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An Examination of the Practices of Teachers Regarding the Arrangement of Education According to Individual Differences

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The present study tries to find out how often teachers in Istanbul employ the methods, techniques, materials, contents and assessment instruments that are preferred within the scope of differentiated instruction, as well as the variables that influence their choices. The results of the research indicate that teachers more frequently use specific practices addressing to individual differences rather than a certain method/technique. While arranging content, teachers primarily consider their own knowledge and interest. They prefer mostly classics assessment instruments rather than student-centered ones and while grading, consider the efforts and in-class participation of students rather than exam results.

Keywords: Constructivism, differentiated instruction, teachers preferences, teacher trainer, instruction

INTRODUCTION

The receipt of education is one of the fundamental rights of all citizens under Turkish Constitutional Law (Anayasa, 2012). Though the provision of education is granted to people all over country in accordance with this right, it is not the same for every student in terms of quality. Tens of thousands of students receive "zero" points in national exams (MEB, 2011), there are school-based and regional differences in PISA exam results (Berberoğlu & Kalender, 2005), and there remains the existence of students who cannot read and write though they proceed to upper grades (Genelge, 2009). These are only some of the indicators of the inequality in education. One of the most important reasons for this situation is the educational approach which does not take human beings as its center and assumes that all students are similar.

One of the approaches that can solve the above mentioned problems is differentiated instruction (DI) which takes into consideration individual differences. To Gregory and Chapman (2002), DI is the philosophy that allows teachers to make plans to meet the individual differences of students. Plans taking into consideration individual differences provide various ways for students to discover the content of the curricula, and support

them by enabling them to make choices to prove that they have learnt (Tomlinson, 1999). Thus, the needs of all students are met individually (Gregory & Chapman, 2002).

The basis of DI is theoretically supported by many different fields (Subban, 2006). The first field is social constructivism which regards learning as a social phenomenon and expresses the view that the best learning takes place in environments where there is intense teacher-student and student-student interaction, it presents the right of selection to the students, and claims that students should be responsible for their own learning (Del rı´o & A´lvarez, 2007). DI has theoretical support from the zone of proximal development coined by Vygotsky within the frame of social constructivism. Since each individual has both different background knowledge and guidance levels, that are necessary for his/her zone of proximal development, the teacher is supposed to plan his/her instruction in accordance with the needs of the students (Akinoglu & Tandogan, 2007; Pritchard &Woollard, 2010; Akınoğlu, 2013).

The other theory constituting the basis of DI is brain based learning (BBL). BBL, just like social constructivism, supports cooperation in learning. The brain is social and likes to learn from and with others (Erlaur, 2003). Cooperation also supports the learning of students with low and medium level abilities (Jensen, 2005). According to BBL, students have a higher level of motivation and lower levels of stress when they have the opportunity to select what they learn and control their learning. The course becomes more enjoyable for students when they make their own selections. In this way, students adopt the activities conducted more (Erlaur, 2003; Jensen, 2005).

Other theory contributing to DI is the multiple intelligence (MI) theory that place an emphasis on individual difference (Turville at al., 2010). According to the MI theory, there are nine different areas of intelligence (Gardner, 2000) with different rates of distribution in the class (Demiray, 2010). Teachers should not only provide students with alternatives whereby they can learn subjects by different means and make choices by themselves, but also they should differentiate between means of assessment according to individual differences (Gardner, 2000, 2008).

DI is an approach the effect of which has been proved through many studies and activities. Programs prepared that take into consideration "average" students do not meet the individual needs and preferences of the students. Such programs solely bring success to a specific group of students. Two thirds of students do not receive education in accordance with their learning styles (Bremmer, 2008). DI approximates the learning of disadvantaged groups to that of "superior" groups (Beecher & Sweeny, 2008; McQuarrie & McRae, 2010), and it supports highly gifted students and improves their achievement by means of instruction in compliance with their potential (Kondor, 2007; Tieso, 2005). Basically, it is possible to say that the approach improves the academic achievement of all groups (Allcock & Hulme, 2010; Avcı et al., 2009; Beecher & Sweeny, 2008; Beler & Avcı, 2011; Ellis et al., 2007; Flaherty & Hackler, 2010; McQuarrie & McRae, 2010; Tieso, 2005). DI provides students with learning and

assessment in compliance with their speeds, pre-knowledge, interests, learning styles and cognitive skills (Tomlinson & Inbeu, 2010). Thus, student motivation regarding learning increases in the first place (Avcı et al., 2009; Beecher & Sweeny, 2008; Fener at al., 2010; Flaherty & Hackler, 2010; Kondor, 2007).

In 2004, the Ministry of National Education started to develop curricula, one of the aims being to find a solution to the abovementioned problems and other similar problems. The primary school curriculum, the pre-school curriculum, and the secondary school curriculum were developed respectively. The main characteristic of these curricula is providing student-centered practices (MEB, 2005; Akınoğlu, 2008). As explained above, DI is an approach that allows the simultaneous implementation of constructivism, BBL, MI, and learning styles in the educational environment. Therefore, it is possible to say that DI is a good way to apply current curricula. DI is not used in Turkey as a whole. There are many studies regarding the differentiation of education according to individual differences; such as MI and learning styles. In addition, authentic assessment approaches that support individual differences are also used as a requirement of the new primary education curriculum. On the whole, there is no information about how often these kinds of applications are used by teachers. The present study tries to find out how often teachers in Istanbul employ the methods, techniques, materials, contents and assessment and evaluation instruments that are preferred within the scope of DI, as well as the variables that influence their choices.

METHOD

Research Model

In this study, a cross-sectional scanning method was employed to reveal the use frequency of instructional methods, content types, instructional materials, and assessment instruments by teachers (Karasar, 2009). "The survey for determining the usage frequency of DI practices" was used for data collection.

Research Group

The universe of the present study consists of teachers, from state and private schools within the provincial borders of Istanbul, at primary and secondary education levels where formal education is provided. In the present study, 592 teachers were interviewed. Teachers were accessed from 20 out of 33 districts of Istanbul. A simple random sampling method was employed for accessing teachers. Of the participants, 293 were male (49.4%) and 299 were female (50.6%). Four hundred and twenty eight of the participants were primary and secondary school teachers (72.3%) and 164 were high school teachers (27.7%).

Assessment Instruments

Two assessment instruments were employed in the present study: (1) personal information form; and (2) a survey for determining the usage frequency of DI practices.

Personal Information Form: This form was developed by the researcher in order to obtain the personal information of the participants.

The Survey for Determining the Usage Frequency of Differentiated Instruction Practices: The original form of the survey was first developed by Moon, Tomlinson and Callahan (1995) for data collection in a study. This original form contained 21 questions with choices ranging from 5 to 30 according to their types. In this study, the original survey was initially translated into Turkish by the researcher. Then, questions which were not in compliance with the Turkish Educational System were removed and the necessary additions were made. There are five questions in the survey employed in the present study. There are choices after each question ranging from 7 to 26 according to the structure of the question. Questions were aimed at determining teachers' criteria in selecting teaching materials, contents, methods and assessment instruments, which methods-techniques and assessment instruments they preferred and what kind of group works they conducted.

Data Collection and Analysis

Online and printed paper survey methods were employed collectively for data collection. Initially, the intention was to collect data via an online survey. However, there were only 128 feedbacks though 10,000 teachers were accessed. It was understood that data collection was not possible by this means; therefore the researcher resorted to the printed version of survey. Four hundred and sixty four teachers were accessed via this method. Data were collected in November and December, 2011. Data were analyzed using the SPSS 11.5 program on the basis of frequency, percentages and average-standard deviations.

FINDINGS

The findings of the research were grouped under the headings of instructional methods and techniques, instructional materials, content and assessment instruments.

Instructional Methods and Techniques Preferred by Teachers

Here is the distribution of answers given in response to the question, "How often are each of the following instructional strategies used in your classroom?"

First, teachers were asked how often they used 30 strategies, methods, techniques and activities to differentiate learning. When the answers in Table 1 are examined, it is seen that teachers often employ specific practices that address individual differences rather than a particular technique. The first three activities are "adapting the depth of content according to student needs", "allowing students to progress at their own speeds" and "pre-assessment of the student's current knowledge, understanding, and skills" respectively. The last ones are instructional strategies/methods such as tiered instruction, stations and agendas. This order changes partially on the basis of departments (especially with primary school teachers). With primary school teachers,

pre-assessment, which is the third one in other groups, is the sixth one while cooperation based learning goes up to second place. Other observed differences are about MI practices and simultaneous use of materials from different levels since they are in the upper ranks. The three groups are similar to one another in other choices.

Table 1: Frequency of using instructional strategies/practices preferred by teachers to address student differences

First five practices	$\bar{X}$	*df*	*Rank*			*Last five practices*	$\bar{X}$	*df*	*Rank*		
			S	*B1*	*B2*				*S*	*B1*	*B2*
1- Adapting the depth of content according to student needs	4.9	1.1	3	1	1	**26-** Computer programs for improving problem solving	3.2	1.7	22	28	26
2- Allowing students to progress at their own speeds	4.9	1.1	1	2	2	**27-** Learning contracts	3.2	1.6	27	25	24
3- Pre-assessment of the student's current knowledge and skills	4.7	1.0	6	3	3	**28-** Stations	3.2	1.6	28	22	27
4- Cooperative learning	4.7	12.	2	8	8	**29-** Agendas	3.0	1.8	30	26	28
5- Varied instructional materials by readiness, interest, and/or learning profile	4.7	1.3	7	4	5	**30-** Internet based group works	2.9	1.6	29	29	20

Note for all tables: The response format was as follows: S: Primary school teacher, B1: Secondary school teacher B2: High school teacher

Factors Influencing the Teachers' Selection of Instructional Materials

Here is the frequency distribution of answers given in response to the question, "Which factors influence the selection of instructional materials; and how important are these factors in your decision making?"

Table 2: The importance ranks of factors influencing the selection of instructional materials

			Rank						*Rank*		
	$\bar{X}$	*Sd*	*S*	*B1*	*B2*		$\bar{X}$	*Sd*	*S*	*B1*	*B2*
1-Pleasure-giving learning	3.6	.6	2	1	1	**7-**School facilities	3.2	.7	7	8	6
2-Comprehensibility of the material by students	3.6	.5	1	2	2	**8-**Objectives and suggestions of the curriculum	3.2	.6	8	6	8
3-Detailed learning of given information by students	3.4	.6	3	4	5	**9-**Socio-cultural and financial structures of families	2.9	.7	9	9	9
4-Addressing different student characteristics	3.4	.6	4	3	4	**10-** General outcomes of national exams	2.8	.7	11	11	10
5-Developing different perspectives on events and issues	3.4	.6	5	7	3	**11-** Suggestions of the teachers' book	2.8	.8	10	10	11
6-Addressing both male and female students	3.3	.8	6	5	7	**12-** Advice education directorates and school administration	2.6	.7	12	12	12

According to Table 2, the factors that teachers pay most attention to while selecting materials are "pleasure-giving learning", "comprehensibility of the materials by students" and "detailed learning of given information by students". The ones that get the

least attention are the general outcomes of national exams, teachers' books, and administrative advice. It is seen that teachers take into account individual differences while selecting materials. Three of the items in the table support DI. The percentage of teachers advocating that the first item "addressing different student characteristics" is important and vital at 94.4%. However, this is the fourth one among other factors.

Addressing both male and female students (sixth one) which is 86.4% and taking into consideration socio-cultural and financial structures of students (ninth one) which is 78.4% are other factors considered important and vital. Though there are small changes in ranking in terms of departments, it is generally similar.

Factors Influencing the Content Preferences of Teachers

Here is the distribution of answers given in response to the question, "How important is each of these factors in determining the content you teach?".

This item questioned which factors were taken into consideration by teachers in organizing the content. Thirteen factors, three of which were about DI, were given to teachers in the question. It is seen from the answers that teachers organize content mostly according to their knowledge levels and interests. Items about DI are the third, fourth and ninth ones. Of the teachers, 94.8% believe that general student characteristics are influential and very influential in deciding the intensity of the content. The factors getting the least attention in determining content are the weekly course program, the scope of national exams, course books and the school report marks of the previous year. It is seen that there are some differences between groups in terms of departments. The school report marks of the previous year are more important for primary school teachers while concepts and principles of the instructed fields are less important.

Table 3: The extent of influence of the factors on determining how often and which dimensions of the course content will be taught

			Rank						*Rank*		
	$\bar{X}$	*Sd*	*S*	*B1*	*B2*		$\bar{X}$	*Sd*	*S*	*B1*	*B2*
1-Knowledge level of the teacher	3.5	.7	2	2	1	**8-** Proficiency tests (Reading, writing etc.)	3.1	.7	9	8	8
2-Teacher interest	3.5	.7	1	1	3	**9-**Test results assessing pre-knowledge of students	2.9	.8	10	9	10
3- General characteristics of students	3.4	.6	3	3	2	**10-**Weekly course program	2.9	.7	11	10	9
4- Interest areas of students	3.4	.7	4	5	5	**11-**Scope of national exams	2.9	.8	13	11	11
5-Main concepts and principles of the given area	3.3	.7	7	4	4	**12-**Course books	2.9	.8	12	12	12
6- Experience-based teacher decision	3.3	.6	6	6	6	**13-**School report marks of the previous year	2.3	.8	5	13	13
7- General skill levels of students	3.2	.6	8	7	7						

Assessment Instruments Preferred by Teachers

Here is the distribution of answers given in response to the question, "How often do you use the following strategies to assess student achievement?"

Table 4: Usage frequency of the assessment instruments preferred by teachers

			Rank						Rank		
	$\bar{X}$	*Sd*	*S*	*B1*	*B2*		$\bar{X}$	*Sd*	*S*	*B1*	*B2*
1 -Essay	3.2	.7	5	2	1	**8-** Project	2.9	.7	8	5	9
2 -Objective tests	3.2	.8	1	1	2	**9-** Check list	2.9	.8	9	8	8
3 -Homework	3.1	.8	4	4	5	**10-** Portfolio	2.7	.8	10	11	13
4 -End of unit tests	3.1	.8	2	6	4	**11-** Rating scale	2.7	.8	12	10	12
5 -Performance works / tasks	3.0	.7	6	3	6	**12-** Self and peer evaluation	2.7	.8	11	13	10
6 -Oral exam	3.0	.8	7	7	3	**13-** Observation form	2.6	.8	13	12	11
7 -Proficiency test	2.9	.9	3	9	7	**14-** Rubric	2.4	.8	14	14	14

According to Table 4, the assessment instruments mostly preferred by teachers are written exams, objective tests, homework, end of subject and end of unit tests, and performance projects. There are also some teachers who never use these tests. Student-centered assessment instruments are less preferred when compared to subject-based assessment instruments. However, it is still possible to say that their usage frequencies are quite high. The evaluation based on departments demonstrates that objective tests are used most frequently. Written exams are mostly preferred by secondary and high school teachers and end of subject and unit tests are mostly preferred by primary school teachers while performance projects are mostly preferred by secondary school teachers and proficiency tests are mostly preferred by primary school teachers.

Factors Taken Into Consideration by Teachers When Grading

Here is the distribution of the answers given in response to the question, "What degree of importance do you attach to the following factors when grading?"

Table 5: Distribution of factors influencing teachers when grading

			Rank						Rank		
	$\bar{X}$	*Sd*	*S*	*B1*	*B2*		$\bar{X}$	*Sd*	*S*	*B1*	*B2*
1-Student effort	3.7	.5	1	1	1	**6-** Academic improvement since the exam held at the beginning of the semester	3.2	.7	6	7	7
2- In-class participation	3.6	.5	2	3	2	**7-** Respect for teacher	3.2	.8	8	6	6
3-Carrying out tasks	3.6	.5	4	2	4	**9-** Grades achieved in exams	3.1	.7	7	8	8
4- Observed improvement in student throughout the semester/year	3.6	.5	3	4	3	**8-** The status of the student compared to the rest of the class	2.8	.9	9	9	9
5-Adapting to the course	3.5	.6	5	5	5						

The participants were provided with nine factors that had a potential to influence them when grading students, and asked to grade them according to the importance they attached to those factors. According to Table 5, the factor which is taken into consideration by teachers the most when grading is student effort. This factor is respectively followed by in-class participation, improvement observed throughout the semester, carrying out tasks, adapting to the course, academic improvement observed

since the beginning of the semester, respect for the teacher, exam grades, and status compared to the rest of the class. In terms of departments, the distribution of factors is similar to one another.

DISCUSSION

The present study aimed at determining teachers' usage frequencies of methods, techniques, contents and assessment instruments of DI and the factors influencing their preferences in this regard. Below is the discussion regarding the findings obtained in accordance with this aim.

Instructional Methods and Techniques Preferred by Teachers

Many strategies, methods and techniques are used within the scope of DI. In addition, all activities taking into consideration individual differences are considered within the scope of DI (Tomlinson & Strickland, 2005). Students benefit from the instruction taking into account individual differences especially in terms of academic achievement and learning motivation. One of the most important reasons for school failure is the fact that the curriculum does not address the students. Thus, DI practices to be prepared based on students will ensure the learning of all students (Tomlinson et al., 2003). The present study asked teachers how often they used 30 strategies, methods, techniques and activities that are normally mostly used and preferred within the scope of DI. Some of these should be constantly used while the others should be used at intervals in a class where the lecture is given according to DI. For example, instruction should always address different kinds of learning styles, but a stations strategy should be used less. As was expected, examinees expressed that they turned to activities that should be used constantly more often. The first three activities among those are "adapting the depth of content according to student needs", "allowing students to progress at their own speeds" and "pre-assessment of students' current knowledge, understanding, and skills". However, only 30% of teachers used these activities everyday, though they had to carry them out always. This finding may indicate that teachers do not engage in student-centered activities adequately. The question, "Which methods do teachers always use?"may be asked here. Previous studies conducted with different educational levels found that teachers frequently resorted to lecturing and question-answer approaches (Taşkaya & Bal, 2009). At this point, it can be deduced that teachers could not adapt to the 2005 curriculum thoroughly. This is because the 2005 curriculum basically suggests activities that make students, rather than teachers, active (MEB, 2005). In fact, this is a normal situation according to Brighton and et al., (2005). This is because teachers cannot adapt easily to the process during transition to differentiated or student-centered instruction. In these kinds of changes, teachers should firstly challenge their previous opinions and actions. To achieve a change, there is a need for an environment that trusts in change, intrinsic motivation, and guidance. A lack of these features may result in problems for teachers during the transition to a new situation. When the 2005

curriculum began to be implemented, teachers received short-time in-service training at best.

The strategies and methods preferred by teachers, such as tiered instruction, agendas, and stations are at the end of the list, as is to be expected. This is because strategies and methods are not suitable for each subject, and therefore they are not appropriate for constant usage. However, the fact that teachers use these kinds of methods less may stem from a lack of knowledge regarding these methods and difficulty in implementing them. Previous studies revealed that teachers mostly preferred the methods which they had a better command of and which were easy to implement (Akçadağ, 2010; Akdeniz, Yiğit & Kurt, 2002). Among the methods, only cooperative learning is frequently used. This may stem from the fact that cooperative group works are used along with activities such as projects which require group work. Department-based ranking of the practices changes especially with primary school teachers. Pre-assessment ranks sixth with primary school teachers, while cooperative learning is placed second. Other observed differences are the upper ranking of MI practices and the simultaneous use of different level materials among primary school teachers. The underlying reason for the difference may be the MI based curriculum of 2005 for primary schools. Since there is no central exam at the end of the fourth/fifth year, there is no pressure on primary school teachers to give exam-oriented instruction. This may lead them to use student centered activities more. Besides, it is expected that student-centered activities would be more common at lower grades. Secondary and high school teachers have many classes, and classroom populations are high. This situation may result in less student-centered activities. Indeed, the 2005 curriculum provides an opportunity and makes suggestions to use all of the practices included in the scope of DI.

Factors Influencing the Instructional Material Preferences of Teachers

In DI practices, instructional materials should be selected and developed taking into consideration individual differences (Heacox, 2002; Tomlinson & Strickland, 2005). Generally there are many factors influencing teacher decisions of materials as is the same with method preference. The present study presented teachers with 12 factors with the possibility of influencing their preferences. Among these, only three were in compliance with DI. Though there were some certain similarities between them, teachers stated that all the factors influenced their preference of material to a certain extent. The factor given the most importance by teachers is pleasure-giving materials. Nowadays, it's becoming harder and harder for teachers to convince students to stay in the classroom and listen to lectures while there are so many entertaining and interesting things outside of the classroom such as the computer, the internet environment, electronic toys and television. This result may stem from the fact that teachers who are aware of this fact make an effort to make their courses more fun. The understandability of the material and the guarantee of learning come in the second and third places respectively. The curriculum objectives of teachers are at the eighth place, and teachers' books are eleventh, which is thought-provoking. It is understood from the results obtained that more than half of the teachers take into account these two variables, but

again many teachers do not. Yet, the basic factor influencing in-class selections should be course objectives. The teacher's book is a guide containing examples, but there is no necessity that binds teachers to it. It is understood from the obtained results that teachers take into account the teacher's book though it is partially. It is also deduced that student differences are taken into account though they are placed fourth and sixth.

Factors Influencing Teacher Preferences in Content

Content in DI is differentiated according to the interests, pre-knowledge, and the cognitive abilities of students. In this sense, reading materials of different levels or sources, varying according to interests, may also be used. In order for the teacher to do this, he should know his students in terms of their interest, MI, learning styles etc. (Tomlinson & Strickland, 2005). Despite this fact, the most prominent determiner for teachers in the classes is his/her ideas (Beswick, 2006; Moon et al., 1995). This study asked teachers which criteria played a role in selecting their course contents and the teachers stated that all the factors presented to them influenced their selections to a great extent. However, if a sequence is to be made, it is seen that they organize the intensity of content according to their interests and knowledge. From this point of view, it is possible to say that a teacher emphasizes a subject more if he/she is interested and successful at it. But when the situation is reversed, he/she emphasizes it less. The factors least influential in teacher preferences of content are the weekly course program, the scope of national exams, course books and grades from the previous year's school reports. The three factors, among the others supporting DI, are in the upper ranks. From this point of view, it is possible to say that teachers mainly organize the depth of content according to the individual differences of students. Considering the situation based on departments, the grades from the previous year's school reports are more important for primary school teachers while concepts and principles of the field are less important. This result is in fact expected for primary school teachers. Primary school teachers have the opportunity to know their students better and this leads to easier monitoring of the previous performances of students. In that case, teachers can organize the content of thenew semester according to student levels. As for another case, concepts and principles are of less interest for primary school teachers mainly because they are abstract.

Assessment Instruments Preferred by Teachers

In DI, assessment is regarded as a part of the learning process just like it is in the other student centered practices. What students know at the end of the process is not considered as the base of assessment; it is the effort and the outcomes they produced that assess their learning (Tomlinson, 2001). Within this framework, DI utilizes modern assessment instruments taking into account individual differences such as project, performance work, portfolio and rubric. These instruments are called either "authentic" or "student centered". Traditional assessment methods such as the written exam and multiple choice questions treat all students as if they are equal and assessment is made

by means of a single instrument. However, the student is assessed according to his own potential with modern assessment approaches. Teachers participating in this study generally preferred traditional assessment instruments. The 2005 curriculum suggests that teachers should use both kinds of assessment instrumentsequally, though many studies revealed that teachers rather prefer traditional tests (Güneş et al., 2010). That teachers prefer modern assessment instruments less stem from reasons such as a lack of knowledge (Güneş et al., 2010), modern assessment instruments are time-consuming (Gelbal & Kelecioğlu, 2007; Güneşand et al., 2010), classes are crowded (Gelbal & Kelecioğlu, 2007; Güneş et al., 2010), modern assessment is more expensive and it is difficult (Gelbal & Kelecioğlu, 2007). Though modern tests are more frequently used than traditional ones, modern assessment instruments are frequently and constantly used by only half of the teachers. Considering the situation based on department, written exams are mainly preferred by secondary and high school teachers, end of subject and unit tests are preferred by primary school teachers, performance works are preferred by secondary school teachers, oral exams are preferred by high school teachers and proficiency tests are preferred by primary school teachers. As is well known, there is no necessity for making assessments in the first three years of primary school. Therefore, primary school teachers may use test types which are frequently used and detect deficiencies and errors in learning. Again, the primary school is the place where students acquire basic skills such as reading and writing, thus, it is natural to use tests assessing these skills. One of the innovations brought by the 2005 curriculum is performance projects. Primary and secondary school teachers have to assign performance projects to their students. Since secondary school teachers have many classes, this may lead them to prefer performance projects which are assigned less frequently.

Factors Influencing Teachers in Grading Students

The traditional assessment approach compares the achievement of a student with the rest of the class in order to estimate success. In this type of assessment, the student competes not with himself, but with the others in the class. The modern assessment method evaluates students according to the improvement they have presented individually. Student performance and the improvements from the beginning of semester until the end are regarded as his/her achievements (Fer & Cırık, 2007; Moon, 2005). In the present study, teachers stated that they took into account student improvement throughout a period while grading them. However, the factors that teachers take into account the most while grading is student effort. This is respectively followed by in-class participation, improvement observed during the course of the semester, carrying out tasks, adapting to the course, academic achievement observed since the beginning of the semester, respect for the teacher, exam results and the student's situation compared to that of the rest of the class. Accordingly, it is understood that teachers attach importance to extra-exam factors more while grading students. All three department results are similar to each other in terms of factor distribution. In a study conducted by Dunning (2008), (USA-Rhode Island) teachers

take student effort into consideration in the first place. The sequence of the other factors is similar.

When the present findings are generally evaluated, it is understood that DI practices and principles, in other words instructional activities based on the individual differences of students, are not greatly preferred by teachers working in Istanbul. All of the activities within the scope of DI are also used in integrating constructivism into classrooms. It is even possible to say that DI is an approach that enables the use of constructivism in the classroom environment. From this point of view, it can also be deduced that the desired activities required for the curriculum legislated in 2005, firstly for primary schools, and which has constructivism in its base, are not used adequately. Again, it is also a fact that there is a tendency towards student centered activities.

As explained above, teachers do not make use of differentiated/student centered instructional practices as much as is required by current curriculums. Teachers shouldn't be expected to adapt to the process and practices quickly and change themselves immediately after these kinds of radical changes. Changes in university curriculums for teacher education should be made initially, and support programs should be provided for those who are already in service. Training to be made within this scope should be applied, and teachers should have an expert they can consult when these changes are brought into the classroom. Besides which, parents and managers should also believe in the value and necessity of the practices to be conducted.

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Turkish Abstract

Öğretmenlerin Bireysel Farklılıklara Göre Öğretimi Düzenlemeye Yönelik Uygulamalarının İncelenmesi

Bu çalışmada, İstanbul ilinde görev yapan öğretmenlerin farklılaştırılmış öğretim kapsamında tercih edilen yöntem teknik, materyal, içerik ve ölçme araçlarını kullanma sıklıkları ile bu kapsamdaki seçimlerini etkileyen değişkenleri belirleme amacıyla yapıldı. Araştırma sonuçlarına göre öğretmenler, farklılaştırılmış öğretim kapsamında yer alan öğretim yöntemlerini, ölçme

araçlarını kullanmakta ve plan yaparken, içerik düzenlerken, materyal seçerken ve ölçme yaparken farklılaştırılmış öğretim ilkelerinden faydalanmaktadır. Öğretmenler sınıflarında bir teknikten/yöntemden daha çok bireysel farklara hitap eden belirli uygulamaları daha sıklıkla kullanmaktadır. Öğretmenler not verirken sınav sonuçlarından daha çok öğrencinin gayretine, sınıf içi katılımını dikkate almaktadır.

Anahtar Kelimeler: Yapılandırmacılık, farklılaştırılmış öğretim, öğretmen tercihleri, öğretmen eğitimi

French Abstract

Un examen des Pratiques des Enseignants Concernant l'Arrangement de l'Éducation en Fonction des Différences Individuelles

L'étude présente essaye de découvrir combien de fois les professeurs à Istanbul emploient les méthodes, des techniques, des matériels, le contenu et les instruments d'évaluation qui sont préférés dans les limites de l'instruction différenciée, aussi bien que les variables qui influencent leurs choix. Les résultats de la recherche indiquent que les professeurs plus utilisent fréquemment l'adressage de pratiques spécifique aux différences individuelles plutôt qu'une certaine méthode/technique. En arrangeant le contenu, les professeurs considèrent principalement leur propre connaissance et intérêt. Ils préfèrent surtout des instruments d'évaluation de classiques plutôt que des centrés sur étudiant et tandis que la classification, considèrent les efforts et la participation dans-classe d'étudiants plutôt que des résultats d'examen.

Mots-clés: Constructivisme, instruction differenciee, préférences de professeurs, entraîneur de professeur

Arabic Abstract

فحص في ممارسات المعلمين وفيما يتعلق ترتيب التعليم وفقا للفروق الفردية

يحاول هذه الدراسة لمعرفة عدد المرات المعلمين في اسطنبول توظيف الأساليب والتقنيات والمواد ومحتويات وأدوات التقييم التي يفضل ضمن نطاق التعليمات متباينة، فضلا عن المتغيرات التي تؤثر على خياراتهم .نتائج البحوث تشير إلى أن المعلمين أكثر حريا ما تستخدم ممارسات محددة لمعالجة الفروق الفردية بدلا من طريقة معينة /تقنية .بينما يرتب المحتويات والمعلمين النظر في المقام الأول معرفتهم والفائدة .أنهم يفضلون في الغالب أدوات تقييم الكلاسيكية بدلا من تلك التي تركز على الطالب وعلى الرغم من الدرجات، والنظر في الجهود والمشاركة في فئة من الطلاب بدلا من نتائج الامتحانات .

الكلمات المهمة: البنائية، والتعليم متباينة، والمعلمين والأفضليات، المدرب المعلم