INVESTIGATION OF TEACHING STYLES OF PRIMARY SCHOOL TEACHERS FOR TEACHING THINKING SKILLS ACCORDING TO SOME VARIABLES[1]

SINIF ÖĞRETMENLERİNİN DÜŞÜNME BECERİLERİ ÖĞRETİMİNE YÖNELİK ÖĞRETME STİLLERİNİN BAZI DEĞİŞKENLERE GÖRE İNCELENMESİ

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Abstract: The purpose of this research is to examine the teaching styles of primary school teachers for teaching thinking skills according to some variables. General survey model was used in the research. The population of the research consisted of primary school teachers working in primary schools affiliated to the İzmir Provincial Directorate of National Education. The sample of the study consisted of 307 primary school teachers who voluntarily participated in the study in which the scale was applied. The data of the research were collected with the "Personal Information Form" and the "Teaching Styles Scale for Teaching Thinking Skills". The statistical analyzes required for the data collected in the research were made with computer package programs. Based on the findings, it was determined that the primary school teachers had a high level of all teaching styles, and they adopted authoritative teaching style the least and facilitator teaching style the most in teaching thinking skills. It was found that there was no significant difference according to the gender of the teachers. According to the graduation status of the primary school teachers, it was concluded that those who have an associate degree have a higher "Representative Teaching Style" than those who have a undergraduate degree. There was no significant difference according to the professional seniority and marital status of the primary school teachers.

Key Words: Thinking, Thinking Skill, Primary School Teachers, Teaching Style.

Öz: Bu araştırmanın amacını; sınıf öğretmenlerinin düşünme becerileri öğretimine yönelik öğretim stillerinin bazı değişkenlere göre incelenmesi oluşturmaktadır. Araştırmada genel tarama modeli kullanılmıştır. Araştırma evrenini; İzmir İl Milli Eğitim Müdürlüğü'ne bağlı ilkokullarda görev yapan sınıf öğretmenleri oluşturmuştur. Araştırmanın örneklemi ise; ölçme aracının uygulandığı çalışmaya gönüllü olarak katılımda bulunan 307 sınıf öğretmeninden oluşmuştur. Araştırmanın verileri; "Kişisel Bilgi Formu" ve "Düşünme Becerileri Öğretime Yönelik Öğretim Stilleri Ölçeği" ile toplanmıştır. Araştırmada toplanan veriler için gerekli istatistiksel analizler bilgisayar paket programları ile yapılmıştır. Bulgulardan hareketle; sınıf öğretmenlerin tüm öğretme stillerine yüksek düzeyde sahip oldukları, düşünme becerileri öğretiminde öğretmenler en az otorite öğretim stilini, en çok ise kolaylaştırıcı öğretim stilini benimsedikleri, öğretmenlerin cinsiyetlerine göre ise anlamlı farklılık olmadığı, ön lisans mezunu olanların, lisans mezunu olanlardan daha yüksek "Temsilci Öğretim Stiline" sahip oldukları ortaya çıkmıştır.Sınıf öğretmenlerinin düşünme becerileri öğretimine yönelik öğretim stillerinin mesleki kıdemlerine ve medeni durumlarına göre anlamlı bir farklılık olmadığı ortaya çıkmıştır.

Anahtar Kelimeler: Düşünme, Düşünme Becerisi, Öğretmen, Öğretme Stili.

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Introduction

The rapid developments in science and technology in the twenty-first century have changed human life socially, culturally, economically and even politically. These changes have made it necessary to change the individual model required by the information age. Education has become the most important tool in raising individuals who will create change and adapt to change in all societies. As a matter of fact, the most important aim of education has been to raise responsible individuals who can adapt to different conditions, think flexibly, question, think creatively, critically and multi-dimensionally, solve problems, have the skills to be respectful to people and tolerant to thoughts (Tümkaya & Aybek, 2008). According to Özgüven (2000), the rapid developments in science and technology have been influential in the lives of societies in different ways and levels, both in terms of mental activities and thoughts and scientific approaches in the 2000s. While raising individuals in the face of rapid developments, it has become inevitable to provide an education that includes investigative, thought-improving attitudes and skills (cited in Kürüm, 2002).

Considering the importance given to thought, in order for individuals to take their place in society as a good thinker in a constantly changing world, they need to have high-level thinking skills by processing the knowledge they have acquired throughout life (Dutoğlu & Tuncel, 2008). The individual, through thinking, which is the most basic ability he has; examines and researches nature and tries to create meanings about himself/herself and nature (Vural & Kutlu, 2004). As can be understood from these, it is possible to say that thinking is not only a process, but also includes various knowledge, skills, values, attitudes, technical knowledge and skills. The education of thinking skills can be considered as a process that starts in the family and continues with the school and teachers. In this process, it can be said that the most important element is the teacher that will enable individuals to adopt the necessary thinking skills and approaches.

Teachers encounter students with different needs, desires and abilities in the learning-teaching environment. Considering that students' interests, abilities and needs are different, it is necessary for teachers to use different methods, techniques and teaching styles in order to create a suitable learning and teaching environment. From this point of view, while teachers fulfill the responsibilities brought by their profession, teacher characteristics such as the interest displayed during teaching and teaching styles affect education positively or negatively. Therefore, with the emergence of individual differences, the concept of "teaching style" gains importance.

Fer (2005) defines style as an individual's preferred way of applying his/her knowledge skills or abilities. While Fischer, B. and Fischer (1979) define the teaching style as teachers' consistent behaviors towards the teaching process; Grasha (2002) emphasizes the consistency and continuity of teachers' behaviors towards students and their orientation in the learning-teaching process. On the other hand, Dunn, R. and Dunn (1979) defines teaching style as teachers' attitudes towards the curriculum, the method they use, the learning-teaching environment and the materials they use in the classroom; Maden (2012) defines it as the teacher's telling of the determined curriculum according to his personal experiences and in his own style. Felder (1996), unlike other definitions, expresses it as the result of how the teacher presents the information and the quality of the communication with the students. Üredi, L. and Üredi, I. (2007) state that teaching style includes instructional behaviors about how teachers perform student socialization activities along with their interactions in the learning and teaching process.

Again, the teaching style can be defined as an indicator that expresses the way in which the teacher presents the information in the interaction process with the students. The factors that determine the teaching style include the teacher's readiness, beliefs and consistency, as well as the teacher's methods, techniques and behaviors during teaching, explaining, asking questions, involving the student in the lesson, and giving feedback. From this point of view, the teaching style includes all the observable behaviors such as the teacher's self-expression style, tone of voice and form of address (Kolay, 2008). Each teacher's self-expression style and other characteristics are different from each other. Depending on this difference, teaching styles may also change according to teachers' experiences, techniques and learning goals (Aktan, 2012). In other words, since the teaching style is like the signature of the teacher, it is very difficult to change (Babadoğan, 2000). Considering all these definitions, it can be said that teaching style is the behavior of teachers towards students, the current curriculum and all other elements related to the school in the learning-teaching process.

It is seen that the concept of teaching style first started with studies on how students perceive teachers in the early 19th century. In the 1930s, there are studies observing the teaching behaviors of teachers. The phase that has guided the teaching style studies in recent years started with the definition of effective teacher behaviors by researchers in the 1960s (Üredi, 2006). Studies on teaching style took a different turn after the 1960s, because the studies carried out in this period

are a time period in which theoretical models related to teaching styles were developed and thus the concept of teaching style matured (Hemlich, 1990, cited in Aktan, 2012). From this point of view, it can be said that there are different models depending on the interpretation of teaching style, teacher and student behaviors. Some of these are briefly discussed below;

Fischer and Fischer teaching style model: Fischer, B. and Fischer (1979) created models of teaching styles by observing teachers in the classroom environment. He stated that teachers shape their teaching styles according to their own learning styles, and accordingly, student success is affected. Again, in a study conducted by Fischer, BB and Fischer (1979), it was revealed that the teaching styles of teachers with the same teaching method were different, in which teachers were listed as collaborative-planner teacher, task-oriented teacher, child-centered teacher, subject-centered teacher, learning-centered, emotionally enthusiastic and non-enthusiastic teachers.

Dunn and Dunn's model of teaching style: In the study conducted by Dunn, R. and Dunn (1979), it was concluded that teachers think their own learning path is the easiest and most accurate. It has been observed that teachers have the belief that they teach their students in the same way as they learn themselves**.** Again, in this study, it was revealed that there is no superiority between different teaching styles and that teaching styles may vary according to the situation or subject.

Butler's model of teaching style: According to Butler (1987), the teacher should first determine his/her own teaching style characteristics. Because if the teacher determines the characteristics of his own style, he will provide a more effective and productive teaching environment. Again, according to Butler (1987), teaching style is the actions and behaviors of the teacher that effectively open the doors of the learning world to the students. The teaching style is also to apply the teaching that will create a hidden power for learning on student success.

Heimlich teaching style model: Heimlich (1990) states that teaching style is influenced by teachers' background, culture, wishes and behaviors and value judgments, and it emerges as a result of this interaction. Again, according to Heimlic (1990), since students learn with different styles, teaching approaches should be determined in accordance with the learning approach of the students.
Grasha's model of teaching style: The basis of Grasha's (1984) study on teaching styles is his research on learning styles**.** Grasha (1994) grouped teaching styles in five different ways as expert, authoritative, personal model, facilitator (guiding) and representative in his study on teachers'

behaviors in the teaching process. According to Grasha (2002), *Expert Teaching Style*, In this teaching style, the teacher has the expertise and knowledge that students need. It tries to convey information to students and ensure that they are equipped. Applying this method more than necessary can be a disadvantage for inexperienced students . *Authority Teaching Style*, in this teaching style, the teacher provides positive and negative feedback, establishes learning goals and codes of conduct for students. Teacher provides positive or negative feedback to students, sets learning goals, expectations and rules of behavior. It gets things done in the right, standard, and acceptable ways. *Personal Teaching Style*, in this teaching style, the teacher is a role model for the student. He guides his students in the learning process and supports them in making observations. *Facilitator Teaching Style*, in this teaching style, focusing on students' needs, goals and personal flexibility, teacher strives to develop the the students' capacity for initiative and responsibility, works in consultation with students on projects and tries to provide as much support and encouragement as possible, asks to students questions, encouraging them to explore options and alternatives, make informed choices and guides them. *Representative Teaching Style*, in this teaching style, the teacher develop students' autonomous working capacity. Students take part in independent or autonomous teams in project work. Here, the teacher is the resource person at the request of the students (Grasha, 2002).

As it can be seen, there are various teaching styles. Each teaching style is shaped according to teacher and student behaviors. It is possible to say that teaching styles also have effects on the learning-teaching process. Therefore, it is necessary to examine the effects of the teaching style used by the teacher on the learning-teaching process.

Considering that teachers are one of the most important elements that shape the educational environment, it is seen that the teaching styles of the teachers are effective on the learning-teaching process and the students. Therefore, teaching styles are an element that should be taken into account in order for the learning and teaching process to be successful while the teaching profession is practiced in the classroom (Maden, 2012). The teaching style of the teacher is an important variable from the education philosophy s/he has to the method and techniques applied in the classroom environment (Aktan, 2012). Again, teaching styles have an important place in terms of teachers being aware of their personal characteristics and teaching skills. Teaching styles shape how the

teacher will teach in the teaching process, the methods s/he chooses while teaching, the communication s/he will establish with the student in the classroom and how s/he will put the classroom management into practice. Therefore, teaching style helps teachers to choose the most appropriate one among different teaching methods, to understand the teaching logic better, and to recognize the weak and strong aspects of their teaching styles (Arpacı, 2013).As well as the teaching style that teachers will use affects student motivation, it is also seen in studies that it continues to be effective from primary education to higher education (Archer & Scevak, 1998).

In the review of the relevant literature, it is seen that various studies have been conducted on thinking skills and the teaching styles used in the teaching of these thinking skills. Some of them can be listed as; Grasha (1994), Ertekin (2005), Üredi (2006), Üredi, L and Üredi (2007), Üredi and Güven, Y. (2007), Bilgin and Bahar (2008), İnce and Hünük (2010).), Üredi (2011), Aktan (2012), Keeper (2012), Maden (2012), E. Gencel (2013), Saraç and Mustu (2013), Dilekli (2015) and Dinçer, Saracaloğlu, Karademir, and Dedebali (2017).

There are various thinking skills. These should be developed, taught to students through education and training, and programs should be developed. Those who will develop and teach thinking skills are undoubtedly teachers. In this case, the qualifications of teachers and how to teach these skills come to the fore. Because it is necessary to know how to teach as well as to know thinking skills. How teachers gain and teach these thinking skills in the education-teaching process affects and shapes their teaching styles as much as the method-technique they will use while teaching. In other words, teaching style will enable teachers to recognize the positive-negative and weak-strength aspects of the teaching styles they apply, together with choosing the most appropriate teaching way and method in the learning-teaching process. For this reason, this research was considered and constituted the starting point of the research in order to determine the thinking skills and teaching styles of the teachers especially primary school teacher and to enable the implementation of applications to increase their awareness with this determination.

Problem Statement

The question ‘What is the level of primary school teachers' teaching styles for teaching thinking skills?’ constitutes the problem of the research.

Sub problems

1. Do primary school teachers' teaching styles for teaching thinking skills differ according to gender?
2. Do primary school teachers' teaching styles for teaching thinking skills differ according to their educational status?
3. Do primary school teachers' teaching styles for teaching thinking skills differ according to their professional seniority?
4. Do primary school teachers' teaching styles for teaching thinking skills differ according to their marital status?

Purpose and Importance of the Research

The aim of the research is to examine the teaching styles of primary school teachers for teaching thinking skills according to some variables. In other words, examining the teaching styles of primary school teachers for teaching thinking skills according to gender, educational status, professional seniority and marital status constituted the purpose of the research.

The education of the individuals who make up the society first starts in the family and continues in educational institutions. In addition to knowledge, interests and attitudes, individuals generally learn thinking skills at schools through teachers. In the renewed programs in National Education, it is seen that some skills such as critical, reflective, creative and problem-solving skills, use of information technologies and entrepreneurship are desired to be gained by students. Teachers are the ones who implement the prepared programs and gain these skills. In addition to the fact that the teachers should primarily have the thinking skills, there is also the question of how these skills will be taught. As mentioned above, the teaching style will enable teachers to recognize the positive-negative and weak-strong aspects of the teaching styles they apply, together with choosing the most appropriate teaching way and method in the learning-teaching process. For this reason, it was thought that this research was carried out and revealed its importance in order to determine the

thinking skills and teaching styles of the teachers and to enable the implementation of applications to increase their awareness with this determination. Notwithstanding that the aim of developing thinking skills is included in the programs, it is necessary to know how these skills will be gained by teachers and which teaching style is employed. In addition, it is hoped that the results of this research will contribute to the in-service and pre-service training of teachers.

METHOD

Model of the Research

In this study, the descriptive survey model among the general survey model was used. The general survey model is a survey in which the entire universe or a small group of the universe is made over a sample in order to make a general judgment in a universe consisting of many elements, Survey models are research approaches that aim to describe a past or present situation as it exists (Karasar, 2009). Descriptive survey models is used to describe the structure of objects, societies, institutions and the functioning of events (Cohen, Manion ve Morrison, 2007). In this research too, Clasroom Teachers Teaching Styles towards Teaching Thinking Skills were examined in terms of various variables, the descriptive survey method was used.

Population and Sample

The research population consists of primary school teachers working in official primary schools located in the central districts of İzmir Provincial Directorate of National Education. There are a total of 5653 primary school teachers in the central districts of İzmir.

The sample of the study consisted of 307 primary school teachers who were at the school on the day the measurement tool was applied and voluntarily participated in the study. While choosing the sample of the research, the convenience sampling method was applied. The convenience sampling method is a relatively less costly technique that adds speed and practicality to the research (Yıldırım & Şimşek, 2008). In the convenience sampling method, if sample size increases the statistical power rises (Wu Suen, Huang and Lee, 2014); therefore, the number of individuals to be sampled was increased in order to strengthen the statistical result. The information about the sample is given in Table 1.

Table 1.

Distribution of Teachers by Gender, Educational Status, Professional Seniority and Marital Status

Variable	Status	N	%
Gender	Female	229	74.6
	Male	78	25.4
Educational Status	Associate Degree	36	11.7
	Undergraduate	247	80.5
	Post Graduate	24	7.8
Professional Seniority	1-10 years	26	8.5
	11-20 years	94	30.6
	21 years and over	187	60.9
Marital Status	Married	239	77.9
	Single	68	22.1
Total		307	100.0

As seen in Table 1, 229 (74.6%) of the teachers to whom the research was conducted were female and 78 (25.4%) were male. Again, 36 (11.7%) of the teachers who made up the sample were associate degree graduates, 247 (80.5%) undergraduate and 24 (7.8%) post graduates. Of these, 26 (8.5%) have 1-10 years of seniority, 94 (30.6%) have 11-20 years of seniority, and 187 (60.9%) have 21 years or more. According to their marital status, 68 (22.1%) of the teachers were single and 239 (77.9%) of them were married.

Data Collection Tools

In the study, "Personal Information Form" was used for teachers' personal information, and data collection tool "Teaching Styles Scale for Teaching Thinking Skills" the 'Teaching Styles Scale' developed" by Grasha and adapted to Turkish by Aktan (2012) was used as the Thinking Skills Instructional Styles Scale, which was created by Dilekli (2015) to adapt it to the thinking skills teaching process.. The teaching styles scale for teaching thinking skills of teachers consists of sub-dimensions such as Expert Teaching Style, Authority Teaching Style, Personal Teaching Style, Facilitator Teaching Style and Representative Teaching Style. The related scale consists of 40 items and 5 dimensions (α=.960), 8 in the Expert Teaching Style dimension (α=.842), 8 in the Authority Teaching Style (α=.842), 8 in the Personal Teaching Style (α=.817), 8 in the Facilitator Teaching Style (α=.882), and 8 in the Representative Teaching Style (α=.806), dimension. As a result of confirmatory factor analysis of 'Teaching Styles Scale for Teaching Thinking Skills', was found as X^2/sd=2.33, CFI=.85, RMR=.17,GFI=.71 NNFI=.84. Again, the scale is in five-point Likert type

as “Strongly Disagree”, “Disagree”, “Moderately Agree”, “Agree” and “Strongly Agree”. Moreover, Ethics committee approval was obtained for the research with the decision of Burdur Mehmet Akif Ersoy University's Ethics Committee dated 01.12.2021 and numbered GO 2021/416.

Information on the reliability revealed by the application of the Teaching Styles Scale for Teaching Thinking Skills to the research group is given in Table 2.

Table 2.

Reliability of the Teaching Styles Scale for Teaching Thinking Skills in the Research Group

Dimension	N	$\overline{X}$	ss	Cronbach’s Alpha	Skewness	Kurtosis
Expert Teaching Style	307	4.24	.50	.725	,630	,598
Authority Teaching Style	307	3.87	.56	.682	,036	,288
Personal Teaching Style	307	4.33	.52	.804	,769	,373
Facilitator Teaching Style	307	4.45	.50	.851	,968	1,424
Representative Teaching Style	307	4.13	.53	.745	,548	,139

First of all, the reliability of the data was examined in order to carry out statistical analyzes in accordance with the final version of the teaching styles scale for teaching thinking skills applied to the research group. According to Özdamar (2015), a Cronbach's Alpha value between .70 and .90 indicates that the scale has high reliability, and a value between .60 and .70 indicates that the scale has sufficient reliability. Accordingly, as a result of the Cronbach's Alpha analysis, the reliability coefficient was .725 (high) in the Expert Teaching Style dimension, .682 (adequate) in the Authority Teaching Style Dimension, .804 (high) in the Personal Teaching Style Dimension, .851 (high) in the Facilitator Teaching Style dimension, and .745 (high) in the Representative Teaching Style dimension, reliability was found to be suitable for the study.

Analysis of Data

The data collected with the relevant scale were coded and analyzed using package program. Calculations such as frequency (f) and percentage (%) were made. In Likert-type items, the same ranges from positive to negative were taken as reference. In order to make appropriate statistical analyzes of the data obtained with the “Teaching Styles Scale for Teaching Thinking Skills”, the skewness coefficient, arithmetic mean, median and mode were checked, and then the Kolmogorov-Smirnov normality test was performed since the number of participants in the research group was

more than 50. As a result of the Kolmogorov-Smirnov Test the significance value was p=.00 (p<.05) (Büyüköztürk, 2009; Özdamar, 2015). As can be seen in Table 2, Expert Teaching Style Dimension skewness value ,630 Kurtosis value ,598; Authority Teaching Style Dimension skewness value ,036 Kurtosis value ,288; Personal Teaching Style Dimension skewness value ,769 Kurtosis value ,373; Facilitator Teaching Style Dimension skewness value ,968 Kurtosis value 1,424 and Representative Teaching Style Dimension skewness value ,548 Kurtosis value ,139. Absolute value of Skewness not be greater than 3 and Kurtosis should not be greater than 10 (Kline, 2011). The fact that the skewness <3 and kurtosis values are <10, and the scores do not deviate significantly from the normal distribution. . Therefore, it was decided to use parametric statistical tests in the analysis of the data.

In the sub-problems of the research, unrelated t-test was used to test whether the data obtained from two unrelated samples differed significantly from each other. The research data meet the basic assumptions of the t-test. The basic assumptions of the t-test are two sample groups are independent of each other. Dependent variable at interval or ratio scale level must be measured. The raw material of the universe represented by each sample scores show normal distribution. Populations represented by samples variances are homogeneous (Büyüköztürk, 2009). In the sub-problems of the research, one-way analysis of variance (ANOVA) was used to test whether the data obtained from more than two unrelated samples differed significantly from each other. The research data meet the basic assumptions of the one-way analysis of variance (ANOVA). The basic assumptions of the one-way analysis of variance (ANOVA) are the observations must be independent, the data distributed normally, and variances are homogeneous (Büyüköztürk, 2009). If ANOVA test is a significant difference between the groups as a result of this test, the homogeneity of the variances was examined first. It was observed that the variances were homogeneous in all sub-problems in which the data obtained from two or more samples were included. Therefore, the Scheffe test, which is one of the tests used in homogeneous variance distributions, was applied in order to determine between which variables the difference was. The obtained data were interpreted by turning them into tables, and the difference between independent variables was tested at the p=.05 level (Büyüköztürk, 2009). Where significant differences are seen, eta square value was used to determine the effect level of the variable causing the difference. An eta squared value of 0.2 is minor; A value of 0.3 was interpreted as a medium effect and a value of 0.5 as a large effect (Cohen, 1988).

Result of the analysis of this study's data, it was revealed that the teachers had more than one teaching style. It was seen that the exclusion of teachers who have more than one teaching style from the research will cause a lot of data loss. According to Grasha (1996), almost everyone who teaches has five teaching styles to varying degrees. Each style is like the color on the artist's palette and these colors can be blended together. Therefore, the data of the teachers were not carried out according to the teaching style with which they got the highest score, but according to the level of having the colors in the palette over the scores they got from the five learning styles.

The value ranges in Table 3 were taken into account in the interpretation of the mean values of the scores of the teachers obtained from the teaching styles scale for the teaching of thinking skills.

Table 3.

Teaching Styles Scale Evaluation Score Ranges for Teaching Thinking Skills

Range	Value	Comment
1.00-1.79	Strongly Disagree	Negative
1.80-2.59	Partially Disagree	Negative
2.60-3.39	Undecided	Negative
3.40-4.19	Partially Agree	Positive
4.20-5.00	Strongly Agree	Positive

When Table 3 is examined, the arithmetic average of the answers of the primary school teachers, it was interpreted as; the data in the range of 1.00-1.79 "Strongly Disagree", the data in the range of 1.80-2.59 "Partly Disagree", the data in the range of 2.60-3.39 " Undecided", data in the range of 3.40-4.19 "Partially Agree" and data in the range of 4.20-5.00 "Strongly Agree".

Findings and Interpretation

In this section, the findings related to the problem and sub-problems for which answers are sought are given. In Table 4 Distribution of Teachers' Teaching Styles for Teaching Thinking Skills is given.

Table 4.

Distribution of Teachers' Teaching Styles for Teaching Thinking Skills

Dimension	N	X̄	ss	Minimum	Maximum	Mode	Median
Expert Teaching Style	307	4.24	.50	2,13	5,00	3,88	4,25
Authority Teaching Style	307	3.87	.56	2,25	5,00	3,75	3,87
Personal Teaching Style	307	4.33	.52	2,50	5,00	5,00	4,37
Facilitator Teaching Style	307	4.45	.50	2,25	5,00	5,00	4,50
Representative Teaching Style	307	4.13	.53	2,25	5,00	4,00	4,25

When Table 4 is examined, the teaching styles of teachers for teaching thinking skills are in the Expert Teaching Style dimension (X̄=4.24), Authority Teaching Style Dimension (X̄=3.87), Personal Teaching Style Dimension (X̄=4.33), Facilitator Teaching Style dimension (X̄=4.45) and Representative Teaching Style dimension (X̄=4.13). According to these results, and considering the classification in Table 3; it can be said that teachers have a high level of all teaching styles. In teaching thinking skills, teachers adopt the least Authority Teaching Style (X̄=3.87) and the most Facilitator Teaching Style (X̄=4.45).

For first sub-problem, an independent t-test was conducted to examine whether the teaching styles of the teachers differ according to their gender status, and the analysis findings are given in Table 5.

Table 5.

Statistical Analysis of Teachers' Teaching Styles for Teaching Thinking Skills by Gender

Dimension	Gender	N	X̄	ss	sd	t	p	η^2
Expert Teaching Style	Male	229	4.25	.48491	.386	305	.700	,0004
	Female	78	4.22	.56107				
Authority Teaching Style	Male	229	3.87	.56645	.025	305	.980	,0000
	Female	78	3.87	.56707				
Personal Teaching Style	Male	229	4.36	.50917	1.492	305	.137	,0020
	Female	78	4.25	.58260				
Facilitator Teaching Style	Male	229	4.48	.47487	1.829	305	.068	,0100
	Female	78	4.36	.56133				
Representative Teaching Style	Male	229	4.13	.53349	.025	305	.980	,0000
	Female	78	4.13	.53426				

When Table 5 is examined, the teaching styles of teachers for teaching thinking skills does not appear to differ significantly since the values are in the Expert Teaching Style Dimension [t(305)=

0.386, p>.05], Authority Teaching Style dimension [t(305)= 0.025, p>.05], Personal Teaching Style [t(305)=1.492, p>.05], Facilitator Teaching Style [t(305)= 1.829, p>.05], and Representative Teaching Style [t(305)= 0.025, p>.05] When the arithmetic averages of the teaching styles of primary school teachers are examined, it is seen that female and male teachers have averages close to each other. However, in the Facilitator Teaching Style Dimension, male teachers ($\bar{X}$=4.48) have a more facilitator teaching style in teaching thinking skills than female teachers ($\bar{X}$=3.36).

For Second sub-problem, One-Way Analysis of Variance (ANOVA) test was conducted in order to examine whether the teaching styles of the teachers differ according to their educational status, descriptive statistics are given in Table 6 and analysis findings are given in Table 7.

Table 6.

Statistical Distribution of Teachers' Teaching Styles for Teaching Thinking Skills by Educational Status

Dimension	Graduation	N	$\bar{X}$	ss
Expert Teaching Style	Associate Degree (1)	36	4.32	.62634
	Undergraduate (2)	247	4.23	.49165
	Post Graduate (3)	24	4.20	.43840
Authority Teaching Style	Associate Degree (1)	36	3.95	.61818
	Undergraduate (2)	247	3.86	.56983
	Post Graduate (3)	24	3.85	.43718
Personal Teaching Style	Associate Degree (1)	36	4.44	.57038
	Undergraduate (2)	247	4.31	.52820
	Post Graduate (3)	24	4.41	.47012
Facilitator Teaching Style	Associate Degree (1)	36	4.62	.51409
	Undergraduate (2)	247	4.42	.49861
	Post Graduate (3)	24	4.49	.45516
Representative Teaching Style	Associate Degree (1)	36	4.35	.54894
	Undergraduate (2)	247	4.10	.54087
	Post Graduate (3)	24	4.12	.32762

In Table 6, when the teaching styles of teachers for teaching thinking skills are analyzed according to their educational status, associate degree graduates ($\bar{X}$=4.32) have the highest average, while post graduates ($\bar{X}$= 4.20) have the lowest average in the Expert Teaching Style dimension. In the dimension of authority teaching style, associate degree graduates ($\bar{X}$=3.95) have the highest average, while post graduates ($\bar{X}$= 3.85) have the lowest average. In the Personal Teaching Style dimension, associate degree graduates ($\bar{X}$=4.44) have the highest average, while undergraduate

graduates ($\bar{X}$= 4.31) have the lowest average. In the facilitating teaching style dimension, associate degree graduates ($\bar{X}$=4.62) have the highest average, and undergraduates ($\bar{X}$= 4.42) have the lowest average. In the Representative Teaching Style dimension, associate degree graduates ($\bar{X}$=4.35) have the highest average, while undergraduates ($\bar{X}$= 4.10) have the lowest average.

Table 7.

Statistical Analysis of Teachers' Teaching Styles for Teaching Thinking Skills by Educational Status

Dimension	Source of variance	Sum of squares	Sd	Mean of squares	F	p	Sig. Dif.	η^2
Expert Teaching Style	Betw. groups	.275	2	.137	.538	.585		
	In groups	77.615	304	.255				,0035
	Total	77.890	306					
Authority Teaching Style	Betw. groups	.269	2	.135	.419	.658		
	In groups	97.648	304	.321				,0027
	Total	97.917	306					
Personal Teaching Style	Betw. groups	.764	2	.382	1.364	.257		
	In groups	85.103	304	.280				,0088
	Total	85.867	306					
Personal Teaching Style	Betw. groups	1.331	2	.666	2.691	.069		
	In groups	75.174	304	.247				,0173
	Total	76.505	306					
Representative Teaching Style	Betw. groups	1.891	2	.946	3.383	.035	1-2	
	In groups	84.980	304	.280				,0217
	Total	86.871	306					

When Table 7 is examined, it can be seen that the teaching styles of teachers for teaching thinking skills were determined to have no significant difference according to their educational status in the Expert Teaching Style Dimension [F (2-304)=.538, p >.05], and in the Authority Teaching Style dimension [F (2-304) =.419. , p >.05], in Personal Teaching Style Dimension [F (2-304) =1.364, p >.05] and Facilitator Teaching Style Dimension [F (2-304) = 2.691, p >.05] . However, it is seen that there is a significant difference in Representative Teaching Style Dimension [F (2-304) = 3.383, p <.05].The homogeneity of the variances was examined to determine between which groups the differences were. Since the variances were homogeneous, the Scheffe test, one of the multiple comparison tests, was performed. According to the results of the Scheffe test, associate degree teachers ($\bar{X}$=4.35) have a more representative teaching style in teaching thinking skills than undergraduate teachers ($\bar{X}$=4.10). When the eta square value is examined, the education level has a low level of effect on teaching learning styles. When the arithmetic averages are taken into account, in the dimensions of Expert Teaching Style, Authority Teaching Style, Personal Teaching

Style, Facilitator Teaching Style and Representative Teaching Style, associate degree teachers have a higher level of teaching style type than teachers with undergraduate and postgraduate degrees.

For Third sub-problem, One-Way Analysis of Variance (ANOVA) test was conducted to examine whether teachers' teaching styles differ according to their professional seniority, descriptive statistics are given in Table 8 and analysis findings are given in Table 9.

Table 8.

Statistical Distribution of Teachers' Teaching Styles for Teaching Thinking Skills by Professional Seniority

Dimension	Professional Seniority	N	$\bar{X}$	ss
Expert Teaching Style	1-10 years	26	4.14	.52084
	11-20 years	94	4.24	.48280
	21 years and over	187	4.25	.51404
Authority Teaching Style	1-10 years	26	3.66	.66874
	11-20 years	94	3.88	.53846
	21 years and over	187	3.90	.56057
Personal Teaching Style	1-10 years	26	4.20	.57563
	11-20 years	94	4.35	.47776
	21 years and over	187	4.34	.54797
Personal Teaching Style	1-10 years	26	4.35	.51319
	11-20 years	94	4.43	.46074
	21 years and over	187	4.47	.51763
Representative Teaching Style	1-10 years	26	3.96	.59745
	11-20 years	94	4.09	.49428
	21 years and over	187	4.18	.53814

In Table 8, when the teaching styles of teachers for teaching thinking skills are examined according to their professional seniority, teachers with 21 years and more seniority in the Expert Teaching Style dimension have the highest average ($\bar{X}$=4.25), while teachers with 1-10 years of seniority ($\bar{X}$= 4.14) has the lowest average. In the dimension of authority teaching style, teachers with 21 years and more seniority ($\bar{X}$=3.90) have the highest average, while teachers with 1-10 years of experience ($\bar{X}$= 3.66) have the lowest average. In the Personal Teaching Style dimension, teachers with 11-20 years of experience ($\bar{X}$=4.35) have the highest average, while teachers with 1-10 years of experience ($\bar{X}$= 4.20) have the lowest average. In the facilitator teaching style dimension, teachers with 21 years and more seniority ($\bar{X}$=4.4730) have the highest average, while teachers with 1-10 years of experience ($\bar{X}$= 4.35) have the lowest average. In the dimension of

Representative Teaching Style, teachers with 21 years or more seniority ($\bar{X}$=4.18) have the highest average, while teachers with 1-10 years of experience ($\bar{X}$= 3.96) have the lowest average.

Table 9.

Statistical Analysis of Teachers' Teaching Styles for Teaching Thinking Skills by Professional Seniority

Dimension	Source of variance	Sum of squares	Sd	Mean of squares	F	p	η^2
Expert Teaching Style	Betw. groups	.281	2	.141	.550	.577	
	In groups	77.609	304	.255			,0036
	Total	77.890	306				
Authority Teaching Style	Betw. groups	1.323	2	.661	2.082	.126	
	In groups	96.594	304	.318			,0135
	Total	97.917	306				
Personal Teaching Style	Betw. groups	.506	2	.253	.901	.407	
	In groups	85.361	304	.281			,0058
	Total	85.867	306				
Personal Teaching Style	Betw. groups	.343	2	.171	.684	.505	
	In groups	76.163	304	.251			,0044
	Total	76.505	306				
Representative Teaching Style	Betw. groups	1.362	2	.681	2.421	.091	
	In groups	85.509	304	.281			,0156
	Total	86.871	306				

When Table 9 is examined, the teaching styles of teachers for teaching thinking skills were seen to show no significant difference according to their professional seniority as; in the Expert Teaching Style Dimension [F (2-304) =.550 , p >.05], in the Authority Teaching Style dimension [F (2-304) =2.082, p >.05], in the Personal Teaching Style Dimension [F (2- 304) =.901, p >.05], in the Facilitating Teaching Style Dimension [F (22-304) = .684 , p >.05], and in the Representative Teaching Style Dimension [F (2-304) = 2.421, p >. 05].When the averages are examined, it is seen that teachers with 21 years and more seniority and teachers with 11-20 years of seniority have higher scores than teachers with 1-10 years of seniority in all teaching styles in the teaching of thinking skills.

For Fourth sub-problem, in order to examine whether the teaching styles of the teachers differ according to their marital status, a t-test was conducted for independent groups, and the analysis findings are given in Table 10.

Table 10.

Statistical Analysis of Teachers' Teaching Styles for Teaching Thinking Skills by Marital Status

Dimension	Gender	N	X̄	ss	sd	t	p	η^2
Expert Teaching Style	Male	239	4.23	.50	1.104	305	.311	,0033
	Female	68	4.30	.49				
Authority Teaching Style	Male	239	3.87	.56	.410	305	.682	,0005
	Female	68	3.90	.58				
Personal Teaching Style	Male	239	4.32	.55	.387	305	.699	,0004
	Female	68	4.35	.56				
Facilitator Teaching Style	Male	239	4.43	.49	1.224	305	.222	,0048
	Female	68	4.51	.52				
Representative Teaching Style	Male	239	4.12	.54	.687	305	.493	,0015
	Female	68	4.17	.49				

When Table 10 is examined, there is no significant difference among the teaching styles of teachers for teaching thinking skills according to their marital status, and the significance values were calculated as; in Expert Teaching Style Dimension [t(305)= 1.104, p>.05], Authority Teaching Style dimension [t(305)= .410, p>.05].], Personal Teaching Style Dimension [t(305)= .387, p>.05], Facilitating Teaching Style Dimension [t(305)= 1.224, p>.05] and Representative Teaching Style Dimension [t(305)= . 687, p>.05]. When the averages of the teaching styles of the teachers are examined; It is seen that single teachers have higher average scores than married teachers.

Conclusion, Discussion And Recommendations

Conclusion and Discussion

The teaching styles of primary school teachers for teaching thinking skills consist of sub-dimensions such as Expert Teaching Style, Authority Teaching Style, Personal Teaching Style, Facilitator Teaching Style and Representative Teaching Style. According to the results it was concluded that the teachers in general and all sub-dimensions of the scale had a high level of teaching styles, they adopted the 'Authority Teaching Style' at least and the Facilitator Teaching Style the most. This result is in line with the research results of Üredi (2006). On the other hand, it is similar to the research results of Maden (2012) and Arpacı (2013). Because, in the aforementioned studies, it has been concluded that the teachers of Turkish and Religious Culture and Moral Knowledge course have some teaching styles.

It has been concluded that there is no significant gender difference in the teaching styles of primary school teachers for teaching thinking skills, that is, male and female primary school teachers have close averages in teaching styles of thinking skills. However, in the Facilitator Teaching Style sub-dimension, it was concluded that male teachers had a more facilitating teaching style in teaching thinking skills than female teachers. This result is in line with the research results of Üredi (2006). On the other hand, it is similar to the research results of Maden (2012) and Arpacı (2013). Because, in the aforementioned studies, it was concluded that the teaching styles of Turkish and Religious Culture and Moral Knowledge course teachers did not differ significantly according to their genders. On the other hand, Dinçer, Saracaloğlu, Aldan Karademir, and Dedebali, (2017) found that there was a statistically significant difference in favor of women teachers in teaching style.

According to their educational status, it has been revealed that there is a significant difference in the teaching styles of primary school teachers for teaching thinking skills. Accordingly, it was concluded that associate degree teachers have more representative teaching style in teaching thinking skills than undergraduate teachers. On the other hand, it has been concluded that teachers with associate degree have higher teaching styles than teachers with undergraduate and graduate degrees in the dimensions of Expert Teaching Style, Authority Teaching Style, Personal Teaching Style, Facilitating Teaching Style and Representative Teaching Style. This result is similar to the research result of Üredi (2006). Because, in the study of Üredi (2006), there was no significant difference in the teaching styles of teachers' thinking skills according to the graduated school type variable.

According to their professional seniority, there is no significant difference in the overall scale and sub-dimensions of the teaching styles of primary school teachers. However, when the averages are examined, it has been revealed that in all teaching styles in teaching thinking skills, teachers with a seniority of 21 years and above and teachers with a seniority of 11-20 years have a higher teaching style than teachers with a seniority of 1-10 years. While this result coincides with the research results of Üredi (2006) and Arpacı (2013), it differs with the research results of Dinçer, Saracaloğlu, Aldan Karademir and Dedebali (2017). Because it has been determined that there is a statistically significant difference in favor of teachers with 1-10 years of seniority.

Finally, there is no significant difference in general scale and sub-dimensions of primary school teachers' teaching styles for teaching thinking skills according to their marital status. When the

averages of the teaching styles of the teachers were examined, it was concluded that single and married teachers had averages close to each other. However, in the Facilitator Teaching Style Dimension, it was revealed that single teachers had a more facilitator teaching style in teaching thinking skills than married teachers.

Recommendations

1. This research was conducted only with primary school teachers. New research can be done with more comprehensive samples that include all branch teachers, and the teaching styles that teachers use in teaching thinking skills can be determined and practices related to their development can be made.

2. Similar studies should be carried out with teacher candidates in teacher training institutions, and various trainings or lectures can be provided to the programs about the education of thinking skills and how to learn and teach these skills during the training process of teacher candidates.

3. Likewise, in-service trainings on thinking skills and the teaching of these skills can be prepared and conferences can be given to teachers who are working in education. With these trainings and conferences, teachers should be informed about the importance, contribution and effect of teaching styles in the development of thinking skills.

4. Similar studies can be conducted in a way to cover all branch teachers according to different variables and with different methods. Again, programs can be prepared that will provide teachers with knowledge, skills and experience on how to improve their in-service and pre-service thinking skills, and it can be suggested to investigate the effects of these programs by applying them.

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Genişletilmiş Özet

Giriş

Eğitim öğretim ortamını şekillendiren en önemli unsurlarından birinin öğretmenler olduğu göz önüne alındığında öğretmenlerin sahip olduğu öğretim stillerinin, öğrenme öğretme süreci ile öğrenciler üzerinde etkili olduğu görülmektedir. Dolayısıyla sınıf içerisinde öğretmenlik mesleği icra edilirken öğrenme öğretme sürecinin başarılı olabilmesi için öğretim stilleri dikkate alınması gereken bir unsurdur (Maden, 2012). Araştırmanın amacını;sınıf öğretmenlerinin düşünme becerileri öğretimine yönelik öğretme stillerini bazı değişkenlere göre incelemek oluşturmaktadır. Yani sınıf öğretmenlerinin düşünme becerileri öğretimine yönelik öğretme stilleri; cinsiyet, öğrenim durumları, mesleki kıdemleri ve medeni durumlarına göre incelemek araştırmanın amacını oluşturmuştur. Bu amaca bağlı olarak, araştırmanın problemini; sınıf öğretmenlerinin düşünme becerileri öğretimine yönelik öğretme stilleri ne düzeydedir? sorusu oluşturmuştur. Bu probleme bağlı olarak araştırmada;

1. Sınıf öğretmenlerinin düşünme becerileri öğretimine yönelik öğretme stilleri cinsiyete göre farklılık göstermekte midir?
2. Sınıf öğretmenlerinin düşünme becerileri öğretimine yönelik öğretme stilleri öğrenim durumlarına göre farklılık göstermekte midir?
3. Sınıf öğretmenlerinin düşünme becerileri öğretimine yönelik öğretme stilleri mesleki kıdemlerine göre farklılık göstermekte midir?
4. Sınıf öğretmenlerinin düşünme becerileri öğretimine yönelik öğretme stilleri medeni durumlarına göre farklılık göstermekte midir?

sorularına yanıt aranmıştır.

Yöntem

Araştırmanın Modeli

Bu çalışmada genel tarama modellerinden betimsel tarama modeli kullanılmıştır. Genel tarama modeli, çok sayıda öğeden oluşan bir evrende genel bir yargıya varmak ya da var olduğu şekliyle mevcut durumu ortaya koymak için evrenin tamamının veya evrenin küçük bir grubunun bir

örneklem üzerinden yapıldığı bir modeldir (Karasar, 2009). Betimsel tarama modelleri nesnelerin, toplumların, kurumların yapısını ve olayların işleyişini betimlemek için kullanılmaktadır (Cohen, Manion ve Morrison, 2007). Bu araştırmada da Sınıf Öğretmenlerinin Düşünme Becerilerinin Öğretimine Yönelik Öğretim Stilleri çeşitli değişkenler açısından incelemek amacıyla betimsel tarama yöntemi kullanılmıştır.

Evren ve Örneklem

Araştırmanın evrenini İzmir İl Milli Eğitim Müdürlüğü merkez ilçelerinde bulunan resmi ilköğretim okullarında görev yapan sınıf öğretmenleri oluşturmaktadır. İzmir ili merkez ilçelerinde toplam 5653 sınıf öğretmeni bulunmaktadır. Araştırmanın örneklemini ölçme aracının uygulandığı gün okulda bulunan ve araştırmaya gönüllü olarak katılan 307 sınıf öğretmeni oluşturmuştur. Araştırmanın örneklemi seçilirken uygun örnekleme yöntemi kullanılmıştır. Uygun örnekleme yöntemi, araştırmaya hız ve pratiklik katan nispeten daha az maliyetli bir tekniktir (Yıldırım ve Şimşek, 2008). Uygun örnekleme yönteminde örneklem büyüklüğü arttıkça istatistiksel güç de artmaktadır (Wu Suen, Huang ve Lee, 2014); bu nedenle, istatistiksel sonucu güçlendirmek için örnekleme girecek kişi sayısı artırılmıştır. Araştırmanın örneklemini oluşturan öğretmenlerin 229'u (%74.6) kadın, 78'i (%25.4) erkektir. Yine örneklemi oluşturan öğretmenlerin, 36'sı (%11.7) Önlisans mezunu, 247'si (%80.5) Lisans mezunu ve 24'ü (%7.8)Yüksek lisans mezunudur. Bu öğretmenlerin 26'sı (%8.5) 1-10 yıl kıdeme; 94'ü (%30.6) 11-20 yıl kıdeme ve 187'si (%60.9) 21 yıl ve üzeri kıdeme sahiptir. Öğretmenlerin 68'i (%22,1) bekâr ve 239'u (%77.9) evlidir.

Veri Toplama Araçları

Araştırmada; öğretmenlerin kişisel bilgileri için, "Kişisel Bilgi Formu" ve öğretmenlerin düşünme becerilerioğretimine yönelik öğretme stillerini belirlemek için,Grasha(1996) tarafından geliştirilen ve Aktan (2012) tarafından Türkçeye uyarlanan "Düşünme Becerileri Öğretimine Yönelik Öğretim Stilleri Ölçeği (DBÖS-Ö)" kullanılmıştır. Öğretmenlerin düşünme becerileri öğretimine yönelik öğretme stilleri ölçeği; Uzman Öğretim Stili, Otorite Öğretim Stili, Kişisel Öğretim Stili, Kolaylaştırıcı Öğretim Stili ve Temsilci Öğretim Stili gibi alt boyutlardan oluşmaktadır. İlgili ölçek; Uzman Öğretim Stili boyutunda 8, Otorite Öğretim Stili boyutunda 8, Kişisel Öğretim Stili boyutunda 8, Kolaylaştırıcı Öğretim Stili boyutunda 8 ve Temsilci Öğretim Stili boyutunda 8 olmak üzere 40 madde ve 5 boyuttan oluşmaktadır.

Sonuç ve Tartışma

Araştırma sonucunda ölçek geneli ve tüm alt boyutlarda; öğretmenlerin tüm öğretme stillerine yüksek düzeyde sahip oldukları, en az 'Otorite Öğretim Stilini', en çok ise Kolaylaştırıcı Öğretim Stilini benimsemedikleri sonucuna ulaşılmıştır. Bu sonuç Üredi (2006)'nin araştırma sonuçları ile örtüşmektedir. Diğer taraftan Maden (2012) ve Arpacı (2013)'nın araştırma sonuçları ile benzerlik göstermektedir. Çünkü söz konusu araştırmalarda da Türkçe ve Din Kültürü ve Ahlak Bilgisi dersi öğretmenlerinin bazı öğretme stillerine sahip olduğu sonucuna ulaşılmıştır. Sınıf öğretmenlerin düşünme becerilerinin öğretimine yönelik öğretme stillerinde; cinsiyete göre anlamlı farklılık olmadığı, Kolaylaştırıcı Öğretim Stili alt boyutunda erkek öğretmenler, kadın öğretmenlere göre düşünme becerilerinin öğretiminde daha kolaylaştırıcı öğretme stiline sahip oldukları sonucuna varılmıştır. Bu sonuç Üredi (2006)'nin araştırma sonuçları ile örtüşmektedir. Diğer taraftan Maden (2012) ve Arpacı (2013)'nın araştırma sonuçları ile benzerlik göstermektedir. Çünkü söz konusu araştırmalarda da Türkçe ve Din Kültürü ve Ahlak Bilgisi dersi öğretmenlerinin cinsiyetlerine göre öğretme stillerinin anlamlı farklılık göstermediği sonucuna ulaşılmıştır. Bunlara karşın Dinçer, Saracaloğlu, Aldan Karademir ve Dedebali, (2017) araştırmalarında öğretme stilinde, kadınlar öğretmenler lehine istatistiksel açıdan anlamlı fark olduğu tespit edilmiştir. Sınıf öğretmenlerin düşünme becerileri öğretimine yönelik öğretme stilleri öğrenim durumlarına göre ise anlamlı farklılık Uzman Öğretim Stili, Otorite Öğretim Stili, Kişisel Öğretim Stili, Kolaylaştırıcı Öğretim Stili ve Temsilci Öğretim Stili boyutlarında; Önlisans mezunu öğretmenler, Lisans ve Yüksek Lisans mezunu öğretmenlerden daha yüksek öğretme stiline sahip oldukları sonucuna varılmıştır. Bu sonuç Üredi (2006)'nin araştırma sonucu ile benzerlik göstermektedir. Çünkü Üredi (2006)'nin araştırmasında da mezun olunan okul türü öğretmenlerin düşünme becerileri öğretim stillerinde anlamlı bir farklılık göstermemiştir. Sınıf öğretmenlerin düşünme becerilerinin öğretimine yönelik öğretme stilleri mesleki kıdemlerine göre; ölçek geneli ve alt boyutlarında anlamlı farklılık olmadığı sonucuna ulaşılmıştır. Bu sonuç Üredi (2006) ve Arpacı (2013)'nın araştırma sonuçları ile örtüşmekte iken Dinçer, Saracaloğlu, Aldan Karademir ve Dedebali, (2017)'nın araştırma sonuçları ile farklılık göstermektedir. Çünkü bu araştırmalarda 1-10 yıl kıdeme sahip öğretmenler lehine istatistiksel açıdan anlamlı fark olduğu tespit edilmiştir. Son olarak sınıf öğretmenlerin düşünme becerilerinin öğretimine yönelik öğretme stilleri medeni durumlarına göre; ölçek geneli ve alt boyutlarında anlamlı farklılık olmadığı görülmektedir

Öneriler

1. Bu araştırma sadece sınıf öğretmenleri ile yapılmıştır. Yeni yapılacak araştırmalar, daha kapsamlı ve bütün branş öğretmenlerini içine alan örneklemlerle yapılabilir ve öğretmenlerin düşünme becerileri öğretiminde kullandıkları öğretim stilleri belirlenip bunların geliştirilmesi ile ilgili uygulamalar yapılabilir.

2. Benzer araştırmalar öğretmen yetiştiren kurumlarda öğretmen adayları ile yapılmalı, öğretmen adaylarının yetiştirilmesi sürecinde programlara düşünme becerilerinin eğitimi ve bu becerileri nasıl öğrenecekleri ve öğretecekleri ile ilgili eğitimler ve dersler verilebilir.

3. Aynı şekilde eğitim öğretim görevini yapmakta olan öğretmenlere düşünme becerileri ve bu becerilerin öğretimine ilişkin hizmet içi eğitimler programları hazırlanabilir ve konferanslar verilebilir. Bu eğitim ve konferanslarla öğretmenlere öğretim stillerinin, düşünme becerilerinin geliştirilmesindeki önemi, katkısı ve etkisi ile ilgili bilgiler verilmelidir.

4. Benzer araştırmalar farklı değişkenlere göre tüm branş öğretmenlerini kapsayacak şekilde ve farklı yöntemlerle yapılabilir. Yine öğretmenlere hizmet içi ve hizmet öncesi düşünme becerilerinin nasıl geliştirilebileceğine dair bilgi, beceri ve deneyimler kazandıracak programlar hazırlanabilir ve bu programlar uygulanarak etkilerinin araştırılması önerilebilir.

ETİK BEYAN: "*Investigation Of Teaching Styles Of Primary School Teachers For Teaching Thinking Skills According To Some Variables"* başlıklı çalışmanın yazım sürecinde bilimsel, etik ve alıntı kurallarına uyulmuş; toplanan veriler üzerinde herhangi bir tahrifat yapılmamıştır ve veriler toplanmadan önce Mehmet Akif Ersoy Üniversitesi Eğitim Fakültesi Girişimsel Olmayan Klinik araştırmalar Etik Kurulu'ndan 01/12/2021 tarih ve GO 2021/416 sayılı etik izin alınmıştır. Karşılaşılacak tüm etik ihlallerde "Mehmet Akif Ersoy Üniversitesi Eğitim Fakültesi Dergisi Yayın Kurulunun" hiçbir sorumluluğunun olmadığı, tüm sorumluluğun Sorumlu Yazara ait olduğu ve bu çalışmanın herhangi başka bir akademik yayın ortamına değerlendirme için gönderilmemiş olduğunu taahhüt ederiz.