

# Teachers' Efficacy Perceptions About Individualized Instruction

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*Abstract: The population of the study consists of primary school teachers working in the province of Eskişehir. The sample of the study consists of 321 primary school teachers working at 40 primary schools. In the present study, a questionnaire, an instrument to collect data, was used to determine teachers' perceptions of efficacy about individualized instruction. Frequencies and percentage were calculated in the analysis of the data. Results of the study indicated that primary school teachers perceived themselves as sufficient in terms of determining the aims and teaching activities. Furthermore, teachers perceived themselves moderately sufficient in terms of presenting different activities in scheduling; applying knowledge with property of students in scheduling to teaching-learning process and designing suitable teaching material in teaching-learning process; constructing the environment which helps students to realize their powerful and weak aspects. On the other hand, teachers perceived themselves insufficient in terms of scheduling teaching-learning process with convenient individual differences and constructing environment with convenient for students who need special education.*

Keywords: Individualized Instruction, Efficacy Perception

## Introduction

**E**DUCATORS OFTEN WONDER why some students find it difficult to learn although others find it easy, and why can't all students learn all skills in an equal manner? (Jonassen and Grabowski, 1993, 3). Answers to these questions lie in the different characteristics of students. Students learning and achievement can be affected by diversity issues such as culture, language, learning style, and personality. Because diversity influences student behavior, educators need to consider instructional strategies that meet diverse characteristics of students (Johnsen, 2008, 12-17). This diversity influences the educational reforms, instructional approaches and strategies. Individualized instruction is one of the systems which consider individual differences and needs of students in teaching process, and offer instructional approaches appropriate to differences of students. For several decades individualized instruction has been one of the most controversial issues on education.

Individualized instruction is the effort on the part of a school to organize the learning environment to take into account individual student characteristics and needs to make use of flexible instructional practices (Keefe and Jenkins, 2002, 441). Individualized instruction is a system where teaching-learning activities are organized to take into account the individual interests and needs as well as the learning speed and capabilities of the students (Yaşar, 1994, s.516; Worsley, Landzberg and Papagiotas, 2004; Maisano, 2005; Keefe and Jenkins, 2002; Heacox, 2002, 5; Aydın, 2000, 186). Classrooms contain substantial numbers of student with diverse learning needs. Many of these students display characteristics resulting from

such factors as language, intellectual and cognitive abilities, behavior, culture, or limited experiential backgrounds that can significantly interfere with successful learning (Polloway and Patton, 1997, 35). Individualized instruction represents comprehensive attempts to improve learning by tailoring instruction to these individual characteristics. It is based on the assumption that students differ in aptitude, learning rate, culture, and motivation, as well as other variables (McCarthy, 1980, 59), and students enter class with widely divergent skills, motivations (Slavin, Leavelly and Madden, 1984, 410). In individualized instruction students work on materials at their own level and rate (Slavin and Karweit, 1985, 353).

The indispensable catalyst in the individualized instructional environment is the teacher. Individualized instruction demands that the teacher assume some roles (Keefe and Jenkins, 2002). Individualized instruction requires teachers to give up the traditional educator roles such as discipline providers and information distributor in teaching-learning process. Teachers must have more than curricular knowledge and strategies to individualized of instruction effectively. Teachers who would like to realize individualized instruction must possess specific roles and competencies that encompass the planning of instruction, organizing of students and the educational environment, and motivating to students, etc. Yasar (1994, 518) identified these roles such as planner, organizer, consultant, incentive and evaluative. Teachers act as a guide to facilitate learning, a mentor, a friend or a consultant in individualized instruction. In this context, teachers have an important role during the planning, implementing and evaluating of teaching-learning activities in the educational environment where the individualized instruction is used. Teachers carry on various roles such as scheduling the lesson, motivating students to learn, assigning tasks and evaluating performance tasks. These roles teacher assumed are called as “planner”, “organizer”, “consultant”, “incentive”, and “evaluative”. Therefore, teachers are expected to possess efficacies related to planning, implementing, evaluating instruction, selecting appropriate methods and techniques, monitoring and evaluating the progress of students in individualized instructional environment (Yasar, 1994, 518). If teachers want to implement effectively individualized instruction, they should understand that language, culture and family background have an impact on students’ academic and social behavior, attitudes, values and interests. In this context it can be said that teachers must possess the knowledge, skills, and efficacy to teach learners who have these diversity.

Teachers’ individual perceptions about individualized instruction are fundamental contributors influencing the way they teach, and how they motivate and engage their students. Therefore to determine of the teacher efficacy perceptions about individualized instruction is a marker of successful teaching applications. There is a rich body of literature covering the development of individualized instruction (Maisano, 2005, 76). But it is emphasized in the literature (Kitano, 2008, 2) that only a small number of universities offer programs that prepare teachers specifically for working with students with different needs. Moreover, it is stated that regular classroom teachers are ill prepared to instruction to students with different characteristics (VanTassel-Baska, 2008, 50). Also, it is expressed that teachers think that generally learning experiences are organized to meet needs of all groups in the classroom rather than the specific needs of individuals (Killion, 2005, 54). When literature was examined concerning teacher qualifications, many studies were found (Flores, Desjean-Perrotta and Steinmertz, 2004; Kupermintz, 2003; Martinez and Martinez, 1999) on teachers and teacher candidates’ efficacy perceptions. However, it was seen that there is a need to determine the efficacy perceptions of primary school teachers regarding individualized instruction.

Therefore, this study leads to the future development on pre-service and service teacher training programs.

### ***Purpose of the Study***

The main purpose of this study was to determine the perceptions of primary school teachers about individualized teaching practices. Within the scope of the main purpose, the following research questions were addressed:

1. Do teachers feel competent at individualized instruction?
2. What are suggestions of teachers about individualized instruction?

### ***Limitations of the Study***

This study is limited with obtained answers from questionnaires of 321 primary school teachers working 40 elementary schools in Eskisehir/Turkey in 2008-2009 spring term.

### ***Methodology***

The survey method was used in the study. The study was conducted with 321 primary school teachers in Eskisehir/Turkey. In order to determine of the teachers' perception about individualized instruction, a questionnaire which was subjected to pilot testing and re-drafted was designed and administered. The items in the questionnaire focused on the teaching profession general competencies which were prepared by The Ministry of National Education Directorate of Teacher Education in Turkey. After the examination of items in the teaching profession general competencies, items related with individualized instruction were selected, and it was given final form of the questionnaire. For the validity of the questionnaire, it was submitted for the review of the teaching staff that made necessary corrections, in line with their views and suggestions. As a final step, for the reliability of the questionnaire a pilot test was carried out. After the necessary hotfixes the questionnaire was applied to 46 teachers who work in six primary schools not included in the sample. To test the reliability of the questionnaire the Cronbach Alpha Coefficient (Article Total Test Correlation) values were examined. The results of the pilot study indicated that the questionnaire was reliable with a Cronbach Alpha coefficient of reliability of 0.91.

The questionnaire consists of two parts. The first part is a structured, Likert-scale questionnaire comprising 44 items that measure the efficacy perceptions of teachers about individualized instruction. Teachers' efficacy perceptions were categorized as adequate, partially adequate and inadequate. Items are measured on a three-point scale, indicating the degree of adequate or inadequate, ranging from inadequate (1) to adequate (3). A three-point Likert format was adopted for this study mainly because it was considered the best option for systematically trying to capture the respondents' efficacy perceptions about individualized instruction. The second part of the questionnaire consists of 1 open ended question to share their suggestions on the individualized instruction. Also, two demographic questions (participants' gender and professional experience) were included at the end of the questionnaire).

### **Data Analysis**

Data of the study were analyzed using the Statistical Package for the Social Sciences (SPSS), version 15.0. Firstly, Pearson's chi square test was used to detect differences concerning gender, and professional experience of participants, and descriptive statistics i.e. frequency and percentage were used to compute the data to yield a set of quantitative results. Secondly the qualitative data of the questionnaire were analyzed descriptively. The data obtained from descriptive analysis were summarized and interpreted related to determined themes. Also, by making direct quotations from participants' opinions research findings were supported. For the purpose of calculating the reliability of the qualitative data, the data were examined by two experts. Miles and Huberman's (1994) formula was used to calculate the reliability. As a result of this calculation, the reliability of the qualitative data was found as 87.6%.

### **Participants**

The participants of this study were randomly selected from 40 elementary schools in Eskisehir in Turkey. The final sample included 321 elementary school teachers of which 192 (59.8%) were female and the remaining 129 (40.2%) were male. Professional experience of teachers is as follows: 39 (12.1%) were less than 5-years, 110 (34.3%) were 6-10 years, 65 (20.3%) were more than 20-years.

### **Findings**

Frequencies (f), and percentages (%) were used to report the data related to participants' efficacy perceptions about individualized instruction. Pearson's chi square test was used to detect differences concerning gender, and professional experience of participants. The results indicated no significant differences in terms of gender and professional experience related to participants' efficacy perceptions about individualized instruction. No significant difference means that the participants' mean responses did not appear to differ at the 5% level.

In this section, teachers' efficacy perceptions about individualized instruction are examined with regard to the roles such as planning, organizing, guiding, motivating and evaluating.

The efficacy perceptions about the roles of the teacher in planning in individualized instruction are shown in table 1.

**Table 1: The Efficacy Perceptions about the Roles of the Teacher in Planning in Individualized Instruction**

Efficacy Perceptions	Adequate		Partially Adequate		Inadequate	
	f	%	f	%	f	%
The efficacy perceptions about the roles of the teacher in planning in individualized instruction						
To establish objectives for students based on the student's performance and developmentally appropriate	186	57.9	133	41.4	2	6
To determine appropriate methods and techniques	174	54.2	135	42.1	12	3.7
To determine appropriate materials for students who learn in different ways	172	53.6	143	44.5	6	1.9
To determine appropriate instructional activities for students with different learning characteristics	186	57.9	124	38.6	11	3.4
To be aware readiness level of students	183	57.0	127	39.6	11	3.4
To be aware of the skills needed for academic success of students	160	49.8	146	45.5	15	4.7
To offer different activities for respond to the needs of students	141	43.9	164	51.1	16	5.0
To use the information about students characteristics in planning of teaching and learning process	151	47.0	153	47.7	15	4.7
To plan of teaching-learning process according to individual differences	121	37.7	163	50.8	36	11.2

Table 1 illustrates that primary school teachers feel in items concerning “to determine goals based on the student's performance and developmentally appropriate (%57.9)” and “to determine appropriate instructional activities for students with different learning characteristics” *adequate*. Furthermore, while most of the teachers (51.1%) feel in items about “to offer different activities to respond the needs of students” and “to plan teaching-learning process according to individual differences” *partially adequate*, some teachers (11.2%) feel in items about “To planning of teaching-learning process according to individual differences” *inadequate*.

The efficacy perceptions about the roles of the teacher in organizing individualized instruction are shown in table 2.

**Table 2: The Efficacy Perceptions about the Roles of the Teacher in Organizing in Individualized Instruction**

Efficacy Perceptions	Adequate		Partially Adequate		Inadequate	
	f	%	f	%	f	%
The efficacy perceptions about the roles of the teacher in organizing in individualized instruction						
To design teaching materials according to students' individual learning rate.	94	29.3	195	60.7	32	10.0
To prepare and implement various teaching materials, equipment students with different learning needs	128	39.9	166	51.7	27	8.4
To create small working group based on specific criteria	160	49.8	146	45.5	15	4.7
To make physical arrangements according to studies performed in the classroom	180	56.1	124	38.6	17	5.3
To integrate students' learning styles and teaching-learning process.	141	43.9	160	49.8	19	5.9
To offer multiple options to students for demonstrate their knowledge and skills that acquired	144	44.9	160	49.8	16	5.0
To encourage the students to participate to different activities.	209	65.1	104	32.8	8	2.5
To execute the teaching and learning process according to students interest	179	55.8	135	42.1	7	2.2
To change the learning environments according to the subject and the characteristics of students	173	53.9	135	42.1	12	3.7
To provide opportunities to students for enable participating to cooperative learning activities	173	53.9	137	42.7	11	3.4

To provide opportunities to students will work together on projects	144	44.9	152	47.4	25	7.8
To prepare the appropriate environment for students with special educational needs	109	34.0	148	46.1	64	19.9
To use assistive technology to help individuals with learning disabilities become successful	120	37.4	170	53.0	31	9.7
To use a variety of techniques such as observation, face to face interview, scale, individual and group projects, etc..for identify students' developmental levels and individual differences	153	47.7	147	45.8	20	6.2
To benefit from the students interest and needs in teaching-learning process	155	48.3	164	51.1	2	.6
To prepare appropriate learning environments for students with different experiences, characteristics and skills by using information and communication technologies	138	43.0	146	45.5	36	11.2

As seen in table 2, most of the teachers (65.1%) feel in items about “To encourage the students to participate to different activities”, (56.1%) “To make physical arrangements according to studies performed in the classroom” and (55.8%) “To execute the teaching and learning process according to student’s interest” *adequate*. Additionally while most of the teachers (60.7%) feel in items concerning “To design teaching materials according to students’ individual learning rate” and (53.0%) “To use assistive technology to help individuals with learning disabilities become successful” partially adequate, most of the teachers (19.9%) “To prepare the appropriate environment for students with special educational needs” and (11.2%) “To prepare appropriate learning environments for students with different experiences, characteristics and skills by using information and communication technologies” *inadequate*.

The efficacy perceptions about the roles of the teacher in guiding in individualized instruction are shown in table 3.

**Table 3: The Efficacy Perceptions about the Roles of the Teacher in Guiding in Individualized Instruction**

Efficacy Perceptions	Adequate		Partially Adequate		Inadequate	
	f	%	f	%	f	%
The efficacy perceptions about the roles of the teacher in guiding in individualized instruction						
To offer options and create opportunities according to students' individual differences	138	43.0	166	51.7	17	5.3
To help improvements of decision-making capabilities of students	180	56.1	127	39.6	14	4.4
To give responsibility and tasks according to developmental levels, learning styles, and interests of students	179	55.8	130	40.5	12	3.7
To create learning environments that provides to realize of students strengths and weaknesses themselves.	169	52.6	133	41.4	19	5.9
To guide students for collaboration with relevant experts in line with the interests and needs of themselves.	150	46.7	133	41.4	38	11.8

As seen in table 3, most of the teachers (56.1%) feel *adequate* in items about “To help improvements of decision-making capabilities of students”. In addition while most of the teachers (51.7%) feel in items concerning “To offer options and create opportunities according to students’ individual differences” *partially adequate*, (11.8%) “To guide students for collaboration with relevant experts in line with the interests and needs of themselves” *inadequate*.

The efficacy perceptions about the roles of the teacher in motivating in individualized instruction are shown in table 4.



**Table 4: The Efficacy Perceptions about the Roles of the Teacher Motivating in Individualized Instruction**

Efficacy Perceptions	Adequate		Partially Adequate		Inadequate	
	f	%	f	%	f	%
The efficacy perceptions about the roles of the teacher in motivating in individualized instruction						
To provide opportunities for extra drill and repetition for students with learning difficulties	170	53.0	133	41.4	18	5.9
To encourage students for actively attending to the teaching-learning process	225	70.1	91	28.3	5	1.6
To reward students who exhibit positive behavior	237	73.8	79	24.6	5	1.6
To increase students' motivation to learn	218	67.9	99	30.8	4	1.2
To provide opportunities students for self-expression themselves	219	68.2	98	30.5	4	1.2

As seen in table 4, most of the teachers (73.8%) feel *adequate* in items about “To reward students who exhibit positive behavior”. Furthermore, while most of the teachers (41.4%) feel in items concerning “To provide opportunities for extra drill and repetition for students with learning difficulties” *partially adequate*, (5.9%) “To provide opportunities for extra drill and *repetition* for students with learning difficulties” *inadequate*.

The efficacy perceptions about the roles of the teacher in evaluating individualized instruction are shown in table 5.

**Table 5: The Efficacy Perceptions about the Roles of the Teacher in Evaluating in Individualized Instruction**

Efficacy Perceptions	Adequate		Partially Adequate		Inadequate	
	f	%	f	%	f	%
The efficacy perceptions about the roles of the teacher in evaluating in individualized instruction						
To provide feedback to students' learning	177	55.1	140	43.6	4	1.2
To use variety of assessment and evaluation approaches according to students' individual differences.	168	52.3	140	43.6	13	4.0
To prepare observation form and keep records in order to monitor student progress	174	54.2	127	39.6	20	6.2
To discuss academic results by individual or group at the end of teaching	147	45.8	153	47.7	21	6.5
To monitor the effectiveness of teaching-learning process at regular intervals	179	55.8	132	41.1	10	3.1
To provide extra learning opportunities to correct inaccurate and incomplete knowledge and skills of students	174	54.2	132	41.1	15	4.7
To modify and adopt individual measurement and evaluation activities and use variety strategies for provide to attend these activities of student	145	45.2	157	48.9	19	5.9
To measure regularly performances and developmental levels of students	161	50.2	142	44.2	18	5.6
To monitor regularly personal development record of student	195	60.7	116	36.1	10	3.1

As seen in table 5, most of the teachers (60.7%) feel in items about “To monitor regularly personal development record of student” *adequate*. Furthermore, while most of the teachers (48.9%) feel in items concerning “To organize Individual measurement and evaluation activities and use variety strategies for provide to attend these activities of student” *partially adequate*, (6.5%) “To discuss academic results by individual or group at the end of teaching” *inadequate*.

In the open-ended questionnaire prepared in order to determine the suggestions of teachers, they were asked the question ‘Can you explain the suggestions about to perform effectively individualized instruction? The responses of the teachers to this question are presented in table 6.

**Table 6: The Suggestions of Teachers about Individualized Instruction**

<b>The suggestions of teachers about individualized instruction</b>
Teachers should be informed about individualized instruction through in-service training seminars
Number of students in the classroom should be reduced
Appropriate physical environment and technological materials should be provided
It should be provided greater flexibility to teachers in the applications of programs
Teachers should be cooperated with the counseling and guidance center
School-parent cooperation should be improved
It should be created a suitable environment according to interests and abilities of the students
Students should be directed to schools according to their interests and abilities
It should be benefited more from instructional practices based on multiple intelligence theory

As seen in table 6, primary school teachers suggest that “teachers should be informed about individualized instruction through in-service training seminars, number of students in the classroom should be reduced, appropriate physical environment and technological materials should be provided, it should be provided greater flexibility to teachers in the applications of programs. In this regard, one of the teachers said that “*Individualized instruction is a very important issue. However I couldn't implement the individual instruction in my classroom because of the number of students in classroom. The intensity of the program and raising issues of concern prevent individualized instruction. Another teacher said that “To achieve successfully individualized instruction appropriate learning environment, materials and equipment should be provided. Also teachers must be able to make appropriate activities to each student's interests and needs. Besides these teachers must be trained by experts about individualized instruction”*”.

## **Conclusions and Recommendations**

In this section, major conclusions of this study have been summarized and recommendations provided for implementing the individualized instruction effectively.

This study has revealed that no significant difference is found in terms of gender and professional experience related to participants' efficacy perceptions about individualized instruction. The results of the study indicated that primary school teachers feel adequate in items about to establish objectives for student based on the student's performance and developmentally appropriate, determine appropriate methods and techniques, encourage the students to participate in different activities, make physical arrangements according to studies performed in the classroom, monitor regularly personal development record of student and monitor the effectiveness of teaching-learning process at regular intervals. The results of this study also show that primary school teachers feel partially adequate in items about to

offer different activities to respond the needs of students, design teaching materials according to students' individual learning rate, prepare and implement various teaching materials, equip students with different learning needs, offer options and create opportunities according to students' individual differences, create learning environments that provides to realize of students strengths and weaknesses themselves, modify and adopt individual measurement and evaluation activities and use variety of strategies to provide to attend these activities of student. A major conclusion of this study is that primary school teachers feel inadequate about planning of teaching-learning process according to individual differences, prepare the appropriate environment for students with special educational needs, prepare appropriate learning environments for students with different experiences, characteristics and skills by using information and communication technologies and provide opportunities for extra drill and repetition for students with learning difficulties. The findings of the study match with the findings of İzci's (2005) "The knowledge and skills of primary school teacher candidates about special education and inclusive education are not adequate", Seferoglu's (2004), "teacher candidates feel inadequate about implementing appropriate teaching techniques and issues for students who need special education", and Karaca's (2004) "teacher candidates feel inadequate about the evaluating of teaching". In this context, it can be said that pre- service special education courses about individualized instruction have benefited pre-service teachers in gaining an understanding students with special needs and characteristics.

The findings of this study reveal that primary school teachers encountered some problems such as lack of materials and technological equipment, and crowded class. Moreover, the results of this study show that teachers need more support, resources; training and time to carry out individualized instruction effectively. Similar findings were reported by Vaughn et al. (1996). Their study showed that the teachers identified that some factors such as class size, inadequate resources, and lack of adequate teacher preparation would affect the success of inclusion. Based on the results of the study, it can be suggested that:

- Determining the problems encountered in the process of individualization of instruction and making inference about the resolution of these problems can contribute to the improvement works to be done in individualized instruction.
- Informative in-service education about individualized instruction for in-service teachers should be organized.
- More attention should be given to the basic competencies about individualization of instruction at pre-service teacher training courses.
- Training on special education issues at pre-service teacher training programs should be given.
- Teachers should maintain current knowledge and skills related to best practices about individualized instruction.
- Teachers should cooperate with parents, universities and one another in implementing of individualized instruction.

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