

## Impact of Differentiated Instruction on Student Learning: Perception of Students and Teachers

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### Abstract

*The present study examines the perceptions and influences of the teachers and the students in relation to differentiated education. The research population contains all the academic departments of Karakoram International University (KIU). Five departments were selected as sample of the study. Moreover 5 teachers and 10 students were selected from each department. The study objectives were 1) to find out teachers' perception of differentiated instruction. 2) to find out students' perception of differentiated instruction. 3) to examine how differentiated instruction, influence student classroom learning. The questionnaire was used as a research instrument. Data were collected and the analysis revealed the following conclusion: 1) Differentiated instructions have a great influence on the students' learning 2.) The teachers use Differentiated guidance for improving high-quality skills of the students. 3) Differential teaching is pervasive and promotes the learning environment in the classroom. The key recombination was made that teacher should promote and enhance differentiated instruction as a learning strategy.*

**Key Words:** Differentiated Instruction, Learning, Academic Performance.

## Introduction

Education is one of Pakistan 's main disciplines and important learning fields, but is not recognized as a core curriculum. Education is an integral subject. The core idea is that education is a program that follows developmental phases based on structural elements derived from instructions in order to improve individuals and society. Such views provide sufficient foundation for a systematic rethought and development of a science education program from primary level to secondary level. There are also suitable instructions for students to be prepared adequately for life and education program in the 21st century..

Differential education provides the university with a valuable opportunity to address the diverse academic needs of its students (Anderson, 2007; Tomlinson, 2004a). Studies show that students can improve attitudes and academic achievement in responsive classrooms by being viewed as individuals and supported through learning (Ryan and Cooper 2007).

There have been several highlights of distinction among researchers (Gregory & Chapman, 2007; Gregory & Kuzmich, 2004; Heacox, 2002). A number of theory papers and books have been written by Carol Ann Tomlinson, a Differentiating Expert, Tomlinson, Tomlinson and Kalbfleisch, 1998, and Tomlin, and Dockerman, 2002 (Tomlinson, 1999, 2000a, 2001, 2003a; 2003b). Tomlinson, (2000b) says distinguished learning is a theory of teaching and learning based on the following views:

Differential education provides a significant opportunity for the university to meet the diverse learning needs of its students (Anderson 2007; Tomlinson 2004a). Studies show that students can improve attitudes and academic achievement in responsive classrooms by being viewed as individuals and supported through learning (Ryan and Cooper 2007). Researchers have been distinguished several times (Gregory & Chapman, 2007;

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[Gregory & Kuzmich, 2004](#); [Heacox, 2002](#)). Carol Ann Tomlinson, Tomlinson, Tomlinson and Kalbfleisch, 1998, and Tomlin, and Dockerman, 2002 is the author of a number of analytical articles and books (Tomlinson, 1999, 2000a, 2001, 2003a; 2003b). Tomlinson, (2000b).

The conventional way of learning is challenged by the standardized teaching. The gap between classes is made up by the students and by increasing attentive teaching (Tomlinson & Kalbfleisch, 1998; [Tomlinson & Allan, 2000](#)). The premise is that there are no two students of the same capability according to differentiated instruction and that many opportunities should be provided for the conceptualization of information and a sense of thought. As a human, the student focuses that he / she wants to do and what the program offers. Gregory & Kuzmich, researchers (2004) found that distinguished teaching is a theory that teachers around the world practice in response to the diverse needs of their students for learning. Differentiation is also related research-driven approaches that meet the needs of all students with No Child Left Behind, since they don't do the same thing on the same day. Whilst research according to teacher perceptions of this approach has been missing ([Subban, 2006](#); [Hall, Strangman & Meyer, 2003](#)), on how better integrated teaching can be applied, the latest literature is based.

Education can be seen as the transmission of social importance and acquired information. It is similar in that context to what social scientists call socialization ([Anderson, 2007](#)). The nation was facing extraordinary problems immediately after achieving independence. The immediate task in education was to save the system from collapse, a task which had become difficult because of the loss of supervisory and teaching personnel. It was nevertheless successfully accomplished: schools, colleges and universities were maintained and most of the abandoned institutions were revived and rebuilt. The number of educational institutions and enrolment has since gone up considerably.

Teachers create the optimal learning environment in various classrooms ([Chapman & King, 2005](#)). Different teachers find students respected and looked after persons represented in a good classroom atmosphere. The first step is the propensity to the physical nature of the higher education. It's an atmosphere developed. The community feels opener when it feels warm in the classroom and invites students to learn more. For example, teachers are responsible for and provide the furniture, confort and lighting rates of the furniture ([Burke & Burke-Samide, 2004](#)).

Teachers who promote new forms of equality where justice requires not that all individuals are treated in the same way, but that each student is provided with the skills towards success. Thus such esteemed teachers are well aware of their diverse academic, emotional, and physical needs, and influence student learning. The need of the students is balanced with the curriculum required by differing higher education teachers. The respected teacher is therefore responsible for training and for the learning of its learners ([Tomlinson & Edison 2003](#); Tomlinson & McTighe 2006). They are also very conscious of the way in which they are taught and educated. The fundamental aim of each of the distinguished Professors' efforts are to ensure that the students 'graduate every day, week, and year as much as possible' (Tomlinson, 1999, p. 2).

Students evaluate and change activities accordingly in a differentiated classroom before, during and after the learning process (Tomlinson & McTighe, 2006). -- student is given "respectful" work on the basis of his or her preparation, interest and learning profile ([Tomlinson & Edison, 2003](#), p.8). Every task is equally important and the students with disabilities are not disadvantaged by repeated rotate exercises (Tomlinson & Edison 2003). It encourages all students to collaborate with and participate in projects that test them ([Heacox, 2002](#)).

Differentiation takes place proactively rather than in reactive ways, because teachers approach student variation with a structured and purposeful program, which includes a program for every single student (Tomlinson & Edison 2003). Teachers who learn and teach expectations are working with a range of teaching techniques, events, materials and tools (Tomlinson & McTighe, 2006). In order to help the students to work effectively and flexibly with time, the teachers are encouraged to use time, space and resources flexibly. In addition, the instructor makes sure that the students have the right tools to complete the assignments effectively (Tomlinson & Edison, 2003).

Diversity encourages teachers to use student microperspectives for every training process. Diversity education is one of the educational policymakers' objectives actually ([Raitano and Peer 2013](#), and [Schleicher 2013](#)). Education is a priority. Teachers should offer educational resources in their classrooms according to the students of different capabilities and attitude. The research was seen as a primary professor's ability in Flanders.

The fact is different in a variety of cases. Many teachers consider it a difficult task to offer a variety of students inclusive educational opportunities. Many teachers do not know how to adjust their teaching practices to the current population situation or how to address the task ([Gaitas et. Martins, 2017](#)). Such people often have little support, and it can be difficult to think about how a distinguished classroom works ([Smets, 2016, De Neve and Devos, 2016](#)).

Specific strategies for addressing classroom flaws are proposed, offering a wide range of learners equal educational options. Tomlinson [2001-2000] introduced a network of different teaching strategies and methods that would allow all the classroom students to maximize learning benefits.

A significant feature of the program consists of the linkage between education design and the student characteristics and not just the learning goals as set out in the curriculum. This 'ethical compass' has been defined by [Coubergs et al. \(2017\)](#) as a theoretical framework for the teachers' insights into difference in education.

## **Statement of the Problem**

The aim of this research work was to find out the instruction-related problems of higher education differentiation in the public sector. It claims to be the students' perception and the influence of the student learning on differentiated instruction.

## **Objectives of the Study**

The objectives of the study were:

1. To find out the teachers' perception of differentiated instruction.
2. To investigate the students' perception of differentiated instruction.
3. To examine how differentiated instruction, influence the students in classroom learning.

## **Research Question**

The following are the research question of the study:

1. What is the teachers' perception of differentiated instruction?
2. What is the students' perception of differentiated instruction?
3. How to examine differentiated instruction, influence the students in classroom learning?

## **Significance of the Study**

This research is significant because today's college classrooms are more diverse. Teachers should be careful to respond to the needs of all students. Professors must encourage the awareness of all students and make the university a good place for all the students.

## **Research Methodology**

This section of research design explains the analysis for the thesis and various components used in the design.

## **Nature of the Study**

The study is entirely descriptive. Questionnaire was prepared to learn the perception about differentiated education of students and teachers.

## **Population of the Study**

The population of the study is taken from all the universities of Khyber-Pakhtunkhwa and Gilgit Baltistan.

## **Sample of the Study**

The sample of the study was taken from of Karakoram International University (KIU). Data were obtained from

only five university departments using the convenient sample technology. Moreover 5 teachers and 10 students selected from each department.

**Table 1.** Sample of the Study

S.NO	Departments of KUST	Teachers	Students	Total
1	Institute of Education	5	10	15
2	Department of Physics	5	10	15
3	Department of Pharmacy	5	10	15
4	Department of Mathematics	5	10	15
5	Department of Economics	5	10	15
		25	50	75

### Delimitation of the study

This research work was delimited to the students and teachers of only five departments of KIU. Data was collected from the following departments

- Department of Education
- Department of Psychology
- Department of Physics
- Department of Mathematics
- Department of Economics

### Research Instrument

As a research tool to gather data from the selected sample, a questionnaire was created. The five-point likert-scale questionnaire was created.

### Data Collection

The researchers personally visited the entire KUI sample University and distributed questionnaires in order to collect the data from the selected samples and managed to get 25 questionnaires completed from the teachers, as well as 50 student surveys completed.

### Data Analysis

Data were collected and analyzed using statistical methods from the teachers and students. Percentage and chi square analysis statistics refer to data collection analysis and interpretation statistical analysis.

### Results and Discussion

The data analysis and its interpretations are covered in this section. In the light of the study’s objectives, the data obtained by the research methods is analyzed and interpreted and the questionnaire used as a research tool. In order to accomplish these objectives, the questionnaires were used to evaluate the validity and significance of study scores using chi-square.

#### Section A: Questionnaire for Teachers

**Table 2.** Set High Expectation for Student Performance

	SA	A	UD	DA	SDA	TOTAL	$\sum(fo-fe)^2 / fe$
fo	5	8	4	4	3	25	
%age	20.00	32.00	16.00	16.00	12.00	100	
fe	5.00	5.00	5.00	5.00	5.00	46	4.40
fo-fe	0.00	3.00	-1.00	-1.00	-2.00	0	

(fo-fe) <sup>2</sup>	0.00	9.00	1.00	1.00	4.00	55	
(fo-fe) <sup>2</sup> / fe	0.00	1.80	0.20	0.20	0.80	5.96	

Table value at 0.05 = 9.5 df = 4 \*Significant

Result is seen in table 2 that value of significant at  $\chi^2$  is 4.40, which is less than the value of the table in a level of 0.05. These statements tended to be accepted by the respondents. The standards for the success of students were strong.

**Table 3.** Engage Students in Planning, Monitoring and Assessing their Learning

	SA	A	UD	DA	SDA	TOTAL	$\sum(fo-fe)^2 / fe$
fo	4	6	5	7	3	25	
%age	17	20	22	28	13	100	
fe	5	5	5	5	5	25	
fo-fe	-0.65	-0.11	0.43	2.07	-1.74	0	1.58
(fo-fe) <sup>2</sup>	0.43	0.01	0.19	4.27	3.02	7.92	
(fo-fe) <sup>2</sup> / fe	0.09	0	0.04	0.85	0.6	1.58	

Table value at 0.05 = 9.5 df = 4 \*Significant

Data result shown in table the estimated  $\chi^2$  value is 1.58, less than the 9.5 table value. The result is significant. The respondents therefore agree that I am involved in planning, monitoring and evaluating their learning.

**Table 4.** Encourage Students to Express their Thoughts

	SA	A	UD	DA	SDA	TOTAL	$\sum(fo-fe)^2 / fe$
fo	5	4	5	7	4	25	
%age	20	16	22	26	16	100	
fe	5	5	5	5	5	25	
fo-fe	0	-1	0.43	2.07	-1	0.5	1.29
(fo-fe) <sup>2</sup>	0	1	0.19	4.27	1	6.46	
(fo-fe) <sup>2</sup> / fe	0	0.2	0.04	0.85	0.2	1.29	

Table value at 0.05 = 9.5 df = 4 \*Significant.

In this table 4 shows that the value calculated of  $\chi^2$  was 1.29, The sum of the table 9.5 is less than that the respondents therefore agree that I encourage students to express their opinions/

**Table 5.** Provide Opportunities for Independent and Group Learning to Promote Depth in Understanding Content

	SA	A	UD	DA	SDA	TOTAL	$\sum(fo-fe)^2 / fe$
fo	5	4	5	8	3	25	
%age	20	16	20	32	12	100.00	
fe	5	5	5	5	5	25.00	
fo-fe	-1	-1	0	3	-2	-1.00	3.00
(fo-fe) <sup>2</sup>	1	1	0	9	4	15.00	
(fo-fe) <sup>2</sup> / fe	0.2	0.2	0	1.8	0.8	3.00	

Table value at 0.05 = 9.5 df = 4 \*Significant.

The result of Table 5 is indicated by the approximate value of  $\chi^2$  being 3.00 lower than the value of Table 9.5. The respondents therefore acknowledged the above argument that they provide incentives for individual and community learning in order to facilitate depth of understanding of content.

**Table 6.** Accommodate Individual and Subgroup differences (e.g. Through Individual Conferencing, Student and Teacher Choice in Material Selection and Task Assignment.)

	SA	A	UID	DA	SDA	TOTAL	$\sum(\text{fo-fe})^2 / \text{fe}$
fo	8	7	5	3	2	25	
%age	32.00	28.00	20.00	12.00	8.00	100.00	
fe	5.00	5.00	5.00	5.00	5.00	25.00	
fo-fe	3.00	2.00	0.00	-2.00	-3.00	0.00	5.20
(fo-fe) <sup>2</sup>	9.00	4.00	0.00	4.00	9.00	26.00	
(fo-fe) <sup>2</sup> / fe	1.80	0.80	0.00	0.80	1.80	5.20	

Table value at 0.05 = 9.5 df = 4 \*Significant.

Look at Table 6 shows that the value of obtaining  $\chi^2$  data is lower than the 0.05 level table value. It tended to back up the statement above. Hence it is concluded that they had Accommodate individual and subgroup differences (e.g. through individual conferencing, student and teacher choice in material selection and task assignment.)

**Table 7.** Allow Students to Discover Key Ideas Individually through Structured Activities and or Questions

	SA	A	UID	DA	SDA	TOTAL	$\sum(\text{fo-fe})^2 / \text{fe}$
fo	5	9	4	4	3	25	
%age	20.00	36.00	16.00	16.00	12.00	100.00	
fe	5.00	5.00	5.00	5.00	5.00	25.00	
fo-fe	0.00	4.00	-1.00	-1.00	-2.00	0.00	4.40
(fo-fe) <sup>2</sup>	0.00	16.00	1.00	1.00	4.00	22.00	
(fo-fe) <sup>2</sup> / fe	0.00	3.20	0.20	0.20	0.80	4.40	

Table value at 0.05 = 9.5 df = 4 \*Significant.

Table 7 indicates that the result is meaningful, since the approximate value of  $\chi^2$  is 4.40, which is less than the 9.5 table value. The respondents therefore acknowledged the above assertion that they required a refresher course at secondary level to teach the existing science syllabus.

**Table 8.** Encourage Multiple Interpretation of Events and Situation

	SA	A	UID	DA	SDA	TOTAL	$\sum(\text{fo-fe})^2 / \text{fe}$
fo	4	5	5	8	3	25	
%age	16.00	20.00	20.00	32.00	12.00	100.00	
fe	5.00	5.00	5.00	5.00	5.00	25.00	
fo-fe	-1.00	0.00	0.00	3.00	-2.00	0.00	2.80
(fo-fe) <sup>2</sup>	1.00	0.00	0.00	9.00	4.00	14.00	
(fo-fe) <sup>2</sup> / fe	0.20	0.00	0.00	1.80	0.80	2.80	

Table value at 0.05 = 9.5 df = 4 \*Significant.

Table 8 shows that the result is significant since the calculated value of  $\chi^2$  is 2.80, which is lower than table 9.5. The respondents therefore appeared to agree with the above assertion that they supported different interpretations of events and circumstances

**Section B: Questionnaire for Students**

**Table 9.** Make Choices that Contribute to my Success in Classroom.

	SA	A	UID	DA	SDA	TOTAL	$\sum(\text{fo-fe})^2 / \text{fe}$
fo	9	10	8	17	6	50	
%age	18.00	20.00	16.00	34.00	12.00	100.00	7.00

fe	10.00	10.00	10.00	10.00	10.00	50.00	
fo-fe	-1.00	0.00	-2.00	7.00	-4.00	0.00	
(fo-fe) <sup>2</sup>	1.00	0.00	4.00	49.00	16.00	70.00	
(fo-fe) <sup>2</sup> / fe	0.10	0.00	0.40	4.90	1.60	7.00	

Table value at 0.05 = 9.5 df = 4 \*Significant.

Result is meaningful in table 9, because the calculated value of  $\chi^2$  is 7.00, lower than the value of the 9.5 table. The respondents therefore tended to agree that they are taking choices which contribute to my classroom success.

**Table 10.** My Teachers don't give me Choices about what I am Supposed to learn.

	SA	A	UD	DA	SDA	TOTAL	$\Sigma(\text{fo-fe})^2 / \text{fe}$
fo	7	11	8	16	8	50	
%age	14.00	22.00	16.00	32.00	16.00	100.00	
fe	10.00	10.00	10.00	10.00	10.00	50.00	
fo-fe	-3.00	1.00	-2.00	6.00	-2.00	0.00	5.40
(fo-fe) <sup>2</sup>	9.00	1.00	4.00	36.00	4.00	54.00	
(fo-fe) <sup>2</sup> / fe	0.90	0.10	0.40	3.60	0.40	5.40	

Table value at 0.05 = 9.5 df = 4 \*Significant.

The result is seen in Table 10, as the value of the  $\chi^2$  measured is 5.40, less than the value of table 9.5. The interviewees therefore appeared to agree with what I have to say, namely that my teachers do not give me any options.

**Table 11.** I have the Support in the Classroom that I Need to be Successful.

	SA	A	UD	DA	SDA	TOTAL	$\Sigma(\text{fo-fe})^2 / \text{fe}$
fo	17	14	8	7	4	50	
%age	34.00	28.00	16.00	14.00	8.00	100.00	
fe	10.00	10.00	10.00	10.00	10.00	50.00	11.40
fo-fe	7.00	4.00	-2.00	-3.00	-6.00	0.00	
(fo-fe) <sup>2</sup>	49.00	16.00	4.00	9.00	36.00	114.00	
(fo-fe) <sup>2</sup> / fe	4.90	1.60	0.40	0.90	3.60	11.40	

Table value at 0.05 = 9.5 df = 4 \*\*N-Significant

Table 11 results do not apply since the estimated value of  $\chi^2$  is 11.40, which is greater than the value of Table 9.5. The respondents therefore did not agree with the aforementioned statement which does not have the support to be successful in the classroom.

**Table 12.** I Understand what we do in Classroom.

	SA	A	UD	DA	SDA	TOTAL	$\Sigma(\text{fo-fe})^2 / \text{fe}$
fo	12	10	6	17	5	50	
%age	24.00	20.00	12.00	34.00	10.00	100.00	
fe	10.00	10.00	10.00	10.00	10.00	50.00	
fo-fe	2.00	0.00	-4.00	7.00	-5.00	0.00	9.40
(fo-fe) <sup>2</sup>	4.00	0.00	16.00	49.00	25.00	94.00	
(fo-fe) <sup>2</sup> / fe	0.40	0.00	1.60	4.90	2.50	9.40	

Table value at 0.05 = 9.5 df = 4 \*Significant.

Table 12 reveals that the result is not significant since it is 9.40, which is lower than the value of table 9.5. This reveals the teacher's consensus on the comprehension of what we do in class.

**Table 13.** What I learn in Classroom Reflects me and my World.

	SA	A	UD	DA	SDA	TOTAL	$\Sigma(\text{fo-fe})^2 / \text{fe}$
fo	21	12	5	8	4	50	
%age	42.00	24.00	10.00	16.00	8.00	100.00	
fe	10.00	10.00	10.00	10.00	10.00	50.00	
fo-fe	11.00	2.00	-5.00	-2.00	-6.00	0.00	19.00
(fo-fe) <sup>2</sup>	121.00	4.00	25.00	4.00	36.00	190.00	
(fo-fe) <sup>2</sup> / fe	12.10	0.40	2.50	0.40	3.60	19.00	

Table value at 0.05 = 9.5 df = 4 \*\*N-Significant

Table 13 indicates that the result is Non-significant because the estimated value of  $\chi^2$  is 19.00, which is higher than table 9.5. The respondents therefore appeared to disagree with the assertion above that they had not learned to represent me and my environment in the classroom.

**Table 14.** The Work at University Complements my Ability.

	SA	A	UD	DA	SDA	TOTAL	$\Sigma(\text{fo-fe})^2 / \text{fe}$
fo	7	10	11	16	6	50	
%age	14.00	20.00	22.00	32.00	12.00	100.00	
fe	10.00	10.00	10.00	10.00	10.00	50.00	
fo-fe	-3.00	0.00	1.00	6.00	-4.00	0.00	6.20
(fo-fe) <sup>2</sup>	9.00	0.00	1.00	36.00	16.00	62.00	
(fo-fe) <sup>2</sup> / fe	0.90	0.00	0.10	3.60	1.60	6.20	

Table value at 0.05 = 9.5 df = 4 \*Significant.

Table 14 shows that the result is significant because the estimated value of  $\chi^2$  is 6.20, which is lower than table 9.5. Consequently, the respondents tended to agree with the above statement that they had my performance complementing the university work.

## Discussion

In this section the results of this study are discussed with the support of the preceding studies where the preceding studies are not only reviewed but modified as well. Since this study shows some positive results, why more higher education teachers disagree, is the next place to be discussed. Research indicates that pre-paring teachers for a range of academic classrooms are short of teacher education programs (Tomlinson and Callahan 1997). Research points have shown that pre-serve teachers rarely have separate teaching in their teaching systems, and usually have one class on a variety of subjects without any guidance. It was noted that pre-service teachers were never encouraged to distinguish between educators, university superiors and teachers.

The public university is the other side of the issue. You do need to carry on the teacher preparation duties. They will help to train the teachers by providing distinguished guidance and time to discuss the method according to the resources. The university Higher Education can offer training on the strategies like compacting curricula and learning centers. Higher Education should teach specific information about distinguishing higher education. Students need site visits to university and classes of the students, as well as assistance with on-going assessments. Teachers need to learn about differentiated teaching processes to know that it is not important to distinguish all or even each part of a lesson.



## Findings

Following were the main findings.

The findings of the study about differentiated instruction can be discussed under two major headings.

### Findings from Teacher Questionnaire

The results extracted from the teacher questionnaire are below.

1. Most of the teachers unconsciously make use of differentiated instructional strategies.
2. The teachers make great care of individual differences during their teaching process.
3. The teachers provide opportunities to the students for group and independent learning for the in depth understanding of the contents.
4. The teachers use varied teaching methods and empower students to evaluate circumstances, incidents and issues.
5. Students are encouraged to compare and contrast thoughts, events and concepts.
6. Teachers give students the ability to create and refine their ideas.

### Findings from Student Survey

Following are the findings extracted from students' survey

1. Learning in the classroom adds to student success.
2. Students are given freedom of choices in their learning.
3. They are engaged in collaborative learning environment.
4. They are engaged in challenging tasks.
5. They are not given freedom to make choices about their assignments.
6. They are made responsible not only for their own growth but also for the growth of their class fellows.
7. Student studies indicate that differentiated teaching approaches have a significant effect on learning for students.

## Conclusions

The following key conclusions were drawn from the analysis of the data and findings of the study:

### Conclusions from Teacher Questionnaire

Following are the conclusions extracted from teacher questionnaire

1. Majority teachers implicitly make use of differentiated teaching techniques.
2. Most of the teachers can make a great care of individual differences during their teaching process.
3. Most of the teachers provide opportunities to students for group and independent learning for the in depth understanding of the contents.
4. Some teachers are conducting differentiated preparation and empower students to judge, evaluate circumstances, incidents and problems.
5. Most teachers involve students with thoughts, incidents and principles comparing and contrasting.
6. Most teachers offer students the opportunity to develop and develop their ideas.

### Conclusions from Student Survey

Following are the conclusions extracted from student survey

1. Most of the respondents viewed that Learning in the classroom adds to student success.
2. Majority of students are given freedom of choices in their learning.
3. Majority of respondents showed that they are engaged in collaborative learning environment.
4. Majority of the students are engaged in challenging tasks.
5. Most of the respondents viewed that they are not given freedom to make choices about their assignments.

6. Most of the respondents viewed that they are made responsible not only for their own growth but also for the growth of their class fellows.
7. It can be concluded from students' survey that the differentiated instruction strategies have a great influence on the students learning.

### **Recommendations**

Based on the study 's conclusions, recommendations are made following:

1. The findings of the study also showed that teachers used various instructional methods, such as grade lessons, literature circles and compaction of curricula. One suggested study would be to examine different educational strategies used by teachers in addition to teacher interviews by observing and examining lesson plans.
2. Furthermore, the findings show that the new teachers have been guided by their professional development to promote differentiated teaching over three years. The course management started, then evaluation and finally differentiated instruction.

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