An Examination of the Researches Related to Teaching Styles Measurement Instruments

Öğretim Stilleri Ölçme Araçlarıyla İlgili Yapılan Araştırmaların İncelenmesi

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Abstract

The aim of this study is to examine the types and frequencies of the models and the measurement instruments that were developed in accordance with the adopted teaching styles of the educators. Besides this, it was aimed to reflect the studies related to the validity and reliability analysis of the measurement instruments and to determine the measurement instruments that are not used in Turkey. The analysis of 17 masters and doctoral theses that are available in the Council of Higher Education Thesis Center and of 19 articles published in national refereed journals between 2000 and 2015 in Turkey was conducted by document analysis method within the scope of this research. According to the research results, there are 22 teaching style models and instruments that were developed based on those models in the international literature, and only five of them were adapted to Turkish. Besides this, it was determined that three instruments were developed in Turkey and the instruments that were developed abroad were taken as a model in the developing process. It was found that the most frequently used teaching style inventory among the ones which were adapted in Turkey is Grasha's Teaching Style Inventory.

Anahtar sözcükler: teaching styles, teaching styles inventories, teaching styles scales.

Öz

Bu çalışmanın amacı eğitimcilerin benimsediği öğretim stillerine ilişkin olarak geliştirilmiş model ve ölçme araçlarından Türkiye'de hangilerinin, hangi sıklıkta kullanıldıklarının incelenmesidir. Bunun yanında Türkiye'de kullanılmayan ölçme araçlarının belirlenmesi ve kullanılan ölçme araçlarına ilişkin yapılmış geçerlik ve güvenirlik çalışmalarının yansıtılması amaçlanmıştır. Araştırma kapsamında doküman incelemesi yöntemi kullanılarak Yükseköğretim Kurulu Ulusal Tez Merkezi veri tabanında bulunan 17 yüksek lisans ve doktora tezi ile Türkiye'de 2000-2015 yılları arasında ulusal hakemli dergilerde yayınlanmış 19 makale incelenmiştir. Araştırma sonuçlarına göre, uluslararası alanyazında 22 öğretim stili modeli ve bunlara dayanarak geliştirilen ölçme araçlarının bulunduğu; bunlardan beşininTürkçeye uyarlandığı görülmüştür. Bunun yanında Türkiye'de 3 farklı çalışmada ölçme aracı geliştirildiği ve bu araçların geliştirilme süreçlerinde, yurt dışında geliştirilen ölçme araçlarının model alındığı belirlenmiştir. Türkiye'de uyarlaması yapılan ölçme araçlarından araştırmalarda en çok kullanılanın Grasha Öğretim Stili Envanteri olduğu görülmektedir.

Key words: öğretim stilleri, öğretim stilleri envanterleri, öğretim stilleri ölçekleri.

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Introduction

The perceptions of individuals who listen to the same music, watch the same movie or look at the same image at the same age, at the same time and in the same environment may not necessarily be the same. Similarly, in the course directed by the same teacher, at the same time, in the same classroom, on the same subjects, the learning styles of individuals, and correspondingly, learning levels may not be equal because of the individual differences which cannot be tangibly seen from the outside, like a fingerprint or an iris, and which have a very important role in the process of learning and teaching (Babadoğan, 2000; Can, 2011; Deryakulu & Kuzgun, 2014; Dunn & Dunn, 1992; Genç & Eryaman, 2007; Güven and others, 2008;

Şeker, 2013; Yağışan & Sünbül, 2009; Yenice & Saracaloğlu, 2009) From this viewpoint, accepting individual differences in the process of learning and teaching and organizing the learning and teaching process which has a multi-directional structure based on individual differences are necessary for an effective learning and teaching process (Adıgüzel, 2009; Güven & Sözer, 2007).

Teaching and instruction include activities which aim to make the behavioral changes of individuals. The common goal of both notions is to promote learning and to create an atmosphere that fosters learning (Çepni & others, 2005). The teaching and learning process consists of components such as teachers, students, learning environment, teaching strategies, etc. (ERG, 2012). The main elements of this process are the students and teachers who carry out teaching activities and who facilitate learning for students. The quality of interactions between the elements in this process is mainly shaped by the personal and professional characteristics of teachers (Temel & Aksoy, 2001). Teachers who are aware of their own teaching characteristics in the process of teaching definitely improve the quality of education positively (Arpacı, 2013; Sarıtaş & Süral, 2010). There is always a value, belief and philosophy under teachers' each behavior which facilitate learning, and these elements are expected to be consistent with teachers' behaviors (Özkaya, 2013; Yılmaz & Tosun, 2013). This consistency within the teaching-learning process helps both students and teachers to achieve their goals. Therefore, teaching styles, which were the indicators of teachers' thoughts, beliefs, and behaviors, can be said to be effective in the teaching-learning process (Bilgin & Bahar, 2008; Fischer & Fischer, 1995; Gencel, 2013).

Classroom environments where teaching activities are held include lots of different interests, expectations, desires, abilities and intelligence types (Deryakulu & Kuzgun, 2014) because students in these classrooms have different learning processes, and thereby usage of learning styles and teaching styles that address these learning styles are important points in the process of learning and teaching (Wolf & Growers, 2013; Veznedaroğlu & Özgür, 2005).

According to Turkish Language Association (2015), the Turkish equivalent of the French origin word "style" is "üslup, biçem". It is seen that there is incomprehensibility on the concept of style as well as a remarkable amount of uncertainty about the misuse of this concept (Ak, 2008). When the studies in the literature are analyzed, it is seen that the notion of style in learning/teaching processes is used as the characteristics that give information about the quality of learners and teachers, reflecting individuals' attitudes, tendencies, and choices in learning/teaching processes.

The researchers who have studied and presented theories about learning styles, all have different definitions of what this concept means. Keefe (1979) defines learning styles as individuals' perceptions, interactions and styles in reaction to their environment and cognitive, emotional and psychological traits that can be stated as relatively unchanging indicators, while Kolb (1984), who made serious contributions to the literature on learning styles, defines it as one's own methods in the learning/teaching process that are used during the gathering and processing of information.

Following the studies that came after the learning style concept's first introduction to literature by Rita Dunn, many different researchers defined this learning style that takes place in the literature. According to Dunn and Dunn (1986) who advocate for the idea that the learning styles of teachers

have an important role in their teaching styles, teaching style is a notion which is formed in a lifelong term and it involves teaching and learning; together with education and content information, experience, manner and behaviour aspects in a far wider manner than the method itself. However, according to Fischer (1979) and Conti (1985), teaching style is the unique and consistent qualities of the teacher that he or she sustains even if the content changes. While Heimlich and Norland (2002) define the teaching styles as educator's adaptation between the choices in teaching behaviours and his beliefs towards teaching behaviours and education, Ellis (1979) defines it as the behaviours displayed by the teacher during the learning and teaching process. Even though there is not one single unanimous definition for teaching style, based upon the widely accepted descriptions in literature it can be defined as the education approaches formed by the teachers that are affected by learning styles.

When the methods on teaching styles are reviewed, it is seen that many researchers abroad have developed teaching styles based on learning styles. However, the researchers who only study teaching styles developed teaching style scales and inventories even if they are not as comprehensive as learning styles. These teaching models, inventories, and scales that are developed abroad can be listed as follows, shown in Table 1 (Altay, 2009; Artvinli, 2010; Kulaç & Gürpınar, 2013; Süral; 2013; Üredi, 2006):

Table 1

Teaching Style Models, Scales, and Inventories Developed Abroad

Teaching Style	Date	Theoretical Foundations	The Classification/ Model of Learning Style that the Inventory Based Upon	Level	Original Inventory
1- Broudy's Teaching Style Model	1972	Teaching Methods	-	H.E	-
2- Joyce and Weil's Teaching Style Model (Joyce & Weil, 1972)	1972	Teaching Strategies and Methods	-	-	-
3- Witkin's Teaching Style Model	1973	Cognitive Styles	Witkin's Teaching Style Model	-	-
4-Brostrom's Teaching Style Model (Brostrom, 1975)	1975	Teaching Methods	-	-	Training Style Inventory
5- Canfield's Teaching Style Model (Canfield & Canfield, 1976)	1976	-	Canfield's Teaching Style Model	-	Canfield's Instructional Styles Inventory
6- Dunn and Dunn's Teaching Style Model (1979a)	1979	-	Dunn and Dunn's Learning Style Classification	H.E	The Teaching Styles Inventory
7- Ellis's Teaching Style Model	1979	-	-	-	-
8- Fischer & Fischer's Teaching Style Model	1979	-	-	-	-
9- Borich's Teaching Style Model	1988	Personal Characteristics/Types	-	-	-
10- Butler's Teaching Style Model	1987	Four Quarter Brain Model	Gregorc Learning Style Model	-	-
11- Reid's Perceptional Teaching Style Preferences	1987	-	-	-	Teaching Style Preferences Questionnairre

12- Heimlich and Van Tilburg's Teaching Style Model (Heimlich & Tilburg, 1990)	1990	-	-	-	Van Tilburg-Heimlich Sensitivity Measure
13- Brekelmans, Levy and Rodrigez's Teaching Style Model	1993	Communicat ion Styles	-	-	Questionnaire on Teacher Interaction
14- Grasha's Teaching Style Model	1994	Teaching Methods	Grasha's Learning Styles Classification	H.E	Teaching Styles Inventory
15- Quirk's Teaching Style Model (Quirk, 1994)	1994	Processing of Knowledge Critical Thinking	-	H.E	-
16- Reinsmith's Teaching Style Model	1994	-	-	H.E	-
17- Mamchur's Type Indicator for Adults Inventory	1996	-	-	-	A Teacher's Guide To Cognitive Type Theory And Learning Style
18- Levine's Teaching Style Model	1998	Supporting Learning and Personal Environment	-	-	-
19- Kulinna and Cothran's Values Perception of Physical Education Teachers Questionnaire	2003	-	-	P S HS	Physical Education Teachers' Use of Teaching Styles and Perceptions of Styles Questionnaire
20- Leung, Lue, and Lee's Teaching Style Inventory	2003	-	-	H.E	Teaching Style Inventory
21- Evans's Teaching Style Model	2004	-	-	-	-
22- CORD Teaching Style Inventory	2005	-	-	H.S	Teaching Style Inventory

** P: Primary School, S: Secondary School, H: High School, H.E: Higher Education*

There are not any teaching style inventories or scales developed based on the teaching style models listed in Table 1: Broudy, Joyce, and Weil, Witkin, Ellis, Fischer, Borich, Butler, Quirk, Reinsmith, Levine, and Evans. Therefore, there are not any studies in the literature based on these 11 models. The lack of teaching style inventories and scales developed on the basis of these mentioned models is important to shedding light on possible future studies.

One of the scale tools seen in Table 1, "Training Style Inventory" was developed by Richard Brostrom in 1975 and originated from teaching style models and based on teaching methods. However, this scale does not have a version adapted into Turkish.

Albert A. Canfield developed Teaching Style Model scale in 1976. He designed this scale based on Learning Styles Model that he himself came up with. In the literature, this scale is referred to as "Cansfield's Instructional Styles Inventory", yet there are not any known studies that use this scale in Turkish literature.

A scale suitable for higher education level was developed in 1979 by Dunn R. and Dunn K, who are known to be the researchers that first came up with the concept of style. This scale was based on the classification of learning styles which was developed by Dunn and Dunn and its original name is "The Teaching Style Inventory". This scale does not have a Turkish adaptation.

Reid's Cognitive Teaching Style Preferences scale was developed by Joy Reid in 1987 based on the sociological learning styles. The original name of this scale is "Teaching Style Preferences". This scale was translated into Turkish by Ertekin (2005) and was used in his doctorate dissertation by adapting it into clauses.

In 1990, Joe E. Heimlich and Emmalou Van Tilburg developed a Teaching Style Model scale which is known by their surnames. The original name of this scale is "Van Tilburg-Heimlich Sensitivity Measure". It does not have a Turkish adaptation.

The Teaching Style Model scale, the institutional basis of which is Communication Styles, was developed by Brekelmans, Levy, and Rodrigez in 1993. This scale takes part in literature with the name of "Questionnaire on Teacher Interaction" and does not have a Turkish adaptation.

One of the scaling tools that was developed abroad and listed in Table 1 is Grasha Teaching Style Scale. It takes its theoretic roots from teaching methods, it is designed to be used in higher education levels and it is based on Grasha's Learning Styles classification. The original name of this scale is "Teaching Styles Inventory" and it was first adapted into Turkish by Bilgin, Uzuntiryaki & Geban (2002). Later, it was re-adapted into Turkish by Karataş (2004), Sarıtaş & Süral (2010) and Üredi (2006). The research by Bilgin, Uzuntiryaki & Geban (2002) was in the scope of a book so it is excluded from our study.

Mamchur Style Indicator Inventory for Adults was developed by Mamchur in 1996. This scale is known as "A Teacher's Guide to Cognitive Type Theory and Learning Style" and was adapted into Turkish by Saban (2002). However, this research by Saban (2002) was conducted within the scope of a book so it is excluded from our study.

Kulinna and Cothran Physical Education Teachers' Teaching Style and Value Perception Questionnaire was developed by Kulinna & Cothran in 2003 and designed with the intention for primary and secondary education level in the area of physical training. The original name of this questionnaire is "Physical Education Teachers' Use of Teaching Styles and Perception of Styles Questionnaire" and it was translated into Turkish by İnce & Hünük (2010).

Teaching Styles Inventory was developed by Leung, Lue & Lee in 2003 with the intention of using it in medical training area. The name of this scale, which is not used in Turkish literature, is "Teaching Style Inventory".

Lastly, CORD Teaching Styles Inventory was developed in 2005 and was intended for secondary education levels. The original name of this scale is "Teaching Style Inventory" and it was adapted into Turkish by Artvinli (2010).

Table 2

Teaching Style Scales and Inventories Developed in Turkey

Teaching Style	Date	Theoretical Foundations	The Classification/Model of Learning Style that the Inventory Based Upon	Level
1- Developed by Beceren in T3	2004	-	Dunn and Dunn Learning Styles	H.E
2- Developed by Yılmaz in T17	2004	-	Reid's Perceptional Teaching Style Preferences & Wintage's Teaching Styles	H.S
3- Developed by Kaf Hasırcı and Bulut in A8	2007	-	-	H.S

As seen in Table 2, other than the teaching style scales developed abroad, there are only 3 different teaching style scales and inventories developed in Turkey. When these scales were examined, it was seen that the one developed by Beceren (2004) in T3 was based on the learning styles inventory developed by Dunn and Dunn. This scale which was developed to be applied in higher education level consists of two parts and has a total of 18 articles. These articles are intended for making a choice among 6 teaching style preferences. The first section is about cognitive education (visual, auditory, tactile and kinesthetic) styles of the students. Each subsection has 3 clauses about cognitive teaching styles. The second section is about students' time preferences (morning, noon and evening hours). This subsection has 3 clauses. These articles are about the time of the day when students are more likely to be motivated and eager to study. Each clause in this scale is sorted randomly. In addition to this, no scoring table is given on the scale so as to prevent leading questions.

It is seen that the scale developed by Yılmaz (2004) in T17 is based on Reid's Cognitive Learning Style Preferences and Wintage's Learning Styles questionnaires. This scale was developed with the intention of applying it to secondary education students. It has 30 clauses divided into 6 sections with 5 clauses each. Yet these clauses are placed in the scale randomly, not respectively. Before being used in the research, this scale, which was developed with the help of two other scales, was put in pilot testing and was seen to be beneficial for English teachers. This scale was developed and applied in English; it was not translated into English. Some of the clauses in the scale are about cognitive style preferences. This scale is a 5-point Likert scale and has strongly agree/strongly disagree options. Applying it takes approximately 15 minutes. In addition to this scale, Dunn and Dunn's scale was also used which was adapted from Teaching Styles scale. This scale consists of 9 sections. These sections are; 1. teaching plan, 2. teaching methods, 3. student groups, 4. classroom design, 5. teaching environment, 6. evaluation techniques, 7. teaching philosophy, 8. teacher's traits, 9. student profiles. Evaluation techniques and student profiles are excluded as they are not directly related to the study.

Lastly, in the M8 study, it was found that there was not any information about questionnaires in the work done by Kaf Hasırcı and Bulut (2007). It was only stated that the scale was developed to be used in higher education.

During the examination of researches in the literature review done within the scope of this study, it was seen that the most frequently used teaching style inventory in Turkey is Grasha's teaching style inventory.

As stated by Üredi (2006), there are many factors that affect the teaching style methods like the students' natural personal characteristics and talents, vocational qualifications; their learning styles, subject areas, and objectives; time, learning environment and cultural features.

When the three different scaling tools that were developed in Turkey (Beceren, 2004; Hasırcı & Bulut, 2007; Yılmaz, 2004) are examined, it is seen that the developers did not run validity and reliability analysis for the scales they developed. From this viewpoint, in order to develop a teaching style inventory or scale suitable for the educators in Turkey or to properly continue the adaptation studies of existing teaching styles inventories into Turkish, the literature on teaching style should be reviewed; existing scales and inventories that are currently in use should be identified and thoroughly examined. Therefore, it is necessary for the teaching style inventories and scales that were used to determine the teaching styles of the people who are assigned in different education levels in Turkey to be presented, validity and reliability analysis used for teaching style inventories and scales should be determined, and the obsolete teaching style inventories and scales in Turkey should be revealed. This is essential for the future studies.

The purpose of this study is to research the teaching styles scales and inventories that researchers use in the studies intended for determining teaching styles based on the mentioned requirements. In the study, answers to the below questions were sought for this purpose:

1- Which teaching style scales and inventories were used and how frequently were they used in order to determine the teaching styles of educators at all education levels in the researches carried out in Turkey?

2- What are the teaching styles scales and inventories that are present in literature but are not seen to be used when the researches carried out in Turkey are examined?

3- What are the validity and reliability analysis carried out for the teaching style scales and inventories used in the researches in Turkey?

Based on the findings of this research, frequently used or never before used scaling tools in the studies that use teaching styles scales and inventories in Turkey will be revealed. Within this context, this study is thought to pioneer new studies that use teaching styles scales and to lead the way, within the scope of teaching styles, for the researchers. This study will show in detail the validity and reliability analysis of the studies in the literature and it is believed to guide the way for future scale development, adaptation and application studies together with raising the quality of these studies.

Method

This research is a descriptive study carried out with document analysis method, in which articles and thesis studies that are intended to determine individuals' teaching styles in Turkey are analyzed.

"Teaching style – teaching styles – education style – education styles" keywords were used in the literature review. Within the scope of this study, 19 articles that were published in peer-reviewed national journals between years 2000 and 2015 in Turkey and 17 post graduate and doctorate studies that can be accessed via Higher Education Council National Thesis Center's digital database were scrutinized thoroughly.

The four main steps of descriptive analysis process according to Yıldırım & Şimşek (2005);

1- Establishing the outline needed for analysis,

2- Processing the data according to the outline established.

3- Identifying the findings.

4- Interpreting the findings.

Firstly, within the scope of this research, all of the scientific studies that are accessed by using the keywords were examined one by one and decided if they were to be included in the research or not. Articles and theses scanned in the decision process are evaluated according to whether or not they include studies determining a sample group's teaching styles with the use of teaching style scale and inventory and the ones that do were included in this study. The articles and theses are given code numbers and an outline was formed rooted from the theoretical basis aimed at teaching styles. The documents are analysed one by one according to this outline and then they were coded and interpreted.

In order to maintain the internal validity of the research, the final report submitted at the end was presented to the experts from curriculum, instruction, and qualitative research fields. Necessary revisions were made in light of their comments and suggestions. With the aim of increasing the reliability of the study, three researchers together coded the data into coding charts, and then another researcher presented the whole data set of reviewed documents with coding charts and was asked to code the data according to these charts.

At the end of the coding process, the researchers gathered together and reached a consensus on the findings. They revisited the data set about the findings that they had differences of opinion and later they reached a unanimous decision. With the use of formula "Intercoder agreement", they reached an 83% agreement on the findings that are shown in Table 1, Table 3, Table 5 and Table 6. They reached a 100% agreement on the findings that are on Table 2, Table 4, Table 7 and Table 8. These rates are considered to be reliable by Miles and Huberman (1994).

Findings

Table 3 shows the teaching style scales and inventories that are used in the studies that aim to determine the teaching styles of the educators who participate in Turkey's primary, secondary and higher education levels. Information is given on how frequently and at which level the teaching style scale and inventories shown in Table 3 are used in articles and theses.

Table 3

Teaching Style Scales and Inventories Used in Determining the Teaching Styles of Educators in the Researches in the Scope of the Study

Teaching Style Scale and Inventory	Document Type	Level				Total	
		P / S	H.S	H.E	N.M	Number	%
1.Grasha's Teaching Style Inventory	Thesis	9	1	3	-	13	35.3
	Article	7	1	3	2	13	35.3
2.Reid's Teaching Style Scale	Thesis	1	-	-	-	1	2.7
	Article	-	-	-	-	-	-
3. Mamchur's Type Indicator for Adults Inventory	Thesis	1	-	-	-	1	2.7
	Article	-	-	-	-	-	-
4.CORD Teaching Style Inventory	Thesis	-	-	-	-	-	-
	Article	-	1	-	-	1	2.7
5. Values Perception of Physical Education Teachers Questionnaire	Thesis	-	-	-	-	-	-
	Article	1*	1*	2	-	3	8.1
6. Dunn and Dunn Teaching Style Inventory	Thesis	-	1**	-	-	1	2.7
	Article	-	-	-	-	-	-
7. Scales and Inventories Developed in Turkey	Thesis	-	1**	1	-	1	5.4
	Article	-	-	2	-	2	5.4
Total	Thesis	11	3	4	-	17	48.6
	Article	8	2	7	2	19	51.4
	Thesis + Article					37	100

** P / S: Primary / Secondary * H.S: High School * H.E: Higher Education * N.M: Not Mentioned*

*** In study A7, Physical Education Teachers' Teaching Styles and Value Perception Scale are shown in two columns as it is both used in primary and secondary education levels but it is represented as one single study in final total.*

**** In study T17, as both Dunn and Dunn Teaching Style Inventory and an inventory developed in Turkey are used, they are mentioned in two columns. They are represented as one single study in the final total.*

As seen in Table 3, Grasha Teaching Style Scale is used in 35,3% of the theses and also 35,3% of the articles are mentioned within the scope of the study. The most frequently used teaching style scale/inventory is the Grasha Teaching Style Scale and it is mostly used in determining the teaching style of the teachers participating in primary education level. The work level of the educators is not mentioned in the two articles that use Grasha Teaching Style Scale.

Reid's Teaching Style Scale is not used in any of the articles in the scope of the study and is only used in 2,7% of the theses. The thesis that used Reid's Teaching Style Scale was used in determining the teaching styles of the educators who participate in primary education level.

Mamchur Style Indicator Inventory for Adults was used only in one thesis and this makes 2,7% of the theses that are included within the scope of the study. This inventory was used in determining the teaching styles of the educators who work in primary education level. Mamchur Style Indicator Inventory for Adults was not used in any of the articles.

CORD Teaching Styles Inventory was not used in any of the theses mentioned within the scope of the study. This inventory was only used in one article that was intended to determine the teaching styles of the educators working in secondary education level and this equals to 2,7% of the articles included in the extent of the study.

The Physical Education Teachers' Teaching Styles and Value Perception Scale was not used in any of the theses in the study. It was used in 8,1% of the articles in the scope of the study. In the study coded A7, it was used in determining the teaching styles of educators working in both primary and secondary education levels. Therefore, it is counted as one single study in the total count. Aside from that, it was used in two articles for teachers working at higher education levels.

The Dunn and Dunn Teaching Style Inventory was used in 2,7% of the theses within the extent of the study and it is in secondary education level.

Teaching style scales and inventories developed in Turkey are featured in both theses and articles. These teaching style scales and inventories developed in Turkey are used in 5,4% of the theses and 5,4% of the articles taken into the scope of the study. These studies are carried out in secondary education and higher education levels.

Based on these results, it can be said that Grasha Teaching Style Scale is most frequently used in the thesis and article studies that are carried out in Turkey. The other scales and inventories are only used in a few studies. The reason for this may be that Grasha Teaching Style Scale was translated into Turkish a few times by different researchers and it has gone through validity and reliability studies.

Table 4

Teaching Style Models, Inventories, and Scales Not Used in Researches within the Scope of the Study

1- Fischer & Fischer's Teaching Style Model
2- Witkin's Teaching Style Model
3- Canfield's Teaching Style Model
4- Butler's Teaching Style Model
5- Heimlich and Van Tilburg's Teaching Style Model
6- Brostrom's Teaching Style Model
7- Joyce and Weil's Teaching Style Model
8- Broudy's Teaching Style Model
9- Brekelmans, Levy and Rodrigez's Teaching Style Model
10- Quirk's Teaching Style Model
11- Borich's Teaching Style Model
12- Levine's Teaching Style Model
13- Kulinna and Cothran's Values Perception of Physical Education Teachers Questionnaire
14- Ellis's Teaching Style Model
15- Reinsmith's Teaching Style Model
16- Evans's Teaching Style Model
17- Leung, Lue, and Lee's Teaching Style Inventory

As seen in Table 4, there are 17 teaching style scales and inventories worldwide that are not used within the scope of any studies in Turkey.

Teaching styles subject is not a widely researched subject in Turkey. The use of these teaching style models is not thought to be beneficial for Turkish literature. However, the lack of a scaling tool of these teaching style models can be said to be the reason for not being used in Turkey.

Within the extent of this study, content/structure validity and criterion-related validity are examined for the validity of scaling tools; stability and internal consistency methods are examined for the reliability of these tools. The validity and reliability studies carried out for the teaching style scales and inventories developed abroad and used in reviewed theses and articles are shown in Table 5 and Table 6. Articles are coded as A1, A2, A3, … , A19 and theses are coded as T1, T2, T3, … , T17.

Table 5

Validity and Reliability Studies Intended for the Teaching Style Identification Tools Developed Abroad and Used in Turkey

Teaching Style Identification Tool	Adapted to Turkish by	Validity Studies	*C.V*	*S.V*	*C.B.V*	Reliability Studies	*S*	*I.C*	No Studies
1.Grasha's Teaching Styles Inventory	Adapted	T1 (Aktan, 2012)		T1		T1, T2, T4 (Deveci, 2008), T6 (Kaleci, 2012), T8 (Kolay, 2008), T9 (Kulaç, 2013), T11 (Mertoğlu, 2011), T14 (Şahin, 2010), T15 (Şentürk, 2010), A6, A10, A15 (Şentürk & İkikardeş, 2011),		T6, T14	T12 (Mutluoğlu, 2012, A1, A4 (Süral, 2010), A9 (Kaleci, 2013), A11
	Researcher	T16			T16	T13, T16, A13, A14, A18 (Üredi & Üredi, 2009),		T16	T7, A16 (Üredi & Güven, 2007), A17 (Üredi & Üredi, 2007), A19 (Üredi, 2011)
	Original Tool					A6			
2.Dunn and Dunn Teaching Styles Inventory	Adapted								
	Researcher								
	Original Tool								T17
3.Reid's Teaching Style Preferences	Adapted								
	Researcher					T5			
	Original Tool								
4. Mamchur's A Teacher's Guide To Cognitive Type Theory And Learning Style	Adapted					T10 (Küçüktepe, 2007)	T10	T10	
	Researcher								
	Original Tool								
5.CORD Teaching Style Inventory	Adapted								
	Researcher	A2	A2			A2		A2	
	Original Tool								
6. Kulinna and Cothran Physical Education Teachers' Use of Teaching Styles and Perceptions of Styles Questionnaire	Adapted								A12 (Saraç & Muştu, 2013), A5 (Cengiz & Serbes, 2012)
	Researcher	A7		A7		A7		A7	
	Original Tool								

C.V= Content Validity, *S.V*=Structure Validity, *C.B.V*= Criterion-Related Validity, *S*= Stability, *I.C*= Internal Consistency

As seen in Table 5, Grasha Teaching Styles Inventory which was developed by Grasha based on the classification of teaching styles is the most commonly used instrument that is adapted into Turkish and used for determining teaching styles. Thirteen articles out of 19 and 12 theses out of 17 that are examined in the extent of this study are prepared with this scaling tool. Grasha teaching style inventory has been adapted into Turkish for four different studies; the first one was for a congress notice (Bilgin, Uzuntiryaki & Geban, 2002), the second and the third were for theses (Karataş, 2004; Üredi, 2006) and the last one was for an article (Sarıtaş & Süral, 2010).

The most preferred form of this scale tool in Turkey is the one that was adapted into Turkish by Üredi (2006). In the study coded T16 which was adapted into Turkish by Üredi (2006), 82 senior students of Marmara University Department of English Language Teaching were applied Turkish and English scales every other week in order to determine language validity. Positive correlation was found in lower dimensions. It was seen that there was not a meaningful difference between the results of applied t-tests. Thus, language validity was detected. Cronbach Alpha values were formed with the data gathered from 100 teachers in order to represent the reliability of the scale and it was detected that the value was changing between .75 and .87 in lower dimensions and the total value was .90. Also for the criterion-related validity study, the benchmark was the approach to the profession of teaching.

Table 6

Lowest/Highest/Total Reliability Index of Teaching Style Identification Tools' Developed Abroad

Study Number	Applied Teaching Style Tool	Applied level	Minimum Cronbach alpha value	Maximum Cronbach alpha value	Total Cronbach alpha value
T1	Grasha's Teaching Styles Inventory	Primary	.80	.88	.96
T2	Grasha's Teaching Styles Inventory	Primary	.66	.84	.85
T4	Grasha's Teaching Styles Inventory	Primary	-	-	.81
T5	Reid's Teaching Style Preferences	Primary	.52	.69	-
T6	Grasha's Teaching Styles Inventory	Higher Education	.39	.74	.86
T7	Grasha's Teaching Styles Inventory	Higher Education	-	-	-
T8	Grasha's Teaching Styles Inventory	Secondary	-	-	.79
T9	Grasha's Teaching Styles Inventory	Higher Education	-	-	.82
T10	Mamchur's A Teacher's Guide to Cognitive Type Theory and Learning Style	Primary	.60	.73	-
T11	Grasha's Teaching Styles Inventory	Primary	-	-	.90
T12	Grasha's Teaching Styles Inventory	Primary	-	-	-
T13	Grasha's Teaching Styles Inventory	Primary	.71	.82	.88
T14	Grasha's Teaching Styles Inventory	Primary	.59	.72	.90
T15	Grasha's Teaching Styles Inventory	Primary	-	-	.84
T16	Grasha's Teaching Styles Inventory	Primary	.75	.87	.90
T17	Dunn and Dunn Teaching Styles Inventory	Secondary	-	-	-
A1	Grasha's Teaching Styles Inventory	Primary / Secondary	-	-	-
A2	CORD Teaching Style Inventory	Secondary	.80	.92	-
A4	Grasha's Teaching Styles Inventory	Primary	-	-	-
A5	Kulinna and Cothran Physical Education Teachers' Use of Teaching Styles and Perceptions of Styles Questionnaire	Higher Education	-	-	-
A6	Grasha's Teaching Styles Inventory	Not mentioned	.69	.84	.79
A7	Kulinna and Cothran Physical Education Teachers' Use of Teaching Styles and Perceptions of Styles Questionnaire	Primary Secondary	.86	.95	-

A9	Grasha's Teaching Styles Inventory	Higher Education	-	-	-
A10	Grasha's Teaching Styles Inventory	Secondary	-	-	.88
A11	Grasha's Teaching Styles Inventory	Primary	-	-	-
A12	Kulinna and Cothran Physical Education Teachers' Use of Teaching Styles and Perceptions of Styles Questionnaire	Higher Education	.83	.86	-
A13	Grasha's Teaching Styles Inventory	Higher Education	-	-	.87
A14	Grasha's Teaching Styles Inventory	Higher Education	-	-	.87
A15	Grasha's Teaching Styles Inventory	Secondary	-	-	.84
A16	Grasha's Teaching Styles Inventory	Primary	-	-	-
A17	Grasha's Teaching Styles Inventory	Primary	-	-	-
A18	Grasha's Teaching Styles Inventory	Primary	.66	.84	.85
A19	Grasha's Teaching Styles Inventory	Primary	-	-	-

Scale adapted by Üredi (2006) was used in the adaptation studies and the following studies that are shown in Table 6: A6, A10 (Kılıç & Dilbaz, 2013), A15, A16, A17, A18, A19 and T1, T4, T8, T9, T11, T15. Among these theses, in only one study, T1, validity and reliability were repeated and it was reported that Cronbach Alpha value ranged between .80 and .88, the total of the scale, on the other hand, was .96. It was emphasized that in A6, Cronbach Alpha value ranged between .69 and .84 in lower dimensions and the total value was .79, in A10 the total value was .88 and in A15 the total value was .84. Besides this, the Cronbach Alpha values that represent internal consistency in T4, T8 and T15 were in that order .81, .79 and .84. Asides from these, studies A16, A17, A18, A19, and T9 and T11 are considered to be the repetition of the original adaptation in terms of validity/reliability.

The scale tool which was applied to 137 high school teachers in terms of determining its validity and reliability by Bilgin, Uzuntiryaki and Geban (2002) and had an internal consistency factor of .89, was used in A1, A4, A11, T2, and T12. However, the internal consistency of T2 which was applied to 189 5th grade class teachers was calculated and again determined to have a lower dimension Cronbach Alpha value ranging between .66 and .84. The total scale was reported to be .85. Information on scale tools presented by all of the studies that use this adaptation is considered to be repetitive.

During the adaptation works of Grasha Teaching Style Inventory that was adapted into Turkish by Sarıtaş and Süral (2010), scale tools in Turkish and English were applied to 30 instructors every other period of 10 days in order to determine the language validity. At the end of correlation analysis, the language validity was identified with .80 correlation factor. Later it was seen that the inventory applied to 241 instructors showed a .875 Cronbach Alpha value in internal consistency. However, no information was given about validity. Studies M9 and A14 that were reviewed within the scope of this study were applied as references for it but reliability was not repeated for either of them. Nonetheless, T6 and T13 were also done under the light of this adaptation and after the results of repeated internal consistency analyses, it was seen that Cronbach Alpha value of study T6 that was applied to Mathematics teachers was ranging between .39 and .74 and the total was .86; the lower dimensions Cronbach Alpha value of the T13 study that was applied to primary education class teachers ranged between .71 and .82 with a total value of .88.

According to Table 6, the only study in which Dunn and Dunn Teaching Styles Scale was used is T17. At the same time, it is the only study among the projects that are reviewed in this research that uses English, the original language of this teaching scale tool. Internal consistency study results show that lower dimension Cronbach Alpha values range between .60 and .70. A Cronbach Alpha value for the whole scale is not given.

Raid's Teaching Styles Scale is only used in study T5 and with the result of the application on 66 Mathematics teachers, it was seen that lower value of Cronbach Alpha varied between .52 and .69. No information was given on the analyses done for the validity during the adaptation of this study into Turkish.

Mamchur Style Indicator Inventory for Adults is also another scale tool used in determining the teaching styles. Among the studies in this research, it is seen that this scale tool is only used in study T20 and two different methods were used to confirm reliability. The first one of these is Cronbach Alpha and its lower dimension values range between .60 and .73 and the repeat test values range between .60 and .72.

No information is given about the identification of language validity in study A2 that was applied to 242 Geography teachers during the Turkish adaptation works of CORD teaching styles inventory. The structure validity method was applied in order to determine the validity of the scale tool. Then again, the Cronbach Alpha value that represents the internal consistency was given for reliability. It was ranging between .80 and .92 in lower dimensions and .88 in the total of the scale.

The Physical Education Teachers' Teaching Style and Value Perception Questionnaire, which is used in Physical Education and Sports Teaching area, was adapted into Turkish by İnce and Hünük (2010) within the scope of study A7. Along the Turkish adaptation process, information was gathered from 242 Physical Education and Sports teachers. The eleven factored structures revealed according to the structure validity as a result of this information represent 11 teaching styles and represent the 86% of total variation. As for the internal consistency results, Cronbach Alpha value ranged between .86 and .95. These structures that are considered as styles in Physical Education and Sports literature represent methods. In the case of the other two studies that use this scale tool (A5, A12), internal consistency results of another study (Cengiz and Serbes, 2012) are given.

Table 7

Validity and Reliability Studies Intended for the Teaching Style Identification Tools Developed in Turkey

Teaching Style Identification Tool	Developer	Validity Studies	*C.V*	*S.V*	*C.B.V*	Reliability Studies	*S*	*I.C*	Validity and Reliability Checked
1. Developed by Beceren in T3	Adapted						T3		
	Researcher								T3
2. Developed by Yılmaz in T17	Adapted	A3				A3			
	Researcher								T17
3. Developed in A8	Adapted								
	Researcher								A8

C.V= Content Validity, *S.V*=Structure Validity, *C.B.V*= Criteria Based Validity, *S*= Stability, *I.C*= Internal Consistency

Table 8

Lowest/Highest/Total Reliability Factors of the Teaching Style Identification Tools Developed in Turkey

Study Number	Applied Teaching Style Tool	Applied level	Minimum Cronbach alpha value	Maximum Cronbach alpha value	Total Cronbach alpha value
T3	Developed by Beceren in T3	Higher Education	-	-	-
T17	Developed by Yılmaz in T17	Secondary	-	-	-
A8	Developed by A8	Higher Education	-	-	-
A3	Developed by Yılmaz in T17	Higher Education	.43	.84	-

As seen in Table 7 and Table 8, three studies (A8, T3, T17) reviewed in the scope of this study were developed and applied in Turkey. In one study (A3) a scale tool developed in Turkey was used. Among these studies, only the internal consistency of the scale developed within the study coded T17 (Yılmaz, 2004) was reviewed in the extent of the study coded A3 (Atabay & Kurtman, 2013) which was carried out to determine the styles of educators participating in the English preparation education program affiliated with the school of foreign languages. In the light of these results, the Cronbach Alpha value in lower dimensions was stressed to range between .43 and .84. In the studies apart from this (A8, T3, T17) no information is given about validity or reliability.

Conclusion and Discussion

Teaching styles, together with learning styles, are one of two methods that pay regard to personal differences in the learning-teaching process. With the help of scale tools designed for determining the teaching styles, awareness level of the educators can be raised by informing them about their own teaching styles. They can be provided help to offer a more effective teaching service by encouraging them to enrich their teaching styles according to the students' learning styles.

No scientific research was done with the intention of determining the teaching style models that explain the teaching styles in the world and in Turkey, and neither was it done for identifying which of the teaching style scale tools developed within the context of these models are used in Turkey. In correspondence with this case, it is not known which validity/reliability analyses were carried out for the teaching style scale tools used in the researches done in Turkey. Besides this, there are not any studies in the literature intended for the scale tools developed for determining the teaching styles in Turkey. Because of these reasons, the aim is to determine and investigate the scale tools used in identifying the teaching styles of the educators working in different levels of education in Turkey, to identify validity/reliability analysis that were carried out in the works which use these scale tools, and to review the presence of the scale tools developed in Turkey. With the help of documentation analysis process of the research in the case study pattern -which is a part of qualitative research pattern- 17 theses and 19 articles were examined and during this examination it was detected that different tools were used to determine the the teaching styles.Validity/reliability studies that were applied to these studies which used these tools were also discovered.

According to the findings of the study, it is seen that in a great majority of the theses and articles in Turkey, scale tools developed abroad are used after being translated into Turkish. Considering that there are only 5 scale tools which are adapted into Turkish out of the 22 that are identified after the literature scan, it is revealed that more teaching style scales and inventories need to be brought in Turkish literature. On the other hand, there are only 3 scale tools developed in Turkey and out of them, only the one developed in T17 (Yılmaz, 2004) was used in the extent of A3 (Atabay and Kurtman, 2013). Also, considering that these 3 development studies are formed on the basis of other scale tools rather than being genuine development studies, the lack of an authentic scale tool developed in Turkey in order to determine teaching styles can be considered a big absence.

Theses and articles developed in Turkey intended for identifying the teaching styles are mostly applied in primary education, higher education and secondary education levels. In addition to this, none of the research within the study has any research intended towards preschool level or digital learning environments.

Among the studies carried out in Turkey in order to identify the teaching styles, it is seen that Grasha's (1994) teaching style inventory is most commonly used. Thirteen articles out of 19 and 12 theses out of 17 reviewed within the extent of this study are composed by using this scale tool. The Grasha teaching style inventory has been adapted into Turkish by researchers in four different studies; the first one was for a congress notice (Bilgin, Uzuntiryaki & Geban, 2002), the second and the third were for theses (Karataş, 2004; Üredi, 2006) and the last one was for an article (Sarıtaş & Süral, 2010). In the end, it is seen that studies using Grasha teaching style inventory are mostly applied in primary education level. Besides that, it is noted that within the researches carried out, only 5 different scale tools that were developed abroad are used. Teaching style identification tools developed in Turkey are only used in 4 research studies. This case states that not enough studies are conducted in Turkey intended for determining teaching styles. The lack of a scale developed considering the education system, teacher training and cultural factors of Turkey can be referred to as an important deficiency. The presence of tools that are not used in any studies in Turkey even though they are used around the world is also another result that comes to light and needs to be discussed.

It can be said that during the Turkish adaptation process of the scale tools used in Turkey or during the studies of scale tools developed in Turkey, principles of scale tool development are not followed; validity and reliability analysis are not applied adequately.

A genuine scale or inventory not having been developed can be considered a big absence in Turkish literature. When scales and inventories that were previously developed in Turkey are taken into account, this absence can be clearly seen. The necessity of doing teaching style inventory studies or scale development studies in Turkey is important when the effect on the teaching and learning process caused by the country's education system in general and teacher training, environmental conditions and lower dimensions of culture in specific are taken into account.

These suggestions are presented based on the findings of the study:

It is required to adapt the teaching style scales and inventories that were developed abroad and have not yet been adapted into Turkish. It is also necessary to raise the number of studies that use the previously adapted scale tools. Scale adaptation studies will contribute to learning/teaching area in a macro perspective and studies about teaching style in a micro perspective.

Considering that only the Grasha teaching styles inventory was used in most of the studies conducted in Turkey, raising the awareness of the researchers about using the other teaching style inventories and scales reviewed within the study would be beneficial for them. Moreover, most of the researches were applied at primary education level. Therefore, it can be advised to raise the number of future studies on secondary and higher education levels while making studies in never before researched pre-school level and digital learning environments.

Researchers who examine the theoretical structure, and develop a level of a teaching style scale or inventory before using the suitable ones, will help them conduct their researches in line with their purposes and make the results of the research more reliable and valid. Therefore, the researchers should be informed to do so.

When the drawbacks and mistakes in developing a Turkish teaching style inventory or scale are taken into consideration, researchers can be advised to go through the processes meticulously and carefully in order to develop more qualified and valid/reliable scale tools. And it can also be advised for them to take the qualified studies on developing scale tools in the literature as examples.

In order to provide detailed information about the results of this study which was conducted by document analysis method, the researchers who carried out the studies reviewed within the scope of this research can be contacted and their opinions can be taken so as to understand how and why they chose the teaching style scales and inventories they used. Likewise, detailed information can be obtained by meeting and using the document analysis method with the researchers who develop scale tools in Turkey and whose research studies were reviewed within the study. Important data can be gathered about the steps they took in developing these scale tools.

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Geniş Özet

Öğretim Stilleri Ölçme Araçlarıyla İlgili Yapılan Araştırmaların İncelenmesi

Öğrenme-öğretme sürecinin etkili bir şekilde yürütülebilmesi için eğitimde bireysel farkların göz önünde bulundurulması gerekmektedir ve eğitim durumlarının da bu doğrultuda düzenlenmesi büyük önem taşımaktadır. Öğrenme-öğretme sürecinin temel parçalarından olan ve alanyazında oldukça sık karşılaşılan öğrenme ve öğretim stilleri kavramları, eğitimin kalitesi açısından önemli bir role sahiptir. Bu yapılar üzerinde öğrenci ve öğretmen arasındaki etkileşim önemlidir; bunun yanısıra, öğretmen davranışlarının altında yatan değer, inanç ve felsefeleri ile bunların etkileşimi sonucu ortaya çıkan mesleki ve kişilik özelliklerinin eğitim sürecinin işletilmesi ve kalitesi üstündeki etkinliği alanyazında vurgulanmıştır. Bu açıdan konuya bakıldığında öğreticilerin inançları, değerleri, tutumları, yönelimleri, tercihleri ve davranışlarının göstergesi olan öğretim stillerinin araştırılması gerekmektedir.

Dunn ve Dunn'ın eğitimde stil kavramını öğrenme ile açıklamasıyla birlikte, eğitim sürecinin diğer büyük paydaşı olan öğretmenlerin öğretim stillerinin de önem kazandığı görülmüştür. Araştırmacılar tarafından 20. Yüzyılın ikinci çeyreğinden itibaren farklı şekilde tanımlanan öğretim stillerine ilişkin olarak yapılabilecek en genel tanımlama ise öğretmenlerin öğrenme stillerinin etkisiyle oluşturdukları öğrenme yaklaşımlarıdır. Öğretim stilleri kuramlarının, geliştirilen araştırmacılarca daha önce ortaya konulan öğrenme stilleri kuramlarından etkilendikleri ve oluşturdukları öğretim stilleri modelleri ile envanterlerinin de öğrenme stillerinden etkilendiği görülmektedir.

Bu çalışmanın amacı eğitimciler tarafından benimsenen öğretim stillerine ilişkin olarak geliştirilmiş model ve ölçme araçlarından Türkiye'de hangilerinin, hangi sıklıkta kullanıldıklarının incelenmesidir. Bunun yanında Türkiye'de kullanılmayan ölçme araçlarının belirlenmesi ve kullanılan ölçme araçlarına ilişkin yapılmış geçerlik ve güvenirlik çalışmalarının yansıtılması da amaçlanmıştır. Bu amaç doğrultusunda uluslararası öğretim stilleri alanyazınında yer alan 22 adet model ve bunlara dayalı olarak geliştirilen ölçme araçları bu çalışmanın kapsamındadır.

Araştırma kapsamında doküman incelemesi yöntemi kullanılarak Yükseköğretim Kurulu Ulusal Tez Merkezi veri tabanında bulunan toplamda 17 yüksek lisans ve doktora tezi ile Türkiye'de 2000-2015 yılları arasında ulusal hakemli dergilerde yayınlanmış 19 araştırma makalesi incelenmiştir. Bu çalışma kapsamında tezler T kodu ile makaleler ise M kodu ile numaralandırılmıştır.

Doküman incelemesi sonrasında Türkiye'de en çok kullanılan ölçme aracının Grasha Öğretim Stilleri Sınıflamasına dayalı olan Grasha Öğretim Stilleri Envanteri olduğu görülmüştür. Grasha Öğretim Stiller Envanterinin 3 farklı araştırmacı tarafından Türkçeye uyarlandığı görülmüştür. Bunun dışında Reid'in Öğretim Stili Ölçeği, Mamchur Yetişkinler İçin Tip Göstergesi Envanteri, Cord Öğretim Stilleri Envanteri, Beden Eğitimi Öğretmenlerinin Öğretim Stilleri Değer Algıları Ölçeği ile Dunn ve Dunn Öğretim Stili Envanteri yurt dışında geliştirildikten sonra Türkiye'deki çalışmalarda kullanılan ölçme araçları olarak belirlenmiştir. Buna karşın yurt dışında geliştirilen ve alan yazında yer alan toplam 17 ölçme aracının ise Türkiye'de henüz kullanılmadığı belirlenmiştir. Son olarak, ülkemizde geliştirilen ve çalışmalarda kullanılan 3 farklı ölçme aracının bulunduğu tespit edilmiştir.

Türkçeye uyarlaması yapılan ölçme araçlarının toplamda 17 makale ve 15 tez çalışmasında kullanıldığı tespit edilmiş ve bunlara ilişkin geçerlik ve güvenirlik çalışmaları incelenmiştir. Geçerlik açısından kapsam geçerliği, yapı geçerliği ve ölçüte dayalı geçerlik çalışmaları incelenmiş ve sadece 4 çalışmanın geçerlik çalışması yürüttüğü, bunlardan bir tanesinin kapsam, iki tanesinin yapı ve bir tanesinin ölçüte dayalı geçerlik yürüttükleri belirlenmiştir. Güvenirlik açısından ise kararlık ve iç tutarlık değerlendirilmiş, sadece 22 çalışmanın uyguladıkları ölçeklere ilişkin güvenirlik analizi yürüttükleri görülmüştür. Bu çalışmalardan sadece bir tanesinde kararlık analizi yapılmış, diğerlerinde ise iç tutarlık değerleri incelenmiştir. Geriye kalan çalışmalarda ise ya geçerlik ve güvenirliğe ilişkin bilgi verilmemiş ya da ölçek uyarlama çalışmalarının sağladığı bilgiler tekrar edilmiştir.

Öğretmenlerin öğretim stillerini belirlemek amacıyla Türkiye'de geliştirilen ve kullanılan 3 adet ölçek ve bunların kullanıldığı 4 farklı çalışma incelenmiştir. Bunlardan sadece bir tanesinde geçerlik, iki tanesinde ise güvenirlik çalışması yürütülmüştür.

Bu çalışma Türkiye'de ve Dünya'da geliştirilen ve öğretim stillerini açıklayan öğretim stili modelleri ile bu modellere bağlı geliştirilmiş ölçme araçlarından hangilerinin kullanıldığına ilişkin olarak yürütülmüştür. Eğitimde bireysel farklılıkların belirlenmesi ve eğitsel süreçlerin niteliğinin arttırılmasında önemli olan öğretim stilleri kavramına ilişkin yapılan ve bu araştırma kapsamında değerlendirilen çalışmaların ağırlıklı olarak yurt dışında geliştirilen envanterlerden, Grasha Öğretim Stilleri Envanterini kullandıkları görülmüştür. Dünya'da ise toplamda 22 ölçme aracının bu alanda kullanıldığı ve sadece 5 tanesinin Türkçeye uyarlandığı görülmüştür. Türkçeye uyarlaması yapılmayan ve farklı modellere dayanan öğretim stili sınıflamalarına yönelik envanterlerin Türkçeye uyarlanması ulusal alanyazının zenginleşmesi ve farklı açılardan öğretim stillerinin değerlendirilmesinde önemlidir. Bunun yanında ise Türkiye'de 3 farklı çalışma tarafından ölçme aracı geliştirildiği ve bu araçların geliştirilme süreçlerinde, yurt dışında geliştirilen ölçme araçlarının model alındığı belirlenmiştir.

Öğretim stillerinin belirlenmesine yönelik yapılan çalışmaların büyük bir çoğunluğu ilköğretim düzeyinde yürütülmüşken, bu yoğunluğu ortaöğretim ve yüksek öğretim takip etmektedir. Bu bilginin yanında, okul öncesi düzeyde ve elektronik eğitim ortamında eğitim sürecini yürüten öğreticilerin stillerini belirlemeye yönelik bir çalışma Türk alanyazınında görülmemektedir.

Türkiye'de yürütülen çalışmaların geçerlik ve güvenirlik açısından genellikle tekrar niteliği taşıdığı, birçok çalışmanın ölçeklerin uyarlanmasını yapan çalışmaların değerlerini vermekten öteye gitmediği görülmektedir.

Araştırma sonuçlarına göre ulusal ve uluslararası alanyazına katkıda bulunmak için nitelikli ölçme araçlarının belirlenerek Türkçeye uyarlama çalışmalarının sayılarının arttırılması ve özgün ölçme araçlarının geliştirilmesinin gerekliliği ortaya çıkmıştır. Ayrıca, yürütülen çalışmaların nitelikleri incelendiğinde, geçerlik ve güvenirlik çalışmalarının yapılması gerekliliği dikkat edilmesi gereken bir diğer önemli husustur. Çalışmaların büyük bir çoğunluğunun ilköğretim düzeyinde gerçekleştirilmiş olması ve okulöncesi düzey ile elektronik öğrenme ortamlarına yönelik olarak hiç çalışmanın yapılmamış olması alanyazında büyük bir eksik olarak dikkat çekmektedir. Türk eğitimcilerinin öğretim stillerinin farklı açılardan belirlenmesi ve değerlendirilmesi gerekliliğinden yola çıkarak yurt dışında yürütülen çalışmalar ile Türkiye'de yürütülen çalışmaların kültürler arası farkları ortaya koyması açısından değerlendirilmesi gerekmektedir.