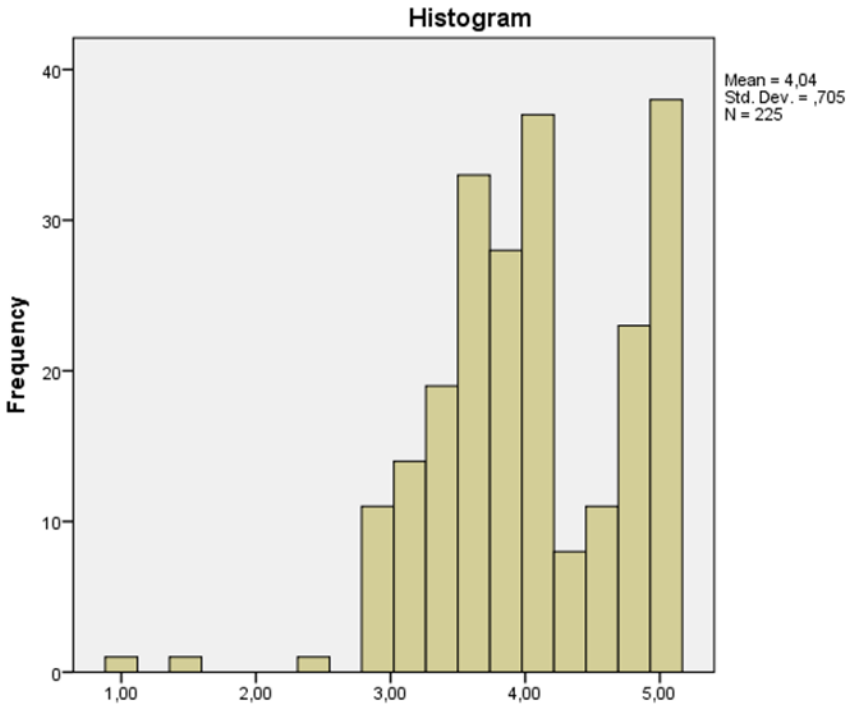

Figure 4. Histogram Chart for the Web 2.0 Rapid Content Development Self-Efficacy Scale for Educational Purposes

Figures 1, 2, 3 and 4 show the graphs of the Educational Web 2.0 Rapid Content Development Self-Efficacy Scale and its sub-factors applied to English teachers. When the graphs are examined, it is clearly seen that the data are concentrated in a right skewed way and the data do not show a normal distribution. Therefore, non-parametric tests were used in the analysis of the data. In this context, Mann Whitney-U and Kruskal Wallis tests, which are non-parametric tests, were used because the data collected in the study did not meet the assumption of normal distribution. First of all, the first sub-problem of the research, "Does English teachers' educational Web 2.0 rapid content development self-efficacy levels change according to the gender variable?" search for an answer to the question. For this purpose, the non-parametric Mann-Whitney U test was used to compare two independent groups. Test results are shown in Table 6.

Table 6.

Investigation of English Teachers' Perceptions of Self-Efficacy for Educational Web 2.0 Rapid Content Development by Gender Variable

Gender	N	Mean Rank	Sum Rank	U	Z	P
Female	161	109.85	17685.500	4644.500	-1.155	.248
Male	64	120.93	7739.500			

When the scores obtained from the total test are examined, it is seen that there is no significant difference between the Web 2.0 rapid content development self-efficacy of English teachers in terms of gender (p=.248). In other words, Web 2.0 rapid content development self-efficacy levels of female and male teachers are close to each other. The results obtained from the examination of the sub-dimensions of the scale according to the gender variable are shown in Table 7.

Table 7.

Examination of the Sub-Dimensions of the Web 2.0 Rapid Content Development Self-Efficacy Scale for Educational Purposes by Gender

Sub-Dimensions	Gender	N	Mean Rank	Sum Rank	U	Z	P
Preparation	Female	161	110.48	17786.50	4745.500	-.926	.354
	Male	64	119.33	7638.50			
Presentation	Female	161	108.68	17498.00	4457.000	-1.616	.106
	Male	64	123.86	7927.00			
Evauation	Female	161	108.99	17547.50	4506.500	-1.489	.137
	Male	64	123.09	7877.50			

When the “preparation, presentation and evaluation” sub-dimensions of the scale are examined separately according to gender, it is seen that the Web 2.0 rapid content development self-efficacy perception levels of male and female teachers do not change according to gender (p=.354, p=.106, p=.137).

Secondly, the second sub-problem of the research, “Do English teachers' Web 2.0 rapid content development self-efficacy levels change according to their working time in the profession?” search for an answer to the question. In order to find an answer to this problem, the Kruskal Wallis test was applied. The Kruskal Wallis test is a method used to test the significance of the difference between the means of three or more groups in data that do not show normal distribution. The results of the Kruskal Wallis test are given in Table 8.

Table 8.

Examination of English Teachers' Self-Efficacy on Web 2.0 Rapid Content Development for Educational Purposes According to the Variable of Working Time in the Profession

Working Time	N	Mean Rank	sd	x	p
1-5 years	18	122.33			
6-10 years	47	125.32			
11-15 years	61	111.18	4	3.085	0.544
16-20 years	64	106.9			
21 years and over	35	105.99			
Total	225				

As can be seen in Table 8, the years of experience of the teachers participating in the research is concentrated in the groups of 11-15 years and 16-20 years, but as a result of the test, it is seen that there is no significant difference between the Web 2.0 rapid content development self-efficacy perceptions of the English teachers according to the working time (p=.544). The results obtained from the examination of the sub-dimensions of the scale according to the working time variable are shown in Table 9.

Table 9.

Examination of Scale Sub-Dimensions According to Working Time

Sub-Dimensions	Working Time	N	Mean Rank	sd	x	p
Preparation	1-5 years	18	122.25	4	2.67	.614
	6-10 years	47	123.85			
	11-15 years	61	112.33			
	16-20 years	64	107.08			
	21 years and over	35	105.67			
	Total	225				
Presentation	1-5 years	18	128.81	4	6.783	.148
	6-10 years	47	129.98			
	11-15 years	61	110.10			
	16-20 years	64	105.62			
	21 years and over	35	100.63			
	Total	225				
Evaluation	1-5 years	18	114.86	4	2.119	.714
	6-10 years	47	124.74			
	11-15 years	61	109.24			
	16-20 years	64	109.65			
	21 years and over	35	108.96			
	Total	225				

When the test results are examined according to the "preparation, presentation and evaluation" sections of the scale, which consists of three sub-dimensions, it is seen that there is no significant difference between the Web 2.0 rapid content development self-efficacy perceptions of English teachers according to their working time in the profession, as in the whole scale (p=.614, p=.148, p=.714).

The last sub-problem of the research, “Does the Web 2.0 rapid content development self-efficacy levels of English teachers change according to the type of school they work in?” In order to find an answer to the question, the Kruskal Wallis test was conducted. Teachers are divided into three sections according to the school level they work in: primary school, secondary school and high school. The test results obtained are shown in Table 10.

Table 10.

Examination of English Teachers' Perceptions of Self-Efficacy for Educational Web 2.0 Rapid Content Development According to the Variable of School Level

School Level	N	Mean Rank	sd	x	p
Primary School	18	124.55	2	3.440	.179
Secondary School	47	105.83			
High School	61	120.69			

According to the results obtained for the whole scale, it was seen that the self-efficacy perceptions of English teachers for educational Web 2.0 rapid content development did not show a significant difference according to the school level variable (p=.179). In other words, the Web 2.0 rapid content development self-efficacy perceptions of English teachers working in primary, secondary and high schools are close to each other. The results of the sub-dimensions of the scale are shown in Table 11.

Table 11.

Examination of Scale Sub-Dimensions by School Level

Sub-Dimensions	School Level	N	Mean Rank	sd	x	p
Preparation	Primary School	29	123.95	2	3.368	.186
	Secondary School	124	105.89			
	High School	72	120.83			
	Total	225				
Presentation	Primary School	29	121.50	2	3.822	.148
	Secondary School	124	105.53			
	High School	72	122.44			
	Total	225				
Evaluation	Primary School	29	120.84	2	2.635	.268
	Secondary School	124	106.74			
	High School	72	120.62			
	Total	225				

When the sub-dimensions of the scale were examined according to the school level, it was seen that the English teachers' educational Web 2.0 rapid content development self-

efficacy perceptions did not show a significant difference according to the school level variable (p=.186, p=.148, p=.268).

Discussion and Conclusion

This study, in which English teachers' Web 2.0 applications and rapid content development self-efficacy perception levels were taken, was carried out with English teachers working in primary and secondary education institutions in Konya. In line with the findings obtained in the research, the following results were obtained.

The first sub-problem of the study, “Does the level of self-efficacy of English teachers for educational Web 2.0 rapid content development change according to the gender variable?” When the scores obtained from the total of the test and the "preparation, presentation and evaluation" sub-dimensions of the scale were examined separately according to gender, it was seen that there was no significant difference between the Web 2.0 rapid content development self-efficacy perceptions of English teachers in terms of gender. In other words, it was concluded that the Web 2.0 rapid content development self-efficacy perception levels of female and male teachers were close to each other. Keskin (2021), in his study, stated that when the self-efficacy status of physical education teachers against Web 2.0 tools is examined according to the gender variable, there is a statistically significant difference in the sub-dimensions of preparation and evaluation in the scale used. He concluded that the difference in the presentation sub-dimension was not statistically significant. In a different study, it was concluded that the Web 2.0 rapid content development self-efficacy perception levels of male and female participants were close to each other (Eser, 2020). In another study, it was concluded that the scores of pre-service teachers' Web 2.0 rapid content development self-efficacy belief levels did not differ significantly according to the gender variable (Say & Yıldırım, 2020). In his study on secondary school teachers, Onbaşılı (2020) concluded that there was no significant difference in the self-efficacy of Web 2.0 tools between male and female teachers, that is, gender did not have any effect on Web 2.0 tools self-efficacy. As can be seen, similar results have been found in many studies. Akkoyunlu and Orhan (2003) concluded in their study that men have more computer skills necessary for Web 2.0 rapid content development. However, when the studies conducted in recent years are examined, there are fewer differences in terms of gender variable. The reason for this can be thought of as the increasing interest and necessity in educational technologies over the past years. It can be concluded that the transition to distance education, especially due to the Covid-19 pandemic, and that teachers may have improved themselves more in the field of technology in this process. For instance,

in his study, Moorhouse (2023) stated that "most of the teachers started using digital technologies regularly due to the online teaching necessitated by the pandemic but decided to continue to use them even after in-person teaching resumed".

For the second sub-problem of the research, the working hours of the English teachers participating in the research were divided into five groups as "1-5 years, 6-10 years, 11-15 years, 16-20 years, 21 years and above". The second sub-problem, "Does the Web 2.0 rapid content development self-efficacy perception levels of English teachers change according to their working time in the profession?" According to the data obtained from both the total of the scale and the sub-dimensions of the scale for the question, it was seen that there was no significant difference between Web 2.0 applications and rapid content development self-efficacy perception levels according to the variable of teachers' working time in the profession. In a similar study, when the awareness levels of faculty members and lecturers for Web 2.0 applications were analyzed according to their working time in the field, it was revealed that the highest level of awareness about Web 2.0 tools belonged to the participants with 6-10 years of experience (Daşkın, 2017). In other words, while there is no difference between the teachers working in primary and secondary education according to their working hours, there is a significant difference among the instructors working in higher education according to their working hours. It can be thought that this difference arises due to the fact that teachers working in primary and secondary schools mostly use Web 2.0 applications in their lessons in order to motivate students to the lesson, to attract their attention or to make the lessons more enjoyable. Keskin (2021, p. 58) stated in his study that there was a statistically significant difference in the preparation and evaluation sub-dimensions of physical education teachers' Web 2.0 rapid content development self-efficacy beliefs according to the variable of years of service, but there was no significant difference in the presentation sub-dimension.

Regarding the third sub-problem of the research, "Do the Web 2.0 rapid content development self-efficacy perception levels of English teachers change according to the type of school they work in?" search for an answer to the question. When the data obtained were examined, it was seen that there was no significant difference between Web 2.0 applications and rapid content development self-efficacy perception levels according to the school type variables grouped as primary school, secondary school and high school. However, when the literature was searched, no study was found that investigated this variable. The reason for this can be explained by the fact that the studies conducted were mostly on pre-service teachers or instructors. This can be explained by the fact that

international projects such as eTwinning and Erasmus Plus are usually carried out by English teachers at all school levels and Web 2.0 applications are frequently used in these projects.

When the results obtained from the study are analyzed in general, it is seen that English teachers are competent in developing content using Web 2.0 applications. In this context, it is important for curriculum developers to prepare programs in which technology-supported content can be integrated more while creating new curricula in order to achieve positive results in the field of education. In addition, the fact that many Web 2.0 applications are paid over time or the ability to use basic features for free is often a problem for teachers. In order to prevent this situation, the Ministry of National Education should develop free applications within its own organization and make them available to teachers.

Recommendations

1. The research is limited to English teachers working in public and private primary and secondary schools affiliated to Konya Provincial Directorate of National Education. Further studies can be done with a larger study group.

2. The data obtained from the research could only be collected online due to the Covid 19 pandemic, it is assumed that the data obtained may mostly belong to the participants with high technological competences. Therefore, in future studies, more detailed results can be obtained by collecting data both face-to-face and online.

3. Only teachers working in primary and secondary education were included in the study. Comparisons can be made by including academicians working in higher education in future studies.

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Conflict of Interest

It has been reported by the authors that there is no conflict of interest.

Funding

No funding was received.

Ethical Standards

The formal ethics approval was granted by the Social and Human Sciences Research and Publication Ethics Committee of Eskişehir Osmangazi University. We conducted the study in accordance with the Helsinki Declaration in 1975.

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