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EXAMINING THE IMPLICATIONS OF DIFFERENTIATED INSTRUCTION FOR HIGH SCHOOL STUDENTS' SELF-ACTUALIZATION

Afaf Aljaser

Institutional Association, Princess Nourah bint Abdelrahman University, Curricula and Instruction Department, Saudi Arabia.
Email: dr.afaf1@hotmail.com Tel: 00966503298700

(+ Corresponding author)

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ABSTRACT

Adopting differentiated teaching and learning strategies has proved effective in addressing students' diverse capabilities and potentials as well as developing their skills. This study examines the implications of differentiated instruction for self-actualization among high school students. For achieving this purpose, the quasi-experimental approach was adopted. The sample consisted of (58) high school students from Riyadh, Saudi Arabia. They were subdivided into an experimental group comprising (28) students taught in a differentiated classroom environment and a control one comprising (30) students taught in a traditional classroom environment. Two scales, a differentiated classroom environment scale and a self-actualization scale, were prepared and applied upon the participants. The results showed a high level of self-actualization among the experimental group students, indicating that differentiated instruction improved their self-actualization skills. Differentiated instruction provided students with an environment suitable to make them feel self-confident, establish positive relations with their classmates, and positively interact and cooperate with them. In the light of these results, the author recommends holding training courses and workshops to qualify teachers for designing and utilizing differentiated instruction.

Contribution/Originality: This study is one of very few studies, which have investigated the implications of differentiated instruction for self-actualization. It enriches the existing literature of learner-centered education since it aims at considering learners' individual differences and self-actualization skills. Studying the implication of differentiated instruction for self-actualization has a promising significance.

1. INTRODUCTION

Due to the diversity of students' learning needs and abilities, they are not equally interested in all the subjects of study nor are they consistently motivated by the same curricula. A skillful teacher takes into account such students' differences in their educational planning in order to ensure the desired performance. It is also important for the teachers to highlight the impact of such differences in instruction, curriculum, and the desired learning outcomes. One of the main objectives of differentiated instruction is providing an educational environment that meets various learning needs of students by considering their individual differences. It helps the teacher design and implement educational lessons, achieve the learning demands of students, and make good decisions in classroom settings (Tomlinson, 2005; Good, 2006; Silver *et al.*, 2009; Abdel and Attia, 2011; Watts-Taff *et al.*, 2013).

Thus, the aspired educational objectives cannot be achieved by making such instructional plans that differ from students' abilities, attitudes, aptitudes, and needs (Al-Shafei, 2009). Hence, effective educational processes are obtained by identifying student abilities; mental characteristics; levels of growth; achievement; scientific, economic and social backgrounds; and attitudes. During the adolescence and high school stage, an individual's self-concept integrates with evolving experiences and self-realization of individual abilities and potentials. In order to employ these individual differences in achieving psychological and social adjustment, a high school student needs and tends to experience self-actualization. It motivates the student's creativity and has an effective and positive impact on his ability to overcome obstacles and gaining confidence.

Self-actualization includes personal integrity based on factors related to individual abilities, capabilities, as well as the surrounding environmental factors. Self-actualization, therefore, varies according to the individual differences in potentials and abilities; social differences due to socialization and environmental conditions; and response to the environmental effects. Maslow has also reported the importance and role of the environment in offering help to get to the maximum potentials (Qatami and Abu Naem, 2016). Maslow asserts that, "While behavior is almost always motivated, it is also almost always biologically, culturally and situationally determined as well" (Maslow, 1943).

Therefore, students' individual differences in abilities, potentials, and needs are a common aspect of differentiated instruction and self-actualization. The present study is designed to explore the relationship between differentiated instruction and self-actualization and how differentiated instruction can affect high school student self-actualization.

The study addresses the existing gap in the literature of differentiated instruction and self-actualization by answering the following two questions: (1) what is the extent of fulfilling the requirements of differentiated instruction in English language classroom from the perspective of the second grade high school students? (2) What is the impact of utilizing differentiated classroom environment on high school students' self-actualization?

2. LITERATURE REVIEW

2.1. Differentiated Instruction

Differentiated instruction is an extension of educational philosophies that perceive the learner as the center of learning and teaching processes as learners have the right to learn in accordance with their abilities and potentials. It is defined by Goddard *et al.* (2015) as "teachers' dedication to planning for academic diversity in their classrooms with the goal of helping students succeed by attending to their needs and interests" (2015, 113). Teachers have to adapt their teaching methods to accommodate students' differences in aptitude, attitudes, and learning preferences (Tomlinson, 2005; DeCandido and Bergman, 2006; Jensen, 2006; Cojak *et al.*, 2008; Goodnough, 2010).

Differentiated instruction is based largely on structural theory and Vygotsky's social development theory through which he argues that students should be taught according to their levels of aptitude and abilities (Vygotsky, 1978; Vygotsky, 1987). Vygotsky argues that students should not be taught in groups in which they are asked to do the same things while some of them are not ready to do. They cannot learn from each other because their educational experiences and development are not equal. This idea is compatible with Dewey's theory of 1916 reporting that the teacher should adopt a teaching strategy that suits the needs of students (Drapeau, 2004; Sarhan, 2010).

According to Chapman and King (2014), Watts-Taff *et al.* (2013), Chamberlin (2011), Hall *et al.* (2004) and Piggott (2002) differentiated instruction is a way of teaching students with different abilities in the same classroom. Its basic idea is maximizing the growth and success of each student through meeting his/ her needs and helping him/ her learn. It is an interactive teaching system designed to meet individual needs of students, wherein the teacher is expected to organize and customize instructions to afford better learning opportunities and to achieve educational objectives. It also provides an educational environment suitable for all students, since it is based

on employing various methods, procedures, and activities. This also helps each student achieve the aspired objectives.

Given the importance of differentiated instruction, many studies have reported its effectiveness in teaching, including (Al-Muqren, 2017); (Al-Khatib, 2017); (Nasr, 2014); (Abdel, 2013); (Martin, 2013); (Munro, 2012); (Moyle, 2012); (Gilbert, 2011); (Shaffer, 2011); (Bogan *et al.*, 2012); (Simpkins *et al.*, 2009); (Luster, 2008); (Ferrier, 2007). In addition, The English Language Professionals Network in Bahrain, in 2015, held its fourth annual conference entitled "Differentiated Instruction in English Language Education". It concludes that differentiated instruction creates the right conditions for learning English as it takes into account student readiness, interest, and learning profile, including the facets of gender, culture, learning style, and intelligence preference.

2.2. Differentiated Classroom Environment

Tomlinson (2001) argues that following points shall be available in a classroom environment according to the principles and requirements of differentiated instruction:

1. Differentiated instruction is based on each student's readiness, interests, and learning pattern.
2. It works in an appropriate and comfortable setting.
3. It allocates differentiated time for activities to support the success of the student.
4. It uses fixed activity points (to which the student turns after completing a specific assignment)
5. It distributes instructions in different ways to avoid chaos.
6. It distributes students into groups or activity corners
7. It defines basic rules for students from start to finish.
8. It ensures that each student has a clear plan while seeking help while the teacher is busy with other students.
9. It expects students to learn how to rearrange classroom furniture after activity.
10. It sets up a plan for students with high achievement rates.

It is therefore important to urge teachers to prepare a classroom environment conducive to the above requirements of differentiated instructions in order to accommodate individual differences among students. Learning is a continuous process of communication and interaction between the teacher and the students through dialogue, exchange of ideas and feelings of acceptance within the classroom in order to achieve meaningful educational outcomes (Al-Tatory and Al-Qudah, 2006; Al-Nawal, 2017). Hence, a differentiated classroom environment will prove to be an ideal situation for learning to take place.

The teaching process should also take place according to the requirements of differentiated instruction, namely by customizing the classroom environment, where the focus shall be on the learner as the main objective of the educational process. A poor classroom environment makes the student obsessed and his mind wandering causing inactivity, laziness, and poor adjustment. Thus, a suitable and motivating classroom environment is essential for teaching and learning (Kassem, 2014; Muhammed, 2014).

Classroom environment has two domains: (1) socio-psychological environment which can be perceived through student verbal expressions about his/ her feelings of intimacy in the classroom, acceptance of the class, positive interactions in the classroom, understanding of the system, rules and behavior in the classroom and availability of enjoyable learning activities; (2) physical environment which can be identified through the availability of spaces for students to sit and move, a space for the teacher's movements, students to feel comfort and happiness, absence of loud sounds and distractions outside the classroom, students' satisfaction with their seats, and adequate lighting and ventilation (Nix *et al.*, 2013); (Elwan *et al.*, 2011); (Sassila, 2010); (Qatami and Qatami, 2002).

Alkhazaala (2011) added a third domain, i.e. the educational environment that includes course books, references, educational aids, activities, museums, teaching methods related to individual or collaborative learning, tests, evaluation methods, and classroom verbal interaction.

Differentiated instruction necessitates that teachers distribute learners according to their levels of aptitude and abilities in order to develop them. Furthermore, a differentiated classroom environment is influenced by educational situations created by the teacher and to which the student responds, and thus teacher-student interaction takes place. In a differentiated classroom environment, teachers are empowered to employ appropriate teaching strategies and educational activities in accordance with individual differences among students. A balanced classroom environment, which affords physical, instructional, and psychological requirements of the educational process, always has a positive impact on educational outcomes (Drapeau, 2004; Elwan *et al.*, 2011; Alnaboulsy, 2014).

Patterson *et al.* (2009) agree that there is a need to restructure the classroom environment in order to facilitate differential instruction besides using various educational aids to meet the needs of students with different abilities. Good classroom environment is important, as it provides appropriate conditions for teaching and support for students. It also enhances thinking patterns, improves motivation, improves academic achievement, activates participation, and offers equal educational opportunities among all students (Muhammed, 2014).

Abu Nemra (2001) reports that an active classroom environment helps students achieve a set of personal, social, and educational outcomes, including triggering self-directedness and assuming responsibility to the learners' actions. It also helps achieve independence, accommodate attitudes, establish social relations under the dominant values; identify and accept potentials, promote facing difficulties, enhance loyalty, and develop thinking and learning patterns.

Given the importance of the classroom environment, several studies have been conducted and concluded that a suitable and good classroom environment is one of the most important requirements to achieve various educational objectives: Kassem (2014), Al-Mashharawi (2010), Canning and Reed (2010), Kovoailk and Olson (2010), Massoud (2005) and Radwan (2004).

This study is based on interviews with (4) supervisors and (9) teachers of the English language in Riyadh, Saudi Arabia. Several questions were raised (How do you address differences among the students of the same classroom including personality, academic abilities, learning patterns, or interests? What teaching strategies do you utilize to meet the educational needs of students in teaching English?). Responses indicate that (7) teachers (77.78%) use the same teaching strategies, tasks, methods and activities with all students in the classroom. They apply the same teaching strategy to low-achievers and high-achievers. In addition, (8) teachers (88.89%) depend on speech, dialogue and discussion in teaching as they do not adopt a clear teaching strategy. All supervisors (100%) reassure the need for training teachers on modern classroom strategies that consider individual differences among students.

The teaching performance of (11) English language teachers in second high grade classroom was also observed, focusing on students' interaction with each other, teacher and students interaction, organization of classroom and provision of supplies. It was concluded that:

- There is no interaction among students in (9) classes, and (5) teachers do not utilize any teaching aids.
- (10) Teachers focus on high-achievers and intermediate- achievers, but not low-achievers.
- (6) Teachers do not employ such educational aids that match the needs of high-achievers and low-achievers. Thus, they do not consider students' individual differences.

This suggests that a clear development is required in the components of the educational system in order to achieve the objectives of the Saudi vision 2030 which aims to promote the learner and invest in his/her abilities and skills.

2.3. Self-Actualization

According to Park and Datnow (2017) "student needs are defined not only by results on assessment tests or academic ability levels but also by readiness, interests, and learning profiles" (2017, 286). Self-actualization is one of

the important needs that largely affect the individual behavior. It is one of most critical psychological needs as it helps the person, whether a child or an adolescent, overcome obstacles and face pressures. Those who have high self-actualization are less vulnerable to externalities than those with low self-actualization are. In addition, they have self-confidence in terms of conceptualizations and judgments. Their attitudes lead them to accept their opinions, pride in reactions and conclusions. On the contrary, those with low self-actualization lack self-confidence. Thus, their self-acceptance is influenced by the sayings of others, and they need the assurance and support of others too. They highly adhere to the judgment of others hoping to receive a positive evaluation (Duclos, 2004; Jaballah, 2010; Deeb, 2014).

Because of the importance of self-actualization, many studies investigated the effectiveness of some methods, strategies, and programs in achieving it among students such as by Alwaheby (2009), Apinuntavech *et al.* (2009), Albejarey (2010), Alsfasefa (2011) and Shehata (2012).

Other studies have addressed the relationship between self-actualization and other variables including by Omar (2005), Ali (2007), Abdulmunaem (2008), Barakat (2009), Aljaat (2009), Alnaeem (2010), Wade (2010), Jassem *et al.* (2011), Akcay and Akyol (2012) and Alanzey (2012).

Through observing students in practicum and academic advising, the author of this study also noted that self-actualization among high school students was low. Hence, there is an urgent need to build their self-actualization in order to improve them positively at behavioral, academic, and social levels. Apinuntavech *et al.* (2009) reported the need to improve self-actualization among adolescents in Thailand to enhance necessary life skills including mental health. However, no study, to the author's knowledge, has investigated the impact of fulfilling the requirements of differentiated instruction-based classroom environment on self-actualization among high school students. Thus, the present study aims to fill this research gap by identifying such an impact.

3. HYPOTHESIS

The hypothesis of this study states: There are statistically significant differences between the means of scores of the control group students (taught in a traditional classroom environment) and the experimental group students (taught in a differentiated classroom environment) in the post-test of self-actualization scale in favor of the experimental group students.

4. METHODOLOGY

4.1. Method

The study adopted the quasi-experimental approach to evaluate the impact of differentiated classroom environment on self-actualization among high school students. It selected two equal groups: one control group taught by a traditional classroom environment and another experimental group taught by a classroom environment prepared as per the requirements of differentiated instruction. The study pre-tested and post-tested the scale of self-actualization.

Sampling: The sample comprised (58) second grade high school students in the second semester of 2017/2018 in Riyadh, Saudi Arabia. They were distributed as (28) students in the experimental group and (30) in the control group.

4.2. Tools

1. Differentiated Classroom Environment Scale

The scale was prepared and divided into four domains. The initial form of the scale included (44) items distributed into four domains.

Validity and Reliability

The author submitted the scale to (8) reviewers among the faculty members specialized in curriculum and instruction of English language. In the light of their notes and instructions, modifications were made, and the final form of the scale was approved after omitting two items and rephrasing four ones.

Internal Validity

After verifying the face validity of the tool, it was applied in a field study. Pearson correlation coefficient was estimated between the score of each item and the total score of the domain. The values of each item's correlation to its domain were found statistically significant at the level of (0.01). Additionally, the internal validity of the domains of the specifics of classroom environment in the light of the requirements of differentiated instruction was estimated via the relationship of each domain to the total score of the questionnaire. Pearson correlation coefficients were found high and statistically significant at the level of (0.01), showing the high validity of the questionnaire's domains.

Reliability

To measure the reliability of the tool, Cronbach's alpha was used. The reliability coefficients of the domains were high and acceptable, scored (0.962). Hence, the questionnaire was judged as highly reliable.

2. Self-Actualization Scale

The preliminary form of the scale comprised (48) items distributed into (4) domains, i.e. self-acceptance, acceptance of others, self-confidence, and self-efficacy. The author adopted the Three-Point Likert Scale as follows: (3) Always, (2) Sometimes, and (1) Never. The scores ranged from (48) to (144).

Validity and Reliability

The author submitted the scale to (9) reviewers of the faculty members specialized in curriculum and instruction of English language and psychology. Based on their notes and instructions, it was adopted in its final form.

Internal Validity

The scale was applied to a pilot sample, the correlation coefficients between each item and the total score were estimated using Pearson correlation coefficient. The correlation coefficients between each item and the total score were (0.34: 0.92) that were significant at (0.01) and (0.05) levels, suggesting the internal validity of the scale.

Reliability

The scale's reliability was estimated using Cronbach's alpha and split-half on the pilot sample. Scale's reliability using Cronbach's alpha and split-half was significant at (0.01).

5. RESULTS

In order to answer the first question: What is the extent of fulfilling the requirements of differentiated instruction in English language classroom from the perspective of the second grade high school students? The arithmetic means and standard deviations of the responses were calculated in four categories: organizational, disciplinary, physical and social requirements.

I. The Organizational Requirements

Table-1 Responses of the participants regarding the availability of organizational requirements' items according to the means of responses

No.	Item	Frequency	Response			Arithmetic mean	Standard deviation	Ranking
		Percentage	Strongly agree	Agree	Disagree			
1	Setting rules and procedures for the classroom environment	Freq.	140	69	2	2.65	0.496	4
		%	66.4	32.7	0.9			
2	Discussing the classroom rules with the students to adhere to them	Freq.	161	48	2	2.75	0.453	2
		%	76.3	22.7	0.9			
3	Setting rules and procedures within the English laboratory	Freq.	160	49	2	2.75	0.456	3
		%	75.8	23.2	0.9			
4	Organizing the classroom individually or collectively according to the lesson's objectives	Freq.	134	71	6	2.61	0.545	5
		%	63.5	33.6	2.8			
5	Allocating responsibilities to the English language teacher and students in the classroom environment	Freq.	123	86	2	2.57	0.515	6
		%	58.3	40.8	0.9			
6	Distributing students according to their individual differences	Freq.	88	91	32	2.27	0.708	9
		%	41.7	43.1	15.2			
7	Preparing the tools and materials for differentiated instruction	Freq.	114	95	2	2.53	0.519	8
		%	54	45	0.9			
8	Organizing individual, collective, and cooperative learning in accordance with agreed upon bases between the English language teacher and the students	Freq.	125	82	4	2.57	0.533	7
		%	59.2	38.9	1.9			
10	Providing time to implement the activities to achieve English language learning objectives	Freq.	166	45	-	2.79	0.411	1
		%	78.7	21.3	-			
General mean						2.61	0.344	

Source: The researcher extracted this data by calculating frequency, percentage, arithmetic mean, and standard deviation.

Table 1 illustrates that the participants' responses are "Strongly Agree" to the organizational domain, with a mean of (2.61).

The results reveal that there is a discrepancy in the responses of the participants to the organizational domain because the arithmetic mean ranged from (2.27) to (2.79) indicating (Agree/ Strongly Agree).

II. The Disciplinary Requirements

Table-2. Responses of the participants to the availability of the disciplinary requirements' items according to the means of response.

No.	Items	Frequency	Response			Arithmetic mean	Standard deviation	Ranking
		Percentage	Strongly agree	Agree	Disagree			
1	Positive reinforcement when the desired behaviors appear	Freq.	162	48	1	2.76	0.4370	2
		%	76.8	22.7	0.5			
2	Motivating students to show the desired behavior	Freq.	164	47	-	2.78	0.417	1
		%	77.7	22.3	-			
3	Diversity of the reinforcement methods in a way that matches student behaviors	Freq.	139	71	1	2.65	0.4870	4
		%	65.9	33.6	0.50			
4	Perseverance in promoting the desired behavior to be permanently practiced by the student	Freq.	143	65	3	2.66	0.5030	3
		%	67.8	30.8	1.4			
5	avoiding collective punishment for offending behaviors	Freq.	115	72	24	2.43	0.689	6
		%	54.5	34.1	11.4			
6	Enhancing self-discipline of the desired behavior	Freq.	135	76	-	2.64	0.4810	5
		%	64.0	36.0	-			
General mean						2.65	0.366	

Source: The researcher extracted this data by calculating frequency, percentage, arithmetic mean, and standard deviation.

Table 2 illustrates that the participants' responses are "Strongly Agree" for the disciplinary domain, with a mean of (2.65).

The results reveal that there is an agreement in the responses of the participants for the disciplinary domain because the arithmetic mean ranged from (2.43) to (2.78) indicating (Strongly Agree).

III. The Physical Requirements

Table-3 Responses of the participants to the availability of physical requirements' items according to the means of response

No.	Items	Frequency	Response			Arithmetic mean	Standard deviation	Ranking
		Percentage	Strongly agree	Agree	Disagree			
1	Providing adequate physical conditions, e.g. ventilation, lighting, and cleanliness	Freq.	175	34	2	2.82	0.409	1
		%	82.9	16.1	0.90			
2	Providing adequate furniture that tables and chairs are light and movable according to the desired activity	Freq.	168	40	3	2.78	0.447	2
		%	79.6	19.0	1.4			
3	Availability of individual work domains to meet the individual needs	Freq.	137	68	6	2.62	0.542	7
		%	64.9	32.2	2.8			
4	Providing group elements to allow the movement of the English language teacher and students while learning	Freq.	147	60	4	2.68	0.507	5
		%	69.7	28.4	1.9			

No.	Items	Frequency / Percentage	Response: Strongly agree	Response: Agree	Response: Disagree	Arithmetic mean	Standard deviation	Ranking
5	Providing various and attractive learning resources to suit their attitudes and interests	Freq.	156	50	5	2.72	0.502	3
		%	73.9	23.7	2.4			
6	Appropriateness of the learning resources for lesson content	Freq.	147	62	2	2.69	0.485	4
		%	69.7	29.4	0.90			
7	Appropriateness of the learning resources for student characteristics	Freq.	131	75	5	2.60	0.538	8
		%	62.1	35.5	2.4			
8	The learning resources motivate students for research and discovery in the English language lessons	Freq.	141	65	5	2.64	0.527	6
		%	66.8	30.8	2.4			
9	Appropriateness of the learning resources for student levels	Freq.	133	69	9	2.59	0.574	9
		%	63.0	32.7	4.3			
10	Organizing furniture in a manner that suits the nature of students and lessons.	Freq.	133	69	9	2.59	0.574	10
		%	63.0	32.7	4.3			
11	Dividing the classroom into interest centers where the students work individually or collectively	Freq.	114	78	19	2.45	0.655	12
		%	54.0	37.0	9.0			
12	Organizing the students in groups according to the source of cognition (audio, visual, visual-written...)	Freq.	90	84	37	2.25	0.736	13
		%	42.7	39.8	17.5			
13	Organizing students according to the objective of English language learning (vocabularies, grammar, conversation, writing the vocabularies in English)	Freq.	85	78	48	2.18	0.776	14
		%	40.3	37.0	22.7			
14	Organizing the English language learning resources in a way that helps the students stimulate the interest and easily absorb the lesson.	Freq.	128	80	3	2.59	0.582	11
		%	60.7	37.9	1.4			
General mean						2.58	0.405	

Source: The researcher extracted this data by calculating frequency, percentage, arithmetic mean, and standard deviation.

Table 3 illustrates that the participants' responses are "Strongly Agree" for the physical domain, with a mean of (2.58). The results reveal that there is a discrepancy in the responses of the participants for the physical domain because the arithmetic mean ranged from (2.18) to (2.82) indicating (Agree/ Strongly Agree).

IV. *The Social Requirements*

Table-4 Responses of the participants to the availability of the social requirements' items according to the means of response

No.	Items	Frequency	Response			Arithmetic mean	Standard deviation	Ranking
		Percentage	Strongly agree	Agree	Disagree			
1	Sharing ideas and feelings between the teacher and students	Freq.	124	84	3	2.57	0.524	8
		%	58.8	39.8	1.4			
2	Allocation of responsibilities among students without bias according to their abilities	Freq.	141	69	1	2.66	0.484	1
		%	66.8	32.7	0.5			
3	Objectively accepting students' opinions of any type and level	Freq.	123	81	7	2.55	0.562	9
		%	58.3	38.4	3.3			
4	Utilizing positive reinforcement methods to suit the various abilities of students	Freq.	138	72	1	2.65	0.488	2
		%	65.4	34.1	0.5			
5	Activities' contribution to the autonomy and cooperation in learning.	Freq.	113	94	4	2.52	0.538	10
		%	53.6	44.5	1.9			
6	An atmosphere of satisfaction prevails among the students as a result of collective contribution and assuming responsibility as individuals.	Freq.	111	97	3	2.51	0.529	11
		%	52.6	46	1.4			
7	Students are allowed to form groups according to their desires.	Freq.	82	76	53	2.14	0.79	14
		%	38.9	36	25.1			
8	Providing high and gradual expectations of the students to suit their differentiation.	Freq.	99	100	12	2.41	0.598	13
		%	46.9	47.4	5.7			
9	Appropriateness of the learning resources for student levels	Freq.	110	94	7	2.49	0.564	12
		%	52.1	44.5	3.3			
10	Employing individual differences in strengthening students' human relationships.	Freq.	133	78	-	2.63	0.484	5
		%	63	37	-			
11	Adopting various approaches to instill confidence among the law-achievers by providing the appropriate activities to their abilities and using the learning processes with different abilities.	Freq.	136	74	1	2.64	0.491	3
		%	64.5	35.1	0.5			
12	Providing various activities to take into account the different interests, abilities, and intelligences	Freq.	135	73	3	2.63	0.514	6
		%	64	34.6	1.4			
13	Following-up and fostering the students while solving the exercises and activities of the English language	Freq.	135	75	1	2.64	0.492	4
		%	64	35.5	0.5			
14	Motivating the students to implement collective classroom expertise of the English language activities	Freq.	126	82	3	2.58	0.522	7
		%	59.7	38.9	1.4			
General mean						**2.54**	**0.401**	

Source: The researcher extracts this data by calculating frequency, percentage, arithmetic mean, and standard deviation.

Table 4 illustrates that the participants' responses are "Strongly Agree" for the social requirements, with a mean of (2.54). The results reveal that there is a discrepancy in the responses of the participants for the social domain because the arithmetic mean ranged from (2.14) to (2.66) indicating (Agree/ Strongly Agree).

To answer the second question and verify the hypothesis of this study, t-test was adopted to estimate the significance of differences between the means of the experimental and control groups in the post-test of the self-actualization scale.

Table-5. Difference between the means of score of the experimental and control groups in the post-test of the self-actualization scale.

Group	Number	Means	Standard deviation	t-value	Significance level	t- significance	Eta square	Effect size
Control	30	122.40	1.53	13.78	0.00	Significance	0.95	High
Experimental	28	135.88	1.77					

Source: This data is calculated by using T-Test for significance of difference.

Table 5 shows that there were differences in the post-test of the self-actualization scale between the means scores of the experimental and control group students. Thus, the hypothesis is verified suggesting the high level of self-actualization in the experimental group who studied using the classroom environment based on the requirements of differentiated instruction unlike the control group who studied using the conventional environment.

6. DISCUSSION

These results reflect the interest in fulfilling the requirements of differentiated instruction in an English language classroom environment. It can be due to the good specificities of the English language classroom environment at a high stage. For the organizational requirements, findings reveal that most teachers adopted the prevailing teaching philosophy in order to organize a classroom environment. It was observed that an effective classroom learning environment is the one in which learning is organized in a way that matches the nature of the educational situation. Additionally, allocating the time to implement the activities that help achieve the learning objectives also suggested the interest of English language teachers in allowing learners to implement the activities in a manner that causes differentiated instruction. Discussing the classroom rules with the students and adhering to them also reflected the teachers' awareness of the importance of engaging students in the administration and organization of their learning. In addition, setting rules and procedures within the English language laboratory showed the teacher's care in organizing the learning process in order to save the classroom time and ultimately benefit from it. It was concluded that this allowed the differentiation and diversity of learning.

According to the results shown in (Table 2), the disciplinary requirements of differentiated instruction are met in the high school classes of English language. It can be attributed to the establishment of clear standards for the assessment of students' performance and behaviors in the English language classroom environment. The clarity of standards defines the behavior expected of students, the required duties and tasks, and defining the acceptable performance levels and the consequent reinforcement or punishment. It is also observed that defining and practicing the students' duties and tasks clearly enhance their morale and increase their efficacy and activity in the classroom environment. Accordingly, the objectives of the learning process can be well achieved. Furthermore, motivating students to show the desired behavior to be permanently practiced plays a role in their psychological stability, practical participation, and achievement inside and outside the classroom. This result agrees with Alnaboulsy (2014) that the classroom environment which is void of rules is appropriate for behavioral problems. Therefore, there shall be clear rules for students' behavior to be easily noticed while students can clearly inquire about the prevailing regulations and practices.

For the physical requirements of differentiated instruction, they should be available in the English language classroom environment. This finding is consistent with the results of Elwan *et al.* (2011) and Al-Mashharawi (2010)

who also maintained that the main requirements of a learning environment include ventilation and lighting. In addition, furniture, tools, and aptitude should be distributed properly to match the nature of classroom activities and student engagement. It thus allows students' ease of movement and to adequately distribute the motifs, e.g. through illustrations or maps.

The results shown in Table 4 reflect English language teacher's concern about elements such as respect and mutual support among students, motivating low achievers by providing adequate activities, and using educational group activities for students with different abilities. Accordingly, students feel secure and confident and they get motivated to effectively participate in learning. This result matches with that of Alkathery (2007) who also asserted that providing a psychological and social environment and sound human relationships in a classroom greatly affects classroom interaction; it promotes student's interaction, participation, and responsibility; and helps enhance classroom management and control.

In sum, the organizational, disciplinary, physical, and social requirements of differentiated instruction are highly met in the high school classroom of English Language.

According to table 5, the impact of the independent variable (teaching in a classroom environment prepared according to the requirements of differentiated instruction) on the dependent one (self-actualization) was high. It suggests the effectiveness of the differentiated instruction-based classroom environment on self-actualization among high school students.

These results are consistent with those of Al-Muqren (2017); Al-Khatib (2017); Nasr (2014); Abdel (2013); Martin (2013); Munro (2012); Moyle (2012); Bogan *et al.* (2012); Gilbert (2011); Shaffer (2011); Simpkins *et al.* (2009) and Luster (2008) regarding the positive impact and effectiveness of differentiated instruction.

It can be interpreted that differentiated instruction requires a flexible and comprehensive learner-centered approach. Fulfilling the organizational, disciplinary, physical, and social requirements of differentiated instruction enables meeting students' varied needs. On one hand, in a differentiated learning environment, students are enabled to share their opinions freely, to discuss their ideas, and to identify their weakness and strengths. Thus, it helps boost self-confidence and self-acceptance among students. On the other hand, the teacher can employ differentiated teaching strategies, learning activities, and assessment methods that help afford equal learning opportunities for all students based on their interests, abilities, and attitudes. This has definitely a positive impact on the behavior of students inside and outside the classroom since they feel seen, attended and considered. Educational stratification increases student motivation for learning and strengthen their self-fulfillment. In other words, fulfilling student varied needs and providing them with equal learning opportunities boosts self-confidence and increases the level of self-actualization among them. Differentiated instruction creates a classroom environment that is suitable for enhancing the various aspects of self-actualization among learners.

7. CONCLUSION

It can thus be concluded that applying differentiated teaching and learning strategies creates a classroom environment that enables students to express their feelings and perspectives, helps them respect opinions and perspectives of others, promotes individual and group responsibility, and enhances self-actualization. Students feel free to express and accept alternatives to suit their abilities and potentials, reflecting self-acceptance. They are given adequate opportunities to discuss and express ideas, in order to boost their self- confidence and self-actualization. Through differentiated activities, the teacher can also link the theoretical and practical aspects of the curricula, adding another dimension to promote their achievement and self-confidence. In differentiated classroom environment, students become more active, independent, planners, aware of learning and performance, and self-organizers. Additionally, it helps them think individually, show positive expectations and motivation, and utilize a wide range of strategies, positively affecting self-actualization. It also helps the teacher consider individual differences of students, and thus provide the gifted and those with poor abilities appropriate opportunities. Such

students need experienced teachers and appropriate educational services to understand their needs. In sum, differentiated instruction provides students a suitable environment to make them feel self-confident with mates and friends, establish positive relations with them, and positively interact and cooperate. This highly affects achieving self-actualization.

8. RECOMMENDATIONS AND IMPLICATIONS

In the light of the findings of this study, a continuance assessment of fulfilling the requirements of differentiated instruction in an English language classroom is highly recommended. Given the importance of differentiated instruction, training courses should be prepared for teachers to acquire the knowledge and skills about the required differentiated teaching and learning strategies. A procedural guide or a manual should be prepared for teachers to explain the mechanism of applying differentiated instruction, its importance, advantages and how to apply it in the classroom. In the same vein, holding workshops to help teachers identify the designing and utilizing of a differentiated instruction classroom would be helpful.

The author suggests conducting a similar study on different curricula and students from different levels. A future study may also be conducted to examine the implications of differentiated instruction for other variables such as students' self-efficacy and leadership.

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