Examination of Preferences of Teachers for Educational Program Design Approaches

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Article Info	Abstract
	This study aims to examine preferences of teachers for curriculum design approaches in terms of various variables. In this study, the relational survey model, one of the quantitative research methods, was used. The population of the study consists of branch teachers working in all types and levels in public schools in the central districts of a province of Turkey. Since the population of the study is very large, sampling was made using the typical case sampling method. The sample of this study consists of 415 teachers who voluntarily supported it. During the study process, the data necessary to reach the goal were obtained by using two scales: "Personal Information Form" and "Teachers' Curriculum Design Approach Preferences Scale". Since the data collected from the scale showed normal distribution, t-test from parametric tests, one-way ANOVA test and Tukey test from Post Hoc tests were used to determine which groups differed in multiple comparisons. In the analysis of all data, the value of 0.05 was taken as the confidence level. As a result of the analysis of the findings obtained from the study, it was stated that the teachers' scores on the curriculum design approach scale were high, and they preferred to use problem-centered curriculum design approaches most in the learning-teaching processes, and at least they preferred to use subject-centered curriculum design approaches.

Introduction

The individual's ability to recognize his/her own individual interests and abilities, to make sense of what is happening around him/her, and to analyze and interpret the events happening in the global world in the best way depends on the quality of the education he/she receives. Today's world now needs well-educated qualified people in almost every field who understand and embrace universal values. Today, expectations from the individual have changed compared to the past. These expectations show themselves as self-sufficient, researching, questioning, problem-solving, and creative features. Modern education systems have been in search of gaining these characteristics to individuals (Akyürek & Şahin, 2013). Marsh (2004) draws attention to the rapid change in our age and states that the objectives, content, teaching strategies and evaluation process in education are significantly affected by this change. Education, which includes various objectives in line with individual and social benefit, needs to be systematically prepared, developed and evaluated in order to achieve these objectives. One of the most important studies that should be done in order to bring education to a systematic structure is the creation of

education programs (Kozikoğlu, & Uygun, 2018). The concept of curriculum is a concept that dates back to the first century BC. Demirel (2012) states that in the first century B.C. in Rome, the oval-shaped running track on which race cars raced was called "running track" in Latin (curriculum), and it was also used in education in the sense of training program (curriculum) "path followed" over time. As Varış (1998) and Kısakürek (1969) emphasized, education programs guide the studies from the behaviour standards of the trainees or learners to learning and teaching activities and play an intermediary role. While planning the training program, it should first start with the design of the program (Alcı, 2012). Educational program designs have important duties in coordinating, arranging, shaping, and implementing the four basic elements of education programs.

Demirel (2012) defined the curriculum design as one of the three dimensions of curriculum development, together with its application and evaluation dimensions, as well as the most important element in which the understanding and philosophy of the curriculum is revealed. Program designs form the basis for determining the objectives, organizing the content, methods-techniques to be applied, and assessment-evaluation processes to be carried out (Saylor, Alexander & Lewis, 1981). According to Ornstein & Hunkins, program design is "a process related to the organization of the parts that make up the program and the nature of the parts" (Ornstein & Hunkins, 1993). Curriculum design approaches are divided into three as subject-centered, student/child-centered, and society/problem-centered (Aykaç, 2014; Sönmez, 2012 & Alcı, 2012). In the subject-centered design model, the content is in the center and the gains should be arranged according to the content. There are close and logical ties between the subjects in this approach (McNeil, 2006). Those who adopt the subject design attach importance to the textbooks because they argue that the information can be learned better by explaining it verbally. The subject design, which aims to convey information about the society to the learners, ignores the interests and needs of the learners (Tanner & Tanner, 1995). The design approaches of this program are based on perpetual and essentialist educational philosophies, which are the reflection of idealist and realist philosophies on education (Gutek, 1988 & Sönmez, 2009).

The student/child-centered design model emphasizes that the student should be at the center of the program. This design, which deals with individual differences, prioritizes the interests and needs of the student (Büyükkaragöz, 1997). Also, in this approach, it is important to create a separate program for each child (Ornstein & Hunkins, 2014). In this design, programs that can change according to the needs determined in the process are prepared simultaneously within the learning process (Henson, 2006). Student-centered design (Gutek, 1988), which is based on pragmatism as the basic philosophy and progressivism as the educational movement, foresees the active participation of the child in the learning process by prioritizing the interests and needs of the child.

The problem-centered design model focuses on real-life problems experienced by the individual and society (Ornstein & Hunkins, 2014; Aykaç, 2014; Demirel, 2012). Problem-centered curriculum design approaches, which focus on social needs that are not yet met, aim to train individuals who can meet these needs and produce solutions to the important problems of the society (Çubukçu, 2008). Problem-centered designs, which are based on pragmatism as the basic philosophy and progressivism and re-constructivism as the educational philosophy, are designed to strengthen the cultural and traditional values and to point out the still unmet needs of the society (Demirel, 2012).

Which design approaches teachers prefer while implementing the education programs that come to life in the hands of teachers will affect the educational goals that are desired to be achieved, the subjects related to the content to be taught to the students, the lecture methods and techniques that teachers will use in the learning and teaching process, and assessment and evaluation approaches. Also, the educational understanding of the education systems of societies will be determined by the curriculum design approaches that teachers prefer to use in their lessons. When the literature on the subject is examined, It is seen that there are studies conducted both in Turkey (Eren, 2010; Baş, 2013; Ünsal & Korkmaz, 2017; Kozikoğlu & Uygun, 2018) and abroad (Ashour, Khasawneh, Abu-Alruz & Alsharqawi, 2012; Horn, 2011; Wang, Elicker & McMullen, 2008) on the curriculum design approaches of teachers from various perspectives. This study is considered significant in terms of determining the curriculum design approaches preferred by teachers and presenting a perspective on which educational philosophy is more related to the curriculum design approaches that teachers apply. Also, it is considered that the results obtained from the research will contribute to the literature and people related to the subject.

This study aims to examine preferences of teachers for curriculum design approaches in terms of various variables. For this reason, answers to the following questions will be sought.

1. What are the demographic characteristics of the teachers participating in the study?
2. What is the distribution of the scores of the teachers from the curriculum design approach preference scale?
3. What is the distribution of the scores of the teachers from the curriculum design approach preference scale items?
4. What is the t-test results for independent groups regarding the scores the teachers got from the curriculum design approach preference scale and sub-dimensions according to gender?
5. What are the results of the one-way analysis of variance regarding the scores of the teachers from the curriculum design approach preference scale and its sub-dimensions according to the age level variable?
6. What are the results of one-way analysis of variance regarding the scores of teachers from the curriculum design approach preference scale and its sub-dimensions according to the variable of professional seniority?
7. What are the results of one-way analysis of variance regarding the scores of teachers from the curriculum design approach preference scale and its sub-dimensions according to the school level variable?

Method

This section contains information about the study model, universe and sample, data collection techniques and analysis.

Research Model

In this study, which was conducted to examine the curriculum design approach preferences of teachers in terms of various variables, the relational survey model, one of the quantitative research methods, was used. Relational screening model is a research model that aims to determine the existence and/or degree of change between two or

more variables (Karasar, 2013).

Population and Sample

The population of the study consists of branch teachers working in all types and levels in public schools in the central districts of a province of Turkey in the 2021-2022 academic year. Since the population of the study is very large, sampling was made using the typical case sampling method. Typical situations are those that contain sufficient information to explain the generally studied event or phenomenon among the many similar ones in the universe (Patton, 2005). Considering the various factors affecting the sample size, homogeneity, level of confidence, tolerance of sampling error, standard error of sampling etc. (Can, 2014), the sample of this study consisted of 415 teachers.

Data Collection Tools

During the study process, the data necessary to reach the goal were obtained by using two scales: "Personal Information Form" and "Teachers' Curriculum Design Approach Preferences Scale".

Personal Information Form: In the personal information form prepared by the researcher himself, four questions were included to determine the gender, age, professional seniority and school level of the participants.

Teachers' Curriculum Design Approach Preference Scale: In this study, the "Teachers' Curriculum Design Approach Scale" developed by Baş (2013) was used. The scale consists of three factors and there are 10 items in each factor and a total of 30 items. The items in the scale were arranged as a 5-point Likert scale, which was "strongly disagree" (1), "disagree" (2), "undecided" (3), "agree" (4) and "strongly agree" (5). The Cronbach Alpha reliability coefficient of the scale was calculated as .94. In this study, the Cronbach Alpha reliability coefficient of the scale was found to be 0.89. The data of the study were collected electronically through a form prepared on google drive by obtaining the necessary permissions from the relevant units.

Analysis of Data

Data collection tools were prepared with the web 2.0 tool as a google form and filled in by 415 teachers working in a province of Turkey. The filled-in scales were checked and transferred to the "SPSS 22.0 for Windows (Statistical Package for Social Sciences)" statistical program, and frequency, percentage and arithmetic averages were calculated. In the normality test of the scale scores, it was determined that the data showed normal distribution due to the skewness and kurtosis values varying between +1.96 and -1.96 and according to the "Kolmogorov-Smirnov" test statistics analysis. Since the data collected from the scale showed normal distribution in the following process, the t-test from parametric tests, one-way ANOVA test and the Tukey test from Post Hoc tests were used to determine between which groups there was a difference in multiple comparisons. In the analysis of all data, the value of 0.05 was taken as the confidence level.

Results

According to Table 1, when the gender status of the participants participating in the study is examined, it is seen that 56.9% (n=236) of the teachers participating in the research are female and 43.1% (n=179) are male teachers. 9.6% (n=42) of the teachers participating in the study are between the ages of 20-30, 44.3% (n=184) are between 30-40 years old, 31.1% (n=129) are between the ages of 40-50 and 14.9% (n=62) are between the ages of 50-65.

Table 1. Findings of the Teachers Participating in the Study Regarding Demographic Characteristics

	N	%
Gender		
Female	236	56.9
Male	179	43.1
Age		
Ages 20-30	40	9.6
Ages 30-40	184	44.3
Ages 40-50	129	31.1
Ages 50-65	62	14.9
Professional Seniority		
0-5 Years	34	8.2
5-10 Years	116	28.0
10-15 Years	93	22.4
15-20 Years	46	11.1
Over 21	126	30.4
School Level		
Pre-school	12	2.9
Primary School	74	17.8
Secondary School	85	20.5
High School	244	58.8

When the professional seniority of the teachers participating in the research is examined, it was determined that 8.2% (n=34) had professional seniority between 0 and 5 years, 28% (n=116) 5-10 years, 22.4% (n=93) are between 10-15 years, 11.1% (n=46) are between 15-20 and 30.4% (n=126) are 21 years and over. When the school types and levels of the teachers participating in the research are examined, it was determined that 2.9% (n=12) of them work in pre-school schools, 17.8% (n=74) primary school, 20.5% (n=85) secondary school and 58.8% (n=244) high school.

In Table 2, the arithmetic mean, standard deviation values, maximum and minimum values of the scores obtained

by the teachers from the curriculum design approach preference scale and the sub-dimensions of this scale are presented.

Table 2. Distribution of Scores from Teachers' Curriculum Design Approach Preference Scale

Sub-dimension	Min	Max	$\overline{X}$	SS
Subject-Centered Design Sub-Dimension	1.60	5	3.256	.740
Student (Learner) Centered Design Sub-Dimension	1.40	5	4.292	.627
Problem-Centered Design Sub-Dimension	1.70	5	4.387	.559
Teachers' Curriculum Design Approach Preference Scale	219	5	4.001	.510

It can be said that the arithmetic mean scores (4.001±510) obtained by the teachers from the curriculum design approach preference scale are high. Since the teachers participating in the research had the arithmetic mean score (3.256±740) of the subject-centered design sub-dimension of the "Teachers' Curriculum Design Approach Preference Scale", it has been determined that teachers prefer subject-centered design approaches as their preference for curriculum design approaches at a low level. Since the teachers participating in the research had the arithmetic mean scores of the "Teachers' Curriculum Design Approach Preference Scale" belonging to the student/learner-centered design sub-dimension level (4.292±627), it has been determined that teachers use student/learner-centered design approaches at a high level as curriculum design approaches. Regarding the same process, it was determined that the arithmetic mean scores of the teachers in the problem-centered design sub-dimension as their choice of educational program design approaches were higher than the arithmetic mean scores they got from the other sub-dimensions of the scale (4.387±627). In other words, it is seen that teachers prefer to use problem-centered design approaches as their choice of curriculum design approaches.

The average item scores of the teachers participating in the research from the curriculum design approach preference scale are given in Table 3. Among the questions of the scale, the statement "It is important for the student to make an effort to learn with his own observations and experiences" has the highest item average with 4,532 points. On the other hand, among the questions on the same scale, the statement "There is no need to reflect the interests and wishes of the students in the course" has the lowest item average with 2.072 points.

Table 4 shows the t-test results for independent groups regarding the scores they got from the "Curriculum Design Approach Preference Scale" and its sub-dimensions according to the gender variable of their teachers. Looking at Table 4, it was determined that female teachers ($\overline{X}$ =4.079) and male teachers ($\overline{X}$ =3.899) got points from the teachers' curriculum design approach preference scale. In addition, according to the sub-dimensions of the teachers' curriculum design approach preference scale, student (learner) centered design sub-dimension, female teachers ($\overline{X}$ =4.454) and male teachers ($\overline{X}$ =4.078) and it has been determined that there is a significant difference between the mean scores of male teachers ($\overline{X}$ =4.241) of female teachers ($\overline{X}$ =4.498) in the problem-centered design sub-dimension in favor of female teachers. However, it was determined that there was no significant difference in the subject-centered design sub-dimension, which is the teacher's curriculum design approach preference scale sub-dimension.

Table 3. Distribution of Teachers' Curriculum Design Approach Preference Scale Items

	Items	$\overline{\text{X}}$	SS
Q1	Problem solving method should be used mostly in the lesson.	3.937	.983
Q2	Students should be more active in the lesson than the teacher	4.139	1.002
Q3	In the course, the interests, needs and expectations of the student should be taken into account.	4.477	.897
Q4	The school should be a place where democratic processes are kept alive.	4.515	.895
Q5	The school should devote a significant part of the day to problematic studies in a way that will enable multi-faceted work and establishing interdisciplinary connections.	4.286	.904
Q6	In the curriculum, the element of educational status should be emphasized more.	4.175	.887
Q7	In the lesson, the important thing is for students to construct knowledge and transfer it to life situations.	4.479	.842
Q8	It is important for the student to make an effort to learn through his/her own observations and experiences.	4.532	.772
Q9	It is important to include collaborative work rather than individual work in the course.	4.250	.868
Q10	Schools should be based on shared learning experiences that all students should learn.	4.281	.881
Q11	Programs should be organized in a way that considers individual differences.	4.342	1.028
Q12	School should be life itself, rather than being a place of preparation for mistakes.	4.373	1.015
Q13	In the lessons, the needs and problems of the society should be addressed.	4.441	.816
Q14	Learning the subjects should be an important part of the lesson.	4.096	.865
Q15	Curriculum should be organized according to unchanging universal knowledge.	3.785	1.195
Q16	Curriculum should include real problems of life	4.397	.844
Q17	The important thing in the lesson is the transfer of knowledge.	3.356	1.248
Q18	It is important to include individual work rather than group work in the course.	3.132	1.171
Q19	In the lessons, students should be encouraged to use the problem-solving process.	4.347	.978
Q20	In the lessons, instead of arranging a separate learning path for each subject, a common learning path for all subjects should be highlighted.	3.062	1.340
Q21	There is no need to reflect the interests and wishes of the students in the lesson.	2.072	1.316
Q22	At school, students should be encouraged to find solutions to social problems by collaborating.	4.412	.774
Q23	Students are receptive and memorizing information.	2.698	1.282
Q24	Educational environments where students can realize themselves and where there is no pressure and coercion are important.	4.216	1.110
Q25	It is important for students to specialize in different branches of knowledge	4.255	.971
Q26	In schools, it is very important to introduce social values to students.	4.542	.964
Q27	Schools and education have a critical role in social change.	4.494	.939
Q28	In the lesson, the teacher rather than the students should be active.	2.520	.1.207
Q29	At school, students should be given the ability to generalize to real-life problems.	4.159	1.018
Q30	In the curriculum, the content element should be emphasized more.	3.585	1.068

Table 4. t-test Results for Independent Groups regarding the Scores of Teachers from the Education Program
Design Approach Preference Scale and its sub-dimensions by Gender

		n	$\overline{\text{X}}$	Ss	t	p
Teachers' Curriculum Design Approach Preference Scale	**Female**	236	4.079	.389	3.619	.000
	Male	179	3.899	.622		
Subject-Centered Design Sub-Dimension	**Female**	236	3.219	.726	-1.161	.246
	Male	179	3.305	.756		
Student (Learner) Centered Design Sub-Dimension	**Female**	236	4.454	.430	6.324	.000
	Male	179	4.078	.767		
Problem-Centered Design Sub-Dimension	**Female**	236	4.498	.421	4.763	.000
	Male	179	4.241	.674		

*p≤ .05

In Table 5, as a result of one-way analysis of variance (ANOVA), the difference between group means was found to be statistically significant (F=6.358; p=000<0.05) to determine whether the mean scores of the teachers participating in the research from the "Curriculum Design Approach Preference Scale" and its sub-dimensions show a significant difference according to the age variable.

Table 5. One-Way Analysis of Variance Results of Teachers' Scores from Curriculum Design Approach
Preference Scale and Its Sub-Dimensions According to Age Level Variable

Dimension		n	$\overline{\text{X}}$	Ss	F	p	Significant Difference
Teachers' Curriculum Design Approach Preference Scale	Ages 20-30 (A)	40	3.968	.561	6.358	.000	B – C
	Ages 30-40 (B)	184	3.898	.526			
	Ages 40-50 (C)	129	4.147	.397			
	Ages 50-65 (D)	62	4.025	.572			
Subject-Centered Design Sub-Dimension	Ages 20-30 (A)	40	3.112	.832	9.273	.000	B – C
	Ages 30-40 (B)	184	3.079	.745			
	Ages 40-50 (C)	129	3.446	.671			B – D
	Ages 50-65 (D)	62	3.480	.651			
Student (Learner) Centered Design Sub-Dimension	Ages 20-30 (A)	40	4.362	.666	2.379	.069	
	Ages 30-40 (B)	184	4.226	.668			
	Ages 40-50 (C)	129	4.399	.501			
	Ages 50-65 (D)	62	4.222	.686			
Problem-Centered Design Sub-Dimension	Ages 20-30 (A)	40	4.297	.767	3.872	.009	B – C
	Ages 30-40 (B)	184	4.328	.543			
	Ages 40-50 (C)	129	4.524	.432			
	Ages 50-65 (D)	62	4.337	.640			

*p≤ .05

Supplementary post-hoc Tukey analysis was performed to identify the source of the differences. As a result of post-hoc Tukey analyzes, Among the mean scores of teachers in the curriculum design approaches preference scale, the mean score of teachers aged between 40-50 years old (4.147 ±397), was found to be higher than the mean score of teachers aged 30-40 years old (3.898±526).

As a result of the post-hoc Tukey analyzes, a statistically significant difference was found between the mean scores of the teachers in the curriculum design approach preference scale sub-dimensions, according to the age variable, in the group mean scores in the subject-centered design approach (F=9.273; p=000<0.05). Supplementary post-hoc Tukey analysis was performed to identify the source of the differences. As a result of post-hoc Tukey analyzes among the subject-centered design point averages obtained by the teachers from the curriculum design approaches preference scale, the average points of the teachers aged between 40-50 years old (3.446 ±671) were found to be higher than the average points of the teachers aged 30-40 years (3.079±745). It was found that teachers aged 50-65 years of age in the curriculum design approach preference scale sub-dimension scores (3.480±651) were higher than the scores of teachers aged 30-40 years in the subject-centered design approach scale sub-dimension (3.079±745). There was no statistically significant difference between the group averages in the student/learner-centered design sub-dimension according to the age variable of the mean scores of the teachers from the curriculum design approaches preference scale.

A statistically significant difference was found between the group averages according to the professional seniority variable in the problem (problem-centered design approach) sub-dimension of the teachers' educational program design approach preference scale (F=3.872; p=009<0.05). Tukey test, one of the Post-Hoc tests, was used to test the source of the significant difference. As a result of post-hoc Tukey analyzes, among the problem-centered design point averages obtained by the teachers from the curriculum design approaches preference scale, the average score of the teachers aged between 40-50 years old (4.524±432) was higher than the average point average of the teachers aged 30-40 years (4.328±543).

In Table 6, as a result of one-way analysis of variance (ANOVA), the difference between group means was found to be statistically significant (F=9.304; p=000<0.05) to determine whether the mean scores of the teachers participating in the research from the "Curriculum Design Approach Preference Scale" and its sub-dimensions show a significant difference according to the seniority variable. Supplementary post-hoc Tukey analysis was performed to identify the source of the differences. As a result of post-hoc Tukey analyzes, among the mean scores of teachers from the curriculum design approach preference scale, the mean score of teachers with a professional seniority of 21 years and above (4.116±492) was found to be higher than the mean score of teachers with a professional seniority of 5-10 years (3.159±843).

A statistically significant difference was found between the group averages in the subject-centered design sub-dimension according to the professional seniority variable of the mean scores of the teachers from the curriculum design approach preference scale. Supplementary post-hoc Tukey analysis was performed to identify the source of the differences (see Table 6). As a result of post-hoc Tukey analyzes, among the subject-centered design approach mean scores, the mean score of the teachers with a professional seniority of 21 years and above

(3.516±636) was higher than the mean score of the teachers with a professional seniority of 5-10 years (3.159±843). Also, regarding the same process, the mean score of teachers with a professional seniority of 21 years and above (3.516±636) was found to be higher than the mean score of teachers with a professional seniority of 10-15 years (3.012±659). On the other hand, it was determined that the mean score of teachers with 15-20 years of professional seniority (3.456±650) was higher than the mean score of teachers with 10-15 years of professional seniority (3.012±659). There was no statistically significant difference between the group averages in the student/learner-centered design approach and problem (problem)-centered design approach sub-dimensions according to the professional seniority variable of the mean scores of the teachers from the curriculum design approach preference scale.

Table 6. One-Way Analysis of Variance Results of Teachers' Scores from the Curriculum Design Approach Preference Scale and its Sub-Dimensions According to the Variable of Professional Seniority

Dimension		n	$\overline{\text{X}}$	Ss	F	p	Significant Difference
Teachers' Curriculum Design Approach Preference Scale	0-5 Years (A)	34	3.806	.538	4.018	.003	B – E
	5-10 Years (B)	116	3.965	.543			
	10-15 Years (C)	93	3.920	.495			
	15-20 Years (D)	46	4.088	.405			
	Over 21 (E)	126	4.116	.492			
Subject-Centered Design Sub-Dimension	0-5 Years (A)	34	3.020	.702	9.304	.000	B – E
	5-10 Years (B)	116	3.159	.843			C – E
	10-15 Years (C)	93	3.012	.659			C - D
	15-20 Years (D)	46	3.456	.650			
	Over 21 (E)	126	3.516	.636			
Student (Learner) Centered Design Sub-Dimension	0-5 Years (A)	34	4.129	.711	.732	.571	
	5-10 Years (B)	116	4.294	.672			
	10-15 Years (C)	93	4.281	.665			
	15-20 Years (D)	46	4.323	.442			
	Over 21 (E)	126	4.331	.589			
Problem-Centered Design Sub-Dimension	0-5 Years (A)	34	4.202	.705	1.338	.255	
	5-10 Years (B)	116	4.362	.577			
	10-15 Years (C)	93	4.396	.531			
	15-20 Years (D)	46	4.415	.469			
	Over 21 (E)	126	4.443	.545			

*p≤ .05

According to Table 7, a statistically significant difference was found between the mean scores of the teachers from the curriculum design approach preference scale according to the school level variable (2.402±067). Supplementary post-hoc Tukey analysis was performed to identify the source of the differences. As a result of the post-hoc Tukey analyzes, the mean scores of the teachers working at the primary school level (4.129±504) were

found to be higher than the mean scores of the teachers working at the high school level (3.958±506). As a result of post-hoc Tukey analyzes, Among the student/learner-centered design approach point averages, which is the sub-dimension of the teachers' curriculum design approach preference scale, the average score of the teachers working at the primary school level (4.470±611) was found to be higher than the average point of the teachers working at the high school level (4.245±624). There was no statistically significant difference in the subject-centered design sub-dimension and problem-centered design approach sub-dimension of the teachers' curriculum design approaches preference scale.

Table 7. One-Way Analysis of Variance Results of Teachers' Scores from Curriculum Design Approach Preference Scale and Its Sub-Dimensions According to School Level Variable

Dimension		n	$\overline{X}$	Ss	F	p	Significant Difference
Teachers' Curriculum Design Approach Preference Scale	Pre-school (A)	12	4.126	.560			B – D
	Primary School (B)	74	4.129	.504	2.402	.067	
	Secondary School (C)	85	3.998	.508			
	High School (D)	244	3.958	.506			
Subject-Centered Design Sub-Dimension	Pre-school (A)	12	3.383	1.091			
	Primary School (B)	74	3.317	.699	,379	.768	
	Secondary School (C)	85	3.258	.849			
	High School (D)	244	3.231	.692			
Student (Learner) Centered Design Sub-Dimension	Pre-school (A)	12	4.491	.536			B – D
	Primary School (B)	74	4.470	.611	3.051	.028	
	Secondary School (C)	85	4.244	.637			
	High School (D)	244	4.245	.624			
Problem-Centered Design Sub-Dimension	Pre-school (A)	12	4.391	.528			
	Primary School (B)	74	4.490	.585	1.645	.178	
	Secondary School (C)	85	4.435	.436			
	High School (D)	244	4.339	.587			

*p≤ .05

Discussion and Conclusion

Examining the preferences of education program design approaches of teachers, the following results were reached in line with the analysis of the findings obtained in this study. It is seen that the teachers in the study group of the research are mostly female teachers who work in high schools and have high professional seniority. Also, it was determined that the arithmetic mean scores of the teachers participating in the research from the curriculum design approach preference scale were high. Teachers stated that they preferred to use problem-centered design approaches the most, and they preferred to use subject-centered design approaches the least. When the literature on the subject is examined, similar research results that support this research result from various

aspects have been reached. Karaman and Bakaç (2018) stated that teachers mostly prefer problem-centered design approach, secondly, student-centered design approach. Similarly, Ünsal and Korkmaz (2017) stated that problem-centered design approach and student-centered design approach are more preferred. In their study, Kozikoğlu and Uygun (2018) concluded that teachers mostly adopt student-centered curriculum design approaches, and least subject-centered curriculum design approaches. The result obtained from the study partially overlaps with the result obtained from this study.

Also, it has been determined that the teachers participating in the research have the highest item average score among the items of the curriculum design approaches preference scale, that it is important for the student to make an effort to learn through his own observations and experiences. The student-centered curriculum design approach, which is based on the fact that learning can only occur with the active participation of the student in the education process, attaches importance to individual differences (Çubukçu, 2008). When the relevant literature is examined, similar research results have been reached, which are in line with the results obtained from this research. In their study, Mutlu and Aydoğdu (2003) determined that learning by doing, with appropriate environment and arrangements, increases the success of students. Kaban (2021) found in his study that teachers attach importance to individuality in education. In their study, Kimonen and Nevalainen (2005) found that active participation of students in their own learning processes increased their motivation. On the other hand, it was determined that among the questions on the same scale, the lowest item average was obtained from the curriculum design approaches preference scale items, saying that it is not necessary to reflect the interests and wishes of the students to the course. In this sense, it is possible to say that while teachers prefer curriculum design approaches, they pay attention to using design approaches that will increase students' motivation towards the lesson. Teachers' positive attitudes affect students' motivation, attitudes towards school and work, and students' self-confidence (Öztürk; Koç & Şahin, 2003).

According to another result obtained from the study, it was determined that the scores of female teachers from the curriculum design preference scale were higher than male teachers. When the relevant literature is examined, it has been found that the research results emphasizing that the gender variable does not make a significant difference in the preferences of teachers' educational program design approaches (Pehlivan & Taşkın, 2020; Burul, 2018; Cheung & Wong, 2002). Also, regarding the same process, it was determined that female teachers use problem-centered and learner-centered design approaches more than male teachers in the learning and teaching processes in the sub-dimensions of the curriculum design approaches scale. On the other hand, it has been determined that male teachers prefer to use the curriculum design approaches preference scale more than female teachers in the learning and teaching processes in the sub-dimension of subject-centered design approaches. When the relevant literature is examined, study results supporting the results of this research were also found. In their study, Pehlivan & Taşkın (2020) determined that male teachers preferred the subject-centered design approach more than female teachers. In the relevant literature, study results have also been found, stating that female teachers prefer student-centered design approaches more than male teachers (Jenkins, 2006; Karaman & Bakaç, 2018).

According to another result obtained from the study, it was determined that the scores of the teachers from the education program design scale according to the age and professional seniority variable showed significant

differences between the groups. It was determined that there were significant differences between the mean scores of the teachers in the subject-centered design sub-dimension of the curriculum design scale and the problem-centered design sub-dimension according to the age variable of the teachers. Also, it was determined that there were significant differences between the mean scores of the groups in the subject-centered design sub-dimension of the curriculum design scale according to the professional seniority variable of the teachers. Based on these results obtained from the study, it can be said that as the ages and professional seniority of teachers increase, they use subject-centered design approaches more in learning and teaching processes. When the relevant literature is examined, similar research results supporting the results of this research have been reached. Ünsal & Korkmaz (2017) concluded in their study in 2017 that teachers with a seniority of 20 years or more use subject-centered curriculum design approaches more than teachers with other professional seniority.

According to another result obtained from the research, it was determined that the scores of the teachers from the curriculum design approach preference scale differ statistically according to the school level they work at. It is seen that the scores of primary school teachers from the curriculum design approaches preference scale are higher than the scores that high school teachers get from the curriculum design approaches preference scale. Also, it was determined that there were significant differences between the mean scores of the groups in the student/learner-centered design sub-dimension of the curriculum design scale according to the school level variable of the teachers. It is observed that the scores of primary school teachers in the curriculum design approaches preference scale student/learner-centered design approach sub-dimension are higher than the scores that high school teachers get in the curriculum design approaches preference scale student/learner-centered design approaches preference sub-dimension.

As a result, teachers stated that the scores they got from the curriculum design approach scale were high, they preferred to use problem-centered curriculum design approaches most and they preferred to use subject-centered curriculum design approaches the least. It can be said that while teachers prefer curriculum design approaches, they consider student-centered curriculum design approaches to ensure their students' learning by doing and experiencing, and their active participation in lessons. It is seen that the scores of the teachers in the curriculum design approaches scale are higher than the male teachers, in favor of female teachers. It has been concluded that as the ages and professional seniority of the teachers increase, they use subject-centered design approaches more. It may be due to the fact that the educational philosophies implemented in Turkey until the 2005-2006 academic year are mostly based on rote, content-oriented, teacher-centered education understanding and philosophy, continuing the traditional understanding of teachers. Although our country has adopted a constructivist education approach since the 2005-2006 academic year, it may be due to the negative situations created on teachers by the examination-oriented and result-based assessment approach, which does not comply with the essence of the constructivist education approach. The fact that primary school teachers have higher scores on the curriculum design approaches preference scale than high school teachers may be due to the length of the academic year that primary school teachers spend with their students in order to recognize and direct their interests, needs and individual differences.

In line with these results obtained from the research, the following suggestions can be made:

- In-service training courses on learner/student-centered and problem-centered design approaches can be given to teachers with 21 years or more of professional seniority.
- Teachers working in high schools can be advised to take care to attend classes in the same class in successive years while creating lesson plans so that they can get to know their students better and prefer design approaches.
- Conducting qualitative studies to determine the criteria that teachers pay attention to in determining their preferences for educational program design approaches and why they prefer these design approaches can contribute to the field.

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