

Impact of Differentiated Instruction Strategies and Traditional-Based Instruction on the Reading Comprehension of Iranian EFL Students

Mohammad Aliakbari¹ & Jaber Khaled Haghghi²

¹Corresponding author, Ilam University, maliakbari@hotmail.com

²Ilam University, jaber.haghghi@gmail.com

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Abstract

This study investigates and compares the efficacy of differentiated instruction and traditional-based instruction on enhancing Iranian students' reading comprehension. Eight elementary, intermediate, and advanced classrooms from 1 language institute were chosen, and based on their performance on the pretests were further divided into 4 control and 4 treatment groups. Flexible grouping, tiered instruction, and tiered assignment strategies were adopted to differentiate the content, process, and product in the treatment groups. Results of the final achievement tests revealed that implementing differentiated instruction was effective in fostering the participants' reading comprehension in the elementary and intermediate classrooms, but no meaningful difference was found in the final performance of the advanced level classrooms.

Keywords: Differentiated Instruction; Reading Comprehension; Flexible Grouping; Tiered Instruction

1. Introduction

Kent (2005) referred to reading comprehension as a major skill in students' knowledge achievement. Hall and Piazza (2008) also maintained that students' ability to read well and development of this ability are of critical importance because it tremendously affects students' achievement at all proficiency levels. However, traditional teachers are, most of the time, confronted with problems when teaching to a heterogeneous group of learners and in addressing the diversity of individual students (Tomlinson, 2002). This is why Gregory and Chapman (2002) posited that if improving students' reading ability is the ultimate aim of teaching reading, teachers must implement instruction in such a way that they fulfill the academic needs of individual learners.

Today, in many countries, including but not limited to Brazil, Korea, Iran, Japan, and so forth, the students learn English as a foreign language (EFL), where English is neither broadly used for communication, nor used as the medium of

instruction; rather, the students learn English at educational settings, including public or private schools, universities, and private language institutes. Reading comprehension, as a literacy skill, is of critical importance in students' gaining knowledge in EFL countries. It enables them to read newspapers, books, journals, magazines, and so on. Thus, implementing satisfying and gratifying techniques and procedures in teaching reading in EFL situations may considerably help students promote their knowledge.

A recent popular approach of instruction intended at meeting the pedagogical needs of students is *differentiated instruction* (Gregory & Chapman, 2002; Heacox, 2002; Levy, 2008; Nunley, 2006; Tomlinson, 1999, 2001). Benjamin (2002) defined differentiation as "a variety of classroom practices that accommodate differences in student's learning styles, interests, prior knowledge, socialization needs, and comfort zone" (p. 1). Tomlinson (2003) also considered differentiation as "systematic approach to planning curriculum and interaction" for diverse students (p. 3).

Content, process, product, and learning environment are the areas through which differentiation can be incorporated (Tomlinson, 1999). Content is what the teachers should represent. Through differentiating the content, teachers adapt the ways and means of developing and implementing the curriculum (Benjamin, 2006; Knowles, 2009; Tomlinson, 1999). In differentiated instruction, the same content is taught to all of the students; however, it may be quantitatively or qualitatively varied (Levy, 2008). Another realm to differentiate is the process. Tomlinson and Allan (2000) describe it as "how the learner comes to make sense of, understand, and own the key facts, concepts, generalizations and skills of the subject" (p. 8). To differentiate the process, teachers should expand choices in expressing the content. In so doing, teachers can assign various homework or class activities to the learners in order for them to grasp the required information, ideas, and skills.

Product is the third area to incorporate differentiation. It is the way through which the students show what they have learned (Levy, 2008; Tomlinson, 1999). Differentiation of the products includes providing students with various ways and techniques so that they show their knowledge. There are different techniques to do so including, but not limited to, creating posters, doing assignments, and preparing albums. Learning environment can also be differentiated by providing convenient places in the classroom that fosters students' collaboration, and places that help students move inside and outside the classrooms and within groups (Tomlinson, 1999). The first and foremost goal of the current study was to practically implement differentiated instruction in the areas of content, process, and product, so as to evaluate its effectiveness in the promotion of EFL students' reading comprehension.

Second, the study intended to investigate the teachers' and students' attitudes toward differentiated instruction.

2. Literature Review

A major part of the previous studies adopted differentiated instruction in L1 (English as first language) situations; however, only a small number of studies sought the efficacy of differentiation in EFL or L2 contexts. Talented, gifted, struggling, and disabled learners have been the subjects of many studies concerning differentiated instruction (e.g., Arens, 2006; Barbaum 2009; Hendricks, 2008; Porcher, 2007; Rock, Gregg, Ellis, & Gable, 2008; Schumm, Moody, & Vaughn 2000; Steinmeyer, 2011; Tobin & McInnis, 2008). Davalos and Graffin (1999) reported that implementing differentiation based on the students' needs has little or no impact on the curriculum, nor on the instruction of the gifted learners.

A plethora of studies have been practically performed by researchers to figure out the efficacy of differentiated instruction in the classrooms of typical learners in L1 situations (e.g., Anderson & Algozzine, 2007; Cusumano & Mueller, 2007; Hawkins, 2007; Parsons, 2003; Saenz & Funch, 2005; Tieso, 2005). Gentry (1999), in a longitudinal quasi-experimental study, found that differentiated instruction was not effective in promoting 3rd grade students' attainment; however, considerable progresses were found in the 4th and 5th grade classrooms.

Thornton (2011) found differentiated instruction effective in improving struggling adolescents' reading comprehension. The participants were four 10th grade students of reading comprehension, whose achievement were investigated before and after implementing differentiated instruction. The findings showed a significant difference between the students' scores on the standardized tests before and after implementing differentiated instruction. To realize the beneficial strategies of differentiation, the students were asked to describe the strategies that contributed to their preparing for assessments. Thornton (2011) referred to flexible grouping, peer tutoring, anchor activities as well as scaffolding and modeling as the best practices of differentiation in classrooms of struggling students. McCullough (2011) considered differentiated instruction effective and constructive in fostering the struggling students' gained knowledge in the realm of vocabulary and reading comprehension.

Using a quantitative pretest-posttest control group, Eastman (2010) examined the efficacy of utilizing learning style preferences on 1st grade students' reading achievement by arranging them into groups based upon their dominant learning style. The upshots of the study led the researcher to conclude that "grouping children by learning preference for reading instruction may be an effective form of differentiation for small group reading instruction" (p. 3). Cummings (2011) found

out that there is no difference between the students' achievement when leveled instruction or traditional-based implementation is exercised. Furthermore, the researcher identified no difference between the male and female students' achievement when differentiation was incorporated.

Alavinia and Farhady (2012), in a quasi-experimental study, attempted to implement differentiated instruction to see the usefulness of this approach on the vocabulary achievement of Iranian female EFL learners. The learners in the experimental group received instruction based on their dominant intelligence and learning styles, and those in the control group received no differentiation. The posttest results indicated that the students in the experimental group outperformed those in the control group. The researchers further reported that the spatial learners achieved the highest mean score, and the intrapersonal learners gained the lowest mean score on the posttest. In an unpublished master's thesis, Khales Haghighi (2012) supported the effectiveness of differentiated instruction in enhancing the Iranian learners' reading comprehension.

Another call for the previous studies has been exploring the administrators', instructors', and students' evaluation of differentiated instruction (e.g., Moody & Vaughn, 1997; Schlag, 2006; Smith, 2011). Adopting a differentiated approach, Dunn and De Bello (1999) discovered that attitude toward learning improves when implementation is matched with the students' learning style. Chen (2007) sought college students' perspective toward differentiated assessment in the EFL situation in Taiwan. The researcher collected data through observations, interviews, videotaping, and artifacts. The participants showed positive attitudes toward the leveled assessment strategy. Moreover, they expressed heightened motivation, increased efforts, promotion of English skills, and greater confidence as a result of tiered assessment. Waller (2011) explored the attitudes of educated placement teachers towards differentiated instruction. Through a qualitative study, the researcher aimed at investigating how the teachers used differentiated instruction, what facets of differentiated instruction they found effective, and how it might respond to the diversity of the students. The data were gathered using in-depth interviews, follow-up interviews, and classroom observations. Incorporating differentiation in the process and product, based on the students' interest, ability, and readiness, was found to be beneficial. However, the time needed to get prepared for differentiation was noted as a difficulty in implementing the approach.

Hickerson (2012) investigated the relationship between differentiating reading homework and students' motivation/interest/attitude toward homework. After implementing two surveys to assess the students' motivation/interest/attitude toward a traditional and a differentiated homework group, the researcher found no difference between the two groups' attitude toward homework, but a remarkable

difference was noticed between the students' interest in reading and motivation to read.

Following the findings and the issues discussed in the literature, it is hoped that the upshots of the present investigation also add to the body of knowledge by providing information about the efficacy of differentiation in the elementary, intermediate, and advanced levels EFL classrooms in the realm of reading comprehension in the Iranian contexts. Furthermore, teachers' and students' views on differentiated instruction can provide invaluable educational and practical information.

The Iranian English language teachers, teaching in private language institutes or in public schools, often encounter students with diverse background knowledge, educational needs, interests, learning styles, and (non)academic problems in one single classroom. The English classes include overachieved and underachieved learners, and students with different models attend to gain knowledge. Yet, no matter what model is adopted to deliver instructions, the teachers can only fulfill the needs of some of the students, but not all. This heterogeneity of students and the critical need for training accomplished students reflect the needs to be responsive to their diverse educational needs. Acknowledging differentiated instruction wherein students' diverse needs, learning styles, and prior knowledge are taken into consideration, we decided to employ the strategies of differentiated instruction including flexible grouping, tiered activities, and anchor activities through differentiating the content, process, and product to investigate if considering the students diversity into account, in the Iranian contexts, is effective in promoting their comprehension. Thus, to pursue the aim of the study, the following research questions were set forth:

1. Does implementing differentiated instruction strategies and traditional strategies lead to differences in the reading comprehension of Iranian EFL students at elementary, intermediate, and advanced levels?
2. How do teachers and students in the treatment groups evaluate the experience of differentiated instruction?

3. Method

3.1 Design

Because the study embodied two succeeding phases, two research designs were adopted. For the first part of the study, a quasi-experimental, pretest and posttest method was employed; for the second part, an open-ended questionnaire was distributed among the students and teachers of the treatment groups. Stated otherwise, the first phase was conducted using a quantitative approach, and the second phase was implemented in a qualitative approach. Needless to say, more

emphasis was placed upon the quantitative part, and a lower weight was dedicated to the qualitative investigation. Johnson and Christensen (2004, as cited in Dornyei, 2007) presented [QUAN → qual] schematic representation of the design, sequence, and the procedure of the study for a similar purpose, where the priority and the increased weight of the quantitative part are shown by capital letters (an arrow shows the sequence), followed by the lower weighted (shown by lower case) qualitative research (p. 163).

3.2 Participants

The participants included 75 adolescent and young students, ranging from 10 to 23 years old, who studied English at a private language institute viz. Alpha Institute in Ilam, Iran. They were selected based on convenience sampling. The students of the all levels took part in the pretests and, based on the achieved scores, they were assigned into control and treatment groups. Thirty-nine students (20 female and 19 male learners) constituted the treatment group, to whom the strategies of differentiated instruction were taught. Moreover, 36 students constituted the control group including 18 female and 18 male students who received traditional-based instruction (i.e., the techniques of the grammar translation method [GTM] and the audiolingual method [ALM]). It should be added that there were four classes in the treatment group and four classes in the control group, including two elementary, one intermediate, and one advanced levels students in each group. Table 1 summarizes the distribution of the students in different proficiency levels:

Table 1. *The Number and Distribution of Students in Each Level*

	Level 4	Level 5	Level 7	Level 11	Total
Treatment group	10	12	10	7	39
Control group	10	10	8	8	36
Total number of students	20	22	18	15	75

Furthermore, four competent teachers, including two male and two female, ranging from 27 to 38 years of age, participated in the study. The skilled and qualified teachers had an M.A. degree in TEFL, with 7 to 13 years of teaching experience in private language institutes.

3.3 Instrument

Four language proficiency and four reading comprehension tests were utilized as the instruments. The students of all the classes, at different levels, participated in the pretests as well as in the final reading comprehension tests. The

goal of the pretests was to divide the students into homogeneous groups, and the aim of the summative exams was to investigate the achievement of the students in the control and treatment groups. The proficiency teachers-made tests included true/false, matching, open-ended, and multiple-choice questions, and comprised of vocabulary, grammar, and reading comprehension questions. The final reading comprehension tests also included multiple-choice, true/false, matching, open-ended, and reading comprehension questions. The time for completing each test was 90 min.

Before using the tests and to determine the reliability of the pretests and posttests, the tests were piloted and analyzed through threshold-loss agreement methods. To use these methods, two administrations of the same tests, with the time intervention of two weeks, were adopted and analyzed by the formula presented by Brown (1996). The following table presents the agreement coefficient (ρ) and the kappa coefficient (κ) for the reliability of each test:

Table 2. *The Calculation of ρ and κ of the Reliability of the Pre and Posttests*

	Tests	ρ	κ
Level 4	Pretest	.80	.66
	Posttest	.89	.62
Level 5	Pretest	.79	.59
	Posttest	.82	.62
Level 7	Pretest	.85	.69
	Posttest	.89	.67
Level 11	Pretest	.90	.71
	Posttest	.86	.68

Kappa lies on a scale of -1, to 1. Kappa = 1 denotes complete agreement; 0 indicates agreement by chance; and -1 indicates less than chance agreement. It is added that $0.61 < \kappa < 0.80$ denotes substantial agreement, and $0.81 < \kappa < 0.99$ reveals almost perfect agreement. Therefore, the calculated κ 's for the tests adopted denote an acceptable level of reliability. The validity of the exams was determined by experts' judgment. The experts were asked to express their ideas about the relatedness of the content and the clearness/the preciseness of the items. After implementing the changes needed, the experts were again asked for their opinion. Finally, there was unanimity among the experts that the tests had a high level of validity to seek the information needed.

3.4 Materials

The main course book was *Interchange* (Richards, Hall, & Proctor, 2005) including *Interchange 1*, *Interchange 2*, and *Interchange 3*. Besides, the book *Steps to Understanding* (Hill, 1980), short stories, electronic sources, and newspapers, including *Iran Daily*, *Tehran Times*, *The Guardian*, and *The New York Times*, were used as complementary materials.

3.5 Procedure

The study was conducted over 3 months from April to June 2012. It was carried out in three sessions a week with the total number of 21 sessions for each class. Firstly, the researchers obtained the consent of the institute's manager to conduct the quasi-experimental study. After that, teacher training courses were held to familiarize the teachers with differentiated instruction and training them to implement the strategies. To capture the initial performance and to make sure that the control and treatment groups in each grade were homogeneous, the pretests were held and, based on the achieved scores, the students were divided into the control and treatment groups. Besides, *t* tests were computed to prove the groups' homogeneity.

Acknowledging and realizing the students' learning styles, holding on-going assessments, and creating learning profiles are three major components of differentiated instruction. Accordingly, the teachers of the treatment groups carefully analyzed the students' academic strengths and weaknesses, using the outcomes of the pretest. Then, having utilized a learning style inventory (Kolb, 1985) and in a cross-sectional survey questionnaire, the differentiated teachers captured the dominant learning styles of the individual learners. Finally, a learning profile was created per student, wherein the information of both tests was referred to in detail.

According to the learning profiles, the teachers of the treatment groups delivered instructions through the major strategies of differentiated instruction viz. flexible grouping, tiered instruction, and on-going assessment in the content, process, and product areas. The teachers in the control groups also delivered instructions through traditional methods of teaching including the methods and strategies of GTM and ALM.

The chief strategies of differentiated instruction are flexible grouping and tiered instruction. After exercising whole class instruction, to implement flexible grouping, the students were arranged into one to five learners groups to receive instruction and materials according to their learning profiles. To tier activities and assignments, texts with different complexity levels were worked out in small flexible groups. On the other hand, the control groups received merely whole class

implementation; however, lots of questions were asked during the class sessions to contribute the learners in comprehending the lessons.

As was noted earlier, differentiation can be implemented through content, process, and product. The first two chapters of the book *Steps to Understanding* (Hill, 1980) and two short stories were practiced as the complementary materials in the elementary classes of the treatment groups. Chapters 2 and 3 of the same book were practiced in the intermediate classrooms, and chapters 3 and 4 were determined as the complementary materials in the advanced level classrooms. Besides, four newspapers, including *Iran Daily* and *Tehran Times*, as well as online versions of the original newspapers *The New York Times* and *The Guardian* were adopted in the advanced classes. The reason for choosing the first two newspapers was that they are less complicated and easier to understand. However, the last two newspapers were more difficult in vocabulary and structure. According to the students' learning profiles, they received various texts. One student might have studied less complicated material, whereas another student could have received more complex material. Furthermore, the students were allowed to choose their interested texts in different books, magazines, and newspapers. The purpose of presenting these various materials was to tier activities. To meet the students' needs and interests, the students of the treatment groups were allowed to choose from among the presented materials in each session. The same chapters of the books were practiced in the control groups; however, all the students of a class studied and worked on the same texts in each session.

To differentiate the product in the differentiated classrooms, the students were to present what they learned and understood based on their interests and preferences in a variety of ways. The students of the elementary and intermediate classes were to design brochures, posters, and albums. The advanced level students were to prepare advertisements, brochure, and albums as the product. The elementary and the intermediate students who received traditional instruction also prepared posters as the assignments, and the advanced level students of this group were to prepare brochures as the assignment. At the end of the semester, in order to determine the efficacy of instructions, the summative tests were administered in all of the classes. Some days after the final exam, the students and the teachers of the treatment group were asked to express their ideas about the new strategies in an open-ended questionnaire.

3.6 Data Analysis

To answer the first research question, the results of the final tests were analyzed using independent samples *t* test. To find answers for the second research question, a portion of the collected data from open-ended questionnaires was gathered and was carefully transcribed and reviewed by the researchers. Lists of the

collected viewpoints from the students and teachers were prepared and categorized into different groups. The transcriptions were, then, given to some experts for analysis, the aim of which was to make sure of the homogeneity of the findings. The final results were compiled and compared in one discussion session; the agreed answers were considered valid for the second research question.

4. Results

Tables 3 and 4 present and compare the mean and the standard deviation of the students' achieved scores in the exams in the treatment and control groups:

Table 3. *Mean and Standard Deviation of the Scores on the Pre and Posttests*

		Pretest		Posttest		Effect Size (Cohens' d)
		Mean	SD	Mean	SD	
Grade 4	Treatment	40.20	4.709	44.40	2.951	1.11
	Control	41.10	4.557	40.40	4.142	
Grade 5	Treatment	42.33	4.030	44.92	2.746	1.38
	Control	41.50	3.779	40.40	3.718	
Grade 7	Treatment	41.70	3.974	45.20	3.120	1.14
	Control	42.50	3.251	41.63	3.114	
Grade 11	Treatment	39.00	3.742	40.29	3.773	0.27
	Control	39.25	3.495	39.38	2.825	

Table 4. *Inferential Statistics of Results of the Pre and Posttest*

		Pretest		Posttest	
		F	df	Sig. (2-tailed)	Std. Error Difference
Grade 4	Pretest	.089	18	.669	2.072
	Posttest	.981	18	.024	1.608
Grade 5	Pretest	.001	20	.623	1.668
	Posttest	.729	20	.006	1.418
Grade 7	Pretest	.989	16	.645	1.703
	Posttest	.043	16	.029	1.478
Grade 11	Pretest	.007	13	.896	1.878
	Posttest	.625	13	.611	1.741

5. Discussion

Two classes (i.e., grade 4 and grade 5) were selected to probe the usefulness of the strategies in the elementary level. As indicated in Table 3, the average score of the treatment group in grade 4 on the pretest is 40.20, and the mean score of the control group is 41.10. The inferential statistics of the students' performance on the pretest shows $Sig. = .669$, thus indicating that the groups were nearly homogeneous in the commencement of the study. After implementing the treatments, the posttests were held to figure out the students' reading comprehension. As indicated in Table 3, the mean score (44.40) of the students who received differentiated instruction is higher than those (40.40) who received traditional strategies of instruction. To check if the difference was meaningful, the statistical analysis of independent samples t test was utilized. The significant level p computed in Table 3 ($Sig. = .024$) indicated that the null hypothesis is rejected. Consequently, it could be argued that delivering reading instruction through differentiation was considerably effective in enhancing the students' reading comprehension in grade 4.

A thought-provoking point in the findings of the pre and posttest results in grade 4 is related to the standard deviation. The standard deviation of the scores in the treatment group is 4.709 on the pretest that reduces to 2.951 on the posttest, whereas the same statistics for the control group is 4.557 on the pretest and 4.142 on the posttest. Comparing the statistics, Table 3 exhibits a significant decrease in the diversity of the treatment group; however, no change is reflected in the other group. Thus, it can be concluded that implementing differentiated instruction reduced the diversity of the students.

Moreover, effect sizes were calculated to get information about the magnitude of the provided information. To do so, the Cohen's d formula, which can be used to figure out the differences between the means of two groups, was adopted. Cohen (1988) maintained that a value of .2 is generally considered a small effect size, .5 a medium, and .8 or more a large effect size. So, the effect size of 1.11 presented in Table 3 yields a high level of effect size. Put differently, it suggests that implementing differentiation was considerably effective in the promotion of the the students' reading comprehension.

Grade 5 classrooms were also selected to investigate the effectiveness of instruction in the elementary level. As shown in Table 3, the pretest mean score of the students in the treatment group is 42.33, and the mean score of the control group is 41.50. The significant level computed in Table 4 ($Sig. = .623$) verifies the homogeneity of the students in both groups in level 5 before launching the study. After the study was finished, all the students of grade 5 took a final reading comprehension test. It is clearly shown in Table 3 that the students of the treatment

group obtained higher average scores (44.92), compared with those in the control group (40.40).

However, to explore if the difference between the average score of the two groups on the posttest is statistically significant, the *t*-test procedure was run. Considering *Sig.* = .006 at $p < .05$ in Table 4, it is evident that the null hypothesis is rejected. Thus, it is right to say that the difference between the students' performance in the posttest was statistically meaningful. All in all, the findings demonstrated that utilizing the strategies of differentiated instruction was considerably beneficial in fostering the students' reading attainment in grade 5.

As demonstrated in Table 3, the treatment group's standard deviation in the pretest equals 4.03, which is reduced to 2.746 on the posttest, whereas the standard deviation of the pretest scores in the control group is 3.779 and is changed to 3.718 on the posttest. A considerable difference is found in the differentiated classroom; however, almost no change is reflected in the traditional-based classroom. The findings as to grade 5 classes are in line with those of grade 4 classes; they also seem to justify that delivering reading instruction through differentiated instruction directed the students of the same class toward homogeneity. The calculated effect size for this group is 1.38 that is a large effective size; accordingly, adopting differentiation was highly effective in promoting the students' performance in reading comprehension.

To find the efficacy of differentiated instruction in the intermediate classroom, two classes of grade 7 were selected. Table 3 shows that the average score of the treatment group in the pretest is 41.70, and that of the control group equals 42.50. The *Sig.* = .645 reported in Table 4 reveals that there were no significant differences in their initial performance, so indicating that the groups were homogeneous. It is also crystallized in Table 3 that the posttest scores of the treatment group elevated to 45.20, whereas the instruction to the control group failed to boost the scores in that the final average score is 41.63.

To see whether the difference between the mean scores was significant, the inferential statistics of *t* test was adopted. Taking *Sig.* = .029 into account (see Table 4), the null hypothesis is rejected. It is concluded that exercising differentiated instruction advanced the students' attainment in reading comprehension in level 7.

The standard deviation of the scores in the control group is 3.25 on the pretest and 3.11 on the posttest. The standard deviation of the scores in the treatment group is 3.97 on the pretest and 3.12 on the posttest. No considerable difference was found between the standard deviations of the control group and the treatment group on the posttest. The large effect size of 1.14 for this group denotes that the results were highly due to the adopted strategy.

To determine the effectiveness of either type of instruction in the advanced level, 15 students of grade 11 were selected and further divided into control and treatment groups. The treatment group generated a mean score of 39, and the control group achieved 39.25 as the average score on the pretest. Table 4 shows $Sig. = .896$; accordingly, the homogeneity of the students in the control and treatment groups is confirmed. It is shown in Table 3 that the scores of the students in the treatment group generated the average score of 40.29 on the posttest, and those in the control group got 39.38. To find out the meaningfulness of either strategy, t -test computation was adopted to analyze the posttests' scores. Based on $Sig. = .611$, we fail to reject the null hypothesis: Accordingly, no difference in the differentiated and the traditional classroom is found.

The standard deviation of the pretest scores in the control group is 3.49, and that of the treatment group is 3.74. The standard deviation of the former group on the posttest equals 2.81, and that of the latter is 3.77. It can be inferred from the findings that implementing differentiated and traditional-based instructions did not impact the students' reading comprehension differently. On the whole, it is concluded that neither the students' performance on reading comprehension, nor the homogeneity of the students was influenced by differentiation in grade 11. The calculated effect size for this grade was 0.27 which, according to Cohen (1988), is a small effect size. It denotes that the results might be due to something other than the adopted strategy.

To answer the second research question, the students and teachers of the treatment group were asked to express their attitude and evaluation of differentiated instruction. The teachers and administrators referred to flexible grouping as a very contributive and advantageous strategy of differentiation. They continued that it helped the students who were ashamed of speaking in the classroom by letting them ask questions and contact classmates to express the ideas for a limited number of peers—not for the whole class. Furthermore, they could match with the peers in the groups because they had the same interests or the same strengths and weaknesses.

The learners cited that the lessons were not beyond their level of understanding. Moreover, they noted that they liked to do the tasks; hence, they were chosen based on their interests, and they had the opportunity to choose their interested topic and task. The teachers and students concurred that preparing assignments, including creating posters, albums, advertisements and the like, established and maintained a lively and interesting atmosphere in the classroom. In addition, the lively atmosphere was created as a result of group-working and collaboration.

The teachers maintained that differentiation had a positive psychological impact on the students. They thought that the learners had the opportunity to choose

the complementary materials, based upon their interests, in a differentiated classroom which addressed and caught their desire. Besides, having the right to choose from among the provided materials boosted the students' confidence. Matching the materials with the students' dominant learning style or dominant intelligence considerably strengthened the students' motivation and willingness to learn.

It is worth noticing that differentiation is a strategy of the teachers, rather than the students, to manage and direct the students. Employing different techniques and procedures of differentiation does not lead to satisfying and pleasing outcomes per se. Thus, Tomlinson and Allan (2000) posited that "instructional strategies are tools of the teachers' art. Like all the tools, they can be used artfully or clumsily, appropriately or inappropriately, "the person who uses them determines their worth" (p. 11). The teachers also maintained that a differentiated teacher should be conversant and experienced in the curriculum, assiduous, and wary of the students' true levels, as well as be able to find and practice the appropriate materials below and above the related curriculum.

The first and the most decisive step in successfully implementing the strategy is to introducing various materials to the students of the same class. One of the difficulties of implementing the leveled strategy was finding and introducing complementary materials according to the students' readiness and interest. Besides, it was weird and confusing for the learners to practice tasks and read texts that were different from those of their classmates. To help them in dealing with the new situation, the teachers stated that they consulted the family members, explained the new way of teaching, and asked them to prepare the students for differentiation. The teachers continued that involving parents, explaining the aim and the techniques of the new strategy were time-consuming and, in some cases, boring and rigorous; however, it totally helped the teachers in positively changing the students' attitudes toward the new strategy.

Contrary to the findings of Thornton (2011), this study indicates that implementing differentiation is not effective in the promotion of the 10th grade students reading comprehension. This study is also in contradiction with those of Gentry (1999) and Parsons (2003) in which the researchers reported no significant improvement in the reading comprehension of the 3rd grade students; however, the findings of the current investigation indicate that implementing differentiation is highly beneficial in improving elementary students' reading comprehension. One interpretation that can be put on the contrary findings might be related to the setting where the studies took place. The previous studies were conducted in L1 settings, whereas the participants of the current study were EFL learners. The results of this

study are also in line with those of Anderson and Algozzine (2007), Cusumano and Mueller (2007), and Alavinia and Farhady (2012).

6. Conclusion

The analysis of the data revealed that implementing differentiated instruction had a noteworthy impact on the students' reading enhancement in grades 4, 5, and 7. In other words, differentiation significantly improved the students' performance in the elementary and intermediate levels. In contrast, no meaningful difference was found in the performance of the advanced level class in grade 11. Additionally, the upshots of the study revealed that implementing differentiation in the elementary level classes reduced the students' diversity; however, it did not change the students' heterogeneity in the intermediate and advanced level classes.

Because one of the major difficulties and obstacles of beginners is that they do not know how to read, learn, and complete assignments, implementing the strategies of differentiated instruction, like flexible grouping and tiered activities, contributes the elementary and the intermediate level students to walk in the path of accomplishment. On the other hand, as the advanced students have studied English for many years, they know how to do the tasks successfully. Another major inference which can be drawn from the findings is that differentiation shows the way of learning to elementary and intermediate level students and leads them towards progress, whereas advanced level students are already familiar with the procedures and methods of gaining knowledge, and they have already acquired the prerequisite skills needed to maximally benefit from the presented strategies and materials. Another justification that can be generated is that advanced level students can achieve knowledge through various ways, that is, they implement differentiation in learning.

An undeniable fact is that students in one classroom are not the same: They possess different interests, intelligences, attitudes, understandings, and skills. This diversity can be a great advantage for qualified teachers. By differentiating the content, process, and products, they can honor and make the benefit of the students' diversity so as to generate and actualize the students' potentiality. The findings revealed that various differentiation techniques and strategies, if implemented properly, can address the major educational needs of students and help lots of them in making progress, especially in elementary and intermediate levels.

One important consequence from the findings can be related to the influential role of the teachers. Because the students achieve a major body of their knowledge through teachers' instruction, it can be concluded that a teacher's role is more highlighted in low levels. After all, with regards to the students' potential differences, implementing differentiation seems inevitable for committed teachers.

This study chiefly discovered that implementing differentiated instruction can lead to superior reading comprehension. However, the students of the advanced level did not show significant enhancement on the posttest; the obvious merits they obtained through differentiation as such were team-working and collaboration. To do the tasks and assignments in groups, students have to share notes, knowledge, materials, and so on; thus, they learn how to work and learn as a team. Moreover, when grouping is implemented, lessons are taught and repeated to the whole class and small groups and are reviewed by peers, so very few points may remain vague for students.

6.1 Implications of the Study

The first implication that can be generated based on the findings of the study is related to the theoretical underpinnings of differentiated instruction. The outcomes questioned the claim that it is effective in the promotion of all students (Heacox, 2002; Tomlinson, 1999). Perhaps, the approach is grade-oriented. In other words, students' reading comprehension in advanced level may not be influenced by differentiated instruction in the same way as lower levels do.

Practical implications can also be drawn upon the upshots of this study. They will contribute greatly to the positive educational changes by helping educators and teachers understand the significance and importance of differentiated instruction in classes. Considering the outcomes of this study into account, traditional instruction should be faded and be replaced by more constructive approaches. Consequently, educators who are committed to promote the quality of teaching English and, consequently, to foster students' performance should be disposed and minded for an educational evolution to take place.

It can be understood from the final results of the current study that one fixed textbook cannot respond to the needs of all learners of the same proficiency level across the country. Thus, the authors should attempt at providing the appropriate tiered supplementary materials for all grades. Additionally, acknowledging students' diversity, the idea of one-standard-curriculum-responds-all should not be put forward in the educational system, and the teachers need to determine flexible curricula in order to address students' potential differences. This can be contributive and beneficial in promoting the quality of education and in meeting students' educational needs. We contend that major academic gains can be yielded through conducting systematic and purposeful assessments in order to monitor students' progress and to realize their strength and weaknesses. Teachers can make the benefit of performing and analyzing the areas of weakness and provide remediation services to those who are not making adequate progress.

Moreover, the insights of the study can be yielded to employ and implement worthwhile approaches and procedures of teaching reading to the Iranian students. In so doing, the administrators should motivate and inspire the teachers to implement differentiation of sterling quality to diverse groups of students in the classrooms. Planning upon the findings of this study, TEFL students should become familiar with different procedures and strategies of implementing differentiation. So, the Ministry of Education, the government body responsible for schools' education of Iran, and the Ministry of Science, Research, and Technology, which directly supervise the state-run universities and are responsible for determining the higher educational policies in Iran, should focus on training the differentiation to preservice and in-service teachers so as to deliver high-quality differentiated education. On the whole, the administrators, educators, and teachers, as a team, should attempt at employing advantageous approaches in teaching in order to foster the students' achievement.

6.2 Directions for Future Study

To offer evidence of the satisfaction and usefulness of differentiated instruction in the Iranian EFL classrooms, further research can replicate the current study to include a larger number of participants. By adding more students as well as teachers' remarks, more profitable insights could be found. The efficacy of differentiated instruction within public schools makes up another area of interest for further research. Thus, the present study could be repeated with teachers and students at elementary, junior, and senior public high schools by employing the same quantitative design.

Relevant to the findings of the study, the rationale behind the effectiveness of differentiation in the elementary and intermediate grades and the reason of not having meaningful outcomes in the advanced grade can be an avenue open for further studies. Longitudinally, studies can be conducted to consider the usefulness of differentiation in different levels in the future. The investigation of the usefulness of differentiated instruction in the areas of language skills other than reading, including listening, speaking, and writing is absent from the present-day literature. Therefore, performing future research in different grades would be beneficial to examine how differentiation would affect students' achievement in the four major English skills.

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