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Differentiated Instruction of Iraqi Fine Arts Institutes Teachers in Teaching English as a Foreign Language

التعليم المتمايز في معاهد الفنون الجميلة العراقية

في تدريس اللغة الإنجليزية لغة اجنبية

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ABSTRACT

The principle behind differentiated instruction is that educational strategies should change and be tailored to the unique needs of each student in a classroom. The purpose of this study is to investigate teachers' perceptions of differentiated instruction and its implementation in day-to-day teaching within the classroom. Nineteen teachers with varying certification levels and years of experience participated in the Differentiated Instruction Questionnaire. The questionnaire included five categories. Those categories include lesson plan and implementation, content, procedure, communication, and learning. The results are consistent with the idea that although teachers theoretically or conceptually understand differentiated instruction, they may not be putting it into practice in their classrooms. Another important implication of study is that future staff development should continue to reinforce the necessity of differentiated instruction, correct the various misconceptions about differentiated instruction, and provide adequate training for the actual implementation of differentiated instruction. The study's conclusions might add to the corpus of knowledge about differentiating instruction and act as a foundation for further study.

Keywords: Differentiated instructions, Institutes, Fine Arts.

الخلاصة

يتمثل المبدأ الكامن وراء التعليم المتمايز في أن الاستراتيجيات التعليمية يجب أن تتغير وأن تُفصل وفقًا للاحتياجات الفريدة لكل طالب في الفصل الدراسي. الغرض من هذه الدراسة هو التحقيق في تصورات المعلمين للتعليم المتمايز ومدى تنفيذها في التدريس اليومي داخل الفصل الدراسي في مادة اللغة الإنكليزية. شارك تسعة عشر مدرسا"
بمستويات شهادات متفاوتة وسنوات مختلفة من الخبرة في استبانة التعليم المتمايز. اشتملت الاستبانة على خمس فئات. تتضمن هذه الفئات خطة الدرس والتنفيذ، المحتوى، الإجراءات، التواصل، والتعلم. تتوافق النتائج مع الفكرة القائلة بأنه على الرغم من أن المعلمين يفهمون التعليم المتمايز نظريًا أو مفاهيميًا، إلا أنهم قد لا يطبقونها او يضعونها موضع التنفيذ في فصولهم الدراسية. من الآثار المهمة الأخرى للدراسة أن تطوير الكادر التعليمي في المستقبل يجب أن يستمر في تعزيز ضرورة فهم التعليم المتمايز، وتصحيح المفاهيم الخاطئة المختلفة، وتوفير التدريب الكافي للتنفيذ الفعلي له. وقد تضيف استنتاجات الدراسة إلى مجموعة المعارف حول التعليم المتمايز وتكون بمثابة أساس لمزيد من الدراسة.

الكلمات المفتاحية: التعليم المتمايز، معاهد، الفنون الجميلة.

The Problem and its Significance

Many educators are recognizing that it is no longer appropriate to approach teaching as a singular, one-size-fits-all endeavor. Recognizing the wide variance that exists within any group of learners, educators are recommending that teachers offer multiple and varied avenues to learning. Students' motivation, sense of ownership and pleasure in their work, and the building of desirable mental habits all improve when they bring their personal voices, visions, and interests to their learning. Instead of expecting students to modify themselves for the curriculum, differentiated instruction requires teachers to be flexible in their approach to teaching and adapt the curriculum and presentation of information to learners.

Students feel motivated when the task they are working on will help them develop language that can be used beyond a classroom setting. This requires a reconceptualization of teaching strategies, curriculum, assessment, and classroom management policies that were designed specifically for student population with similar linguistic experiences. Classrooms are full of students who learn in different ways. Differentiated Instruction offers a range of approaches to learning.

Despite having access to a wealth of data, teachers struggled in their attempts to bridge the gap between the curriculum and the student's needs. . This research paper gives the opportunity to learn more about teachers' comprehension and implementation of differentiated instruction.

The principle behind differentiated instruction is that educational strategies should be changed and be tailored to the unique needs of each student in a classroom. It's critical to keep in mind that differentiated instruction is a skill that can be developed and improved upon rather than a rigid approach. It will become ingrained with practice. Differentiated instruction is a technique of

approaching the classroom that aims to maximize each student's learning potential while also acknowledging their individual learning requirements.

The study was motivated by the idea that educators might not have a clear understanding of what differentiation is, the essential elements for implementation, as well as the misconceptions surrounding the implementation of differentiated instruction. With differentiated teaching, two considerations have emerged: first, will teachers concur on the factors that make the practice effective in the classroom, and second, will teachers accept the common misconceptions about it?

This research paper answers questions regarding each component of differentiated instruction.

1. Do fine arts institute teachers differentiate lesson plan and implementation?
2. Do fine arts institute teachers differentiate content?
3. Do fine arts institute teachers differentiate procedure?
4. Do fine arts institute teachers differentiate communication?
5. Do fine arts institute teachers differentiate learning?
6. How do fine arts institute teachers believe about differentiating English language teaching?

Literature Review

Differentiated Instruction components

Differentiation is governed by a number of significant aspects in the educational setting. The three curriculum components that can be differentiated are content, process, and products, according to Tomlinson

(2001). Also, a few suggestions are made to aid educators in comprehending and conceptualizing differentiating instruction. As teachers begin to differentiate instruction, there are five main instructional elements that can be adjusted to meet the needs of learners: lesson design and implementation, content, procedure, communication, and learning.

By teaching prerequisite material to some students, allowing advanced students to move ahead of the class, or even changing the content for some students based on their individualized education plans, teachers can address the needs of each individual student while also providing the necessary scaffolding when working with content (Tomlinson & Imbeau, 2010).

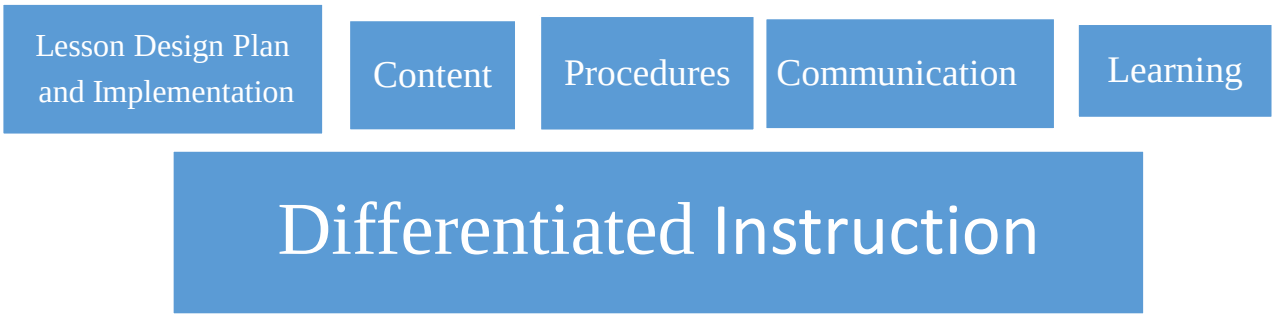
The conceptual framework of this paper is guided by both theory and empirical findings. Theoretically, it is grounded in the differentiated instruction model of Tomlinson (1999). Tomlinson's model of differentiated instruction is used to measure teacher's implementation of it. Teachers' embracing of differentiated instruction strategies in their classroom is evaluated based on content, process, product, communication and learning environment as depicted in the differentiated instruction model by Tomlinson. It is apparent that teachers know the philosophy of differentiated instruction, but may not be consistently implementing the strategies in their classrooms.

The four theoretical approaches that give support to the study are: Vygotsky's social learning, the zone of proximal development, Gardener's theory of multiple intelligences and Brain-Based Learning theory. Vygotsky suggests that teachers should consciously tailor the instructions within learners' zone of proximal development and content shouldn't go beyond the learners' ability to understand (Morgan, 2014). While the

differentiated instruction that is based on the Gardener's theory of multiple intelligence suggests that learners learn using eight different types of intelligence (Gardner, 2011). The brain-based learning is about being conscious about how the brain processes, stores, and retrieves information effectively (Subban, 2006).

Five dimensions of Differentiated Instruction are covered in the questionnaire: Lesson Design and Implementation, Content, Procedures, Communication, and learning see figure 1.

Figure 1
Differentiated Instruction Components



With lesson plan and implementation, teachers provide multiple possibilities for learning based on students' backgrounds, readiness, and interests and continually assess and adjust lesson content to meet students' needs.

To differentiate content, teachers consider the objective of a lesson, then provide students with flexible options about the content they study to meet the objective, from subject or topic to approach or presentation.

When differentiating procedure, teachers differentiate how students learn. Grouping students based on their individual readiness or to complement each other is one way to accomplish procedure differentiation. Another is varying the way concepts are taught: through visual, auditory, or kinesthetic lessons, for example.

Communication differentiation applies to the types of assignments students create. A teacher might ask students to explain a concept; the product could be a written report, a story, a song, a speech, or an art project. Classroom communication can be differentiated by changing physical things in the classroom, like how desks are set up or arranged, or where students can sit. It also can include changes to routines and habits as well as the direction of the class discourse. Teacher can also question students to trigger divergent modes of thinking.

Teachers can differentiate learning by using a flexible approach to time-based tasks, however, faster students are given the facility to complete extension tasks, and it gives other pupils an opportunity to complete their exercise at a more comfortable speed. Allocating roles to each member of the group can also help pupils organize themselves according to their different skills and capabilities. Differentiated instruction is based on a socio-constructivist perspective which highlights that learning develops best when the students get the opportunity to learn and exchange ideas with other people (Idsøe, 2015).

Previous Studies

Reviewing earlier research on differentiated education revealed that several studies addressed issues and/or employed techniques that were somewhat comparable to those used in the current study. They are as follows:

Unal, et al (2022):

In this paper the researchers tried is to examine Kindergarten through 5th-grade teachers' understanding of differentiated instruction and perception of their ability to implement differentiated instruction in their classrooms. Thirty-one K-5 teachers from the state of Georgia participated in this study.

The researchers included two open-ended, differentiated instruction questions and seven demographic questions. Study results suggested that while teachers mostly agree that differentiation is an important instructional strategy, they are faced with multiple barriers to implementation such as a lack of differentiated instruction knowledge and practice and the need for resources and professional development. The findings of that paper is in line with the findings of the current paper the data collection was only included an online survey due to Covid.

Burkett, J. A. (2013):

The study is entitled "Teacher Perception on Differentiated Instruction and its Influence on Instructional Practice". The study interviewed 11 intermediate elementary school teachers using interview questions to promote conversational dialogue. Data analysis revealed the following themes: 1.) Differentiated instruction is essential in an effective classroom; 2.) differentiated instruction occurs naturally, 3.) in-service professional development influences differentiated instruction. In addition the study found that teachers used the following differentiated instructional strategies: flexible grouping, tiered lessons, literature circles, and curriculum compacting. Consequently, this study supports differentiated instruction as an approach to learning while highlighting the influence of professional development on teachers' use of differentiated instruction. Unlike this study, the following study used a questionnaire to gather information about the teacher's perception of differentiated instruction and found some misconception of differentiated instruction.

Data Analysis

SPSS, a statistics software package was used to analyze the numerical data obtained from the questionnaire.

Research Design

Both quantitative and qualitative data were collected in this study in order to obtain a more complete picture of teachers' views about differentiated instruction and its implementation in their classrooms. A closed-ended questionnare written on a four point Likert scale was distributed to a sample of 19 Fine Arts Institute teachers. Item analysis was chosen as the most appropriate approach to validating the instrument.

Validity of the Instrument

Principal item analysis was used to explore the structure underlying the questionnaire items. The inclusion or exclusion of an item in a construct was determined iteratively by examining Cranach's alpha to identify redundant items or items that did not sufficiently measure the same underlying construct (Ziniel et al, 2016). Item analysis methods can be incredibly useful tools for researchers attempting to establish high quality measures of those constructs or categories not directly observed or captured by observation (Tavakio and Wetzel, 2020). Item Analysis provides a snapshot of the statistical relationships of the key behaviors, attitudes, and dispositions of the construct of interest. Therefore, some of the items of the questionnaire have been eliminated in order to have a higher degree in some of the categories. For example item number 2 of the lesson plan and implementation category has been eliminated because it has an item analysis score less than 0. 2. The inclusion or exclusion of an item in a category was determined by item loadings higher than 0.4.

Item analysis was chosen as the most appropriate approach to validating the instrument. The original instrument contained fifty-six items with three of these items

requesting demographic information about the teachers. The last item of the survey was an open-ended question soliciting additional comments from respondents.

Reliability of the Instrument

The fifty items were subjected to item analysis to examine score reliability. Cronbach's alpha coefficient was used to evaluate the internal consistency of the questionnaire, which is the method employed in most validation studies found in the literature (Paiva, et al 2014). To obtain this, alpha coefficient for the five categories is used and found 0.82. Some of the items have been deleted in order to increase internal consistency. The final form of the questionnaire has 38 item. A reliability coefficient of 0 .70 or higher is considered "acceptable" in most social science research situations.

Procedures and Methodology

Nineteen teachers with varying certification levels and years of experience participated in the Differentiated Instruction Questionnaire. This included education degree, Master's degree, and Doctorate degree. The same teachers of varying experience levels were selected for the study: less than 10 years, 11-19 years, and more than 20 years see figure 2.

Figure 2
Experience Levels and Certification of the Participants

Education level	Less than 10 years	10 -19 years	More than 20 years	Total
Education Degree	3	6	5	14
Master's Degree	/	2	1	3
Doctorate Degree	/	/	2	2
Total	3	8	8	19

As Figure 2 shows, fourteen of the participants have a bachelor's teaching degree, three of the participants have a master's degree, and two of the participants have a Doctorate degree. Years of experience shows: three have less than ten years, eight of the participant have 10-19 years of experience whereas eight of them have more than twenty years.

Description of the Instrument:

In order to achieve the aims of the study one instrument has been used for data gathering. The adopted instrument of James (2009) has been adapted by the researcher. The questionnaire contains 39 as a total, 38 items of them are measured using a four-point Likert- type scale anchored by 1 = rarely occurs, 2 = sometimes occurs, 3 = often occurs and 4 = very frequently occurs. The questionnaire measures the following five categories or subscales of differentiated instruction: lesson design and implementation (9 items), content (7 items), procedures (9 items), and communication (6 items), and learning (7). The last item is an open- ended question asking teachers to give their own definition of differentiated instruction.

Population and Sample

The population of the present study consists of 20 institutes distributed on 10 provinces in Iraq. The ten provinces include: Baghdad, Salah ad-Din, Diyala, Wasit, Basrah, Qadisiyyah, Najaf , Anbar, Ninawa , and Kirkuk. It includes teachers enrolled at Fine Arts Institutes during the Academic year 2022-2023 see Table 1.

Table 1
The Population of the Study

Provinces	Boys	Girls	Total
1. Baghdad,	4	1	5
2. Salah ad-Din	1	1	2
3. Diyala,	1	1	2
4. Wasit	1	0	1
5. Basrah	1	1	2
6. Qadisiyyah	0	1	1
7. Najaf	1	1	2
8. Anbar	1	1	2
9. Ninawa	1	1	2
10. Kirkuk	1	0	1
Total	12	8	20

Baghdad Province has been chosen randomly from the whole population as the sample of the study. There are five institutes in Baghdad province they are: Mixed Fine Arts Institute, Fine Arts Institute for Girls, Kadhimiya

Fine Arts Institute for boys, Al-Saydiya Fine Arts Institute for boys, Mahmoudiyah Fine Arts Institute for boys, all of them are morning classes see table 2.

Table 2
Sample of the Study

Institutes	Teachers		Total
	Women	Men	
1. Mixed Fine Arts Institute	5	0	5
2. Fine Arts Institute for Girls	7	0	7
3. Kadhimiya Fine Arts Institute for boys	2	1	3
4. Al-Saydiya Fine Arts Institute for boys	2	0	2
5. Mahmoudiyah Fine Arts Institute for boys	1	1	2
Total	17	2	19

Statistical Methods

The following statistical method is used:

Cronbach's alpha reliability, (Cronbach, 1951:257): It was used to compute the inter-rater reliability of the instruments.

$$\alpha = \frac{N \cdot \bar{r}}{1 + (N-1) \cdot \bar{r}}$$

Where:

N = number of the items

r-bar = the average inter-item correlation among the items.

Data Analysis, Results. Conclusions, Recommendations, and Suggestions

The results obtained according to the aim of the present study, is finding out the extent to which teachers differentiate the components of the differentiated instruction questionnaire. It is four-point Likert scale which ranges from (1) up to (4) as shown in table 3.

Table 3
Intervals of the Questionnaire scores

Likert Scale	Interval	Differences	Description
1	1.00 – 1.74	0.74	Rarely Occurs
2	1.75 – 2.49	0.74	Sometimes Occurs
3	2. 50 – 3.24	0.74	Often Occurs
4	3.25 – 4, 00	0.75	Very Often Occurs

Differentiating lesson Design and implementation

Descriptive statistics of the first component of differentiated instruction : Lesson plan and implementation is shown in table 4.

Table 4
Descriptive Statistics of Differentiating Lesson Plan and Implementation

Items	Frequencies	Rarely occurs	Sometimes occurs	Often occurs	Very frequently occurs	mean	Standard deviation
1	No	1	3	9	6	3.05	0.19
	%	5.3	15.8	47.4	31.6		
2	No	2	2	8	7	3.05	0.22
	%	10.5	10.5	42.1	36.8		

3	No	5	2	8	4	2.58	0.25
	%	26.3	10.5	42.1	21.1		
4	No	3	6	7	3	2.53	0.22
	%	15.8	31.6	36.8	15.8		
5	No	3	8	4	4	2.47	0.23
	%	15.8	42.2	21.1	21.1		
6	No	3	8	4	4	2.47	0.23
	%	15.8	42.2	21.1	21.1		
7	No	1	11	4	3	2.47	0.19
	%	5.3	57.9	21.1	15.8		
8	No	5	3	8	3	2.47	0.24
	%	26.3	15.8	42.1	15.8		
9	No	2	10	5	2	2.37	0.19
	%	10.5	52.6	26.3	10.5		
Total mean score						2.65	

As shown in table 4 most of the answers give indicator that teachers often and often frequently differentiate lesson plan and implementation as the means ranges between 3.05 and 2.37 . The highest mean score is related to the first item, which says, “the best way to asses knowledge is by paper and pencil tests”, yet it has a negative meaning. There are various ways to asses students’ knowledge, and differentiating lesson plan should go beyond paper and pencil tests.

Differentiating Content:

Descriptive statistics of the second component of differentiated instruction; Content is shown in table 5.

Table 5
Descriptive Statistics of Differentiating Content

Items	Frequencies	Rarely occurs	Sometimes occurs	Often occurs	Very frequently occurs	mean	Standard deviation
1	No	4	4	6	5	2.65	0.60
	%	21.1	21.1	31.6	26.3		
2	No	3	3	8	5	2.79	1.03
	%	15.8	15.8	42.1	62.3		
3	No	2	3	7	7	3.0	1.000
	%	10.5	15.8	36.8	26.8		
4	No	5	6	5	3	2.32	1.05
	%	26.3	31.6	26.3	15.8		
5	No	4	3	8	4	2.63	1.06
	%	21.1	15.8	42.1	21.1		
6	No	2	6	5	6	2.79	1.03
	%	10.5	31.6	26.3	31.6		
7	No	4	2	8	5	2.74	1.09
	%	21.1	10.5	42.1	26.3		
8	No	4	7	5	3	2.37	1.01
	%	21.1	36.8	26.3	15.8		
Total mean score						2.66	

As shown in table 5 the total mean score of the content component is 2. 66 which gives indicator that teachers often differentiate content. The mean score ranges between 2.32 and 3.0. the highest mean score 3.0 is for point number 3 which says " I individualize instruction as much as possible". The lowest mean score is 2.30 whish says, "I am comfortable with the content that I teach".

Differentiating Procedure

Descriptive statistics of the third component of differentiated instruction is Procedure. It is shown in table 6.

Table 6
Descriptive Statistics of Differentiating Procedure

Items	Frequencies	Rarely occurs	Sometimes occurs	Often occurs	Very frequently occurs	mean	Standard deviation
1	No	2	4	4	9	3.05	1.07
	%	10.5	21.1	21.1	47.4		
2	No	3	6	6	4	2.58	1.07
	%	15.8	31.6	31.6	21.1		
3	No	2	2	9	6	3.47	2.48
	%	10.5	10.5	47.4	31.6		
4	No	3	2	7	7	2.95	1.07
	%	15.8	10.5	36.8	36.8		
5	No	4	6	6	3	2.42	1.01
	%	21.1	31.6	31.6	15.85		
6	No	5	4	5	5	2.53	1.17
	%	26.3	21.1	26.3	26.3		
7	No	1	6	7	5	2.84	0.89
	%	5.3	31.6	36.8	26.3		
8	No	4	2	6	7	2.84	1.06
	%	21.1	10.5	31.6	36.8		
9	No	3	6	6	4	2.58	1.01
	%	15.8	31.6	31.6	21.1		
Total mean score						2.80	

As shown in table (6) the total mean score of the procedure component is 2. 80 which gives indicator that teachers often differentiate procedure. The mean score ranges between 2.42 and 3.47. The highest mean score 3.47 is

for point number 3 which says, "I know that students are engaged when the classroom is quiet". This sentence has a negative meaning when we differentiate procedures; when we go back to the literature review once will discover that having a quiet classroom does not mean that procedure is differentiate. The lowest mean score is 2.42 with a standard deviation 1.01 which is expressed by number five that says, "I use activity sheets".

Differentiating Communication

Descriptive statistics of the fourth component of differentiated instruction: Communication as shown in table 7.

Table 7

Descriptive Statistics of Differentiating Communication

Items	Frequencies	Rarely occurs	Sometimes occurs	Often occurs	Very frequently occurs	mean	Standard deviation
1	No	5	5	3	6	2.53	1.21
	%	26.3	26.3	15.8	31.3		
2	No	4	5	7	3	2.47	1.02
	%	21.1	26.3	36.8	15.8		
3	No	5	7	6	1	2.16	0.89
	%	26.3	36.8	31.3	5.3		
4	No	10	6	2	1	1.68	0.88
	%	52.6	31.3	10.5	5.3		
5	No	12	3	2	2	1.68	1.05
	%	63.2	15.8	10.5	10.5		
Total mean score						2.10	

As shown in table (7) the total mean score of the communication component is 2. 10 which gives indicator that teachers sometimes differentiate communication. The mean score ranges between 1.68 and 2.53. The highest mean score 2.53 is for point number 1 which says,

"Students questions and comments often determine the focus and direction of classroom discourse". The lowest mean score is 1.16 with a standard deviation 0.89, which is expressed by number three that says, "I believe in excellence and equity for my students".

Differentiating Learning

Descriptive statistics of the fifth component of differentiated instruction: Learning as shown in table 8.

Table 8
Descriptive Statistics of Differentiating Learning

Items	Frequencies	Rarely occurs	Sometimes occurs	Often occurs	Very frequently occurs	mean	Standard deviation
1	No	6	8	3	2	2.05	0.97
	%	31.6	42.1	15.8	10.5		
2	No	9	3	4	3	2.05	1.17
	%	47.4	15.5	21.1	15.8		
3	No	12	1	6	0	1.68	0.94
	%	63.2	5.3	31.5	0		
4	No	10	4	5	0	1.74	0.87
	%	52.6	21.1	26.3	0		
5	No	7	8	3	2	1.89	0.87
	%	36.8	42.1	15.8	10.5		
6	No	6	5	4	4	2.32	1.15
	%	31.6	26.3	21.1	21.1		
7	No	9	4	5	1	1.89	0.99
	%	47.4	21.1	26.3	5.3		
Total mean score						1.94	

As shown in table (8) the total mean score of the learning component is 1.94, which gives indicator that teachers sometimes differentiate learning. The mean scores ranges between 1.68 and 2.32. The highest mean score 2.32 is for point number six which says "I like an organizes but chaotic classroom environment". The lowest mean score is 1.16 with a standard deviation 0.89, which is expressed by number three that says, "I pre-assess regularly to know what students already know". Although this point typically describes differentiating learning, this low mean is an indicator of weakness in this point.

The results associated with question number 38 and to learn more about the implementation of differentiated instruction in classrooms, the researcher asked one open-ended question by asking teachers to give their own definition of differentiated instruction, most of the answers agreed with this definition: "it is the process of tailoring lessons to meet each students' interests, need and strengths". According to the study findings, teachers generally believe that differentiation is a key instructional method, but they encounter numerous obstacles in putting it into reality, including a lack of resources and professional development as well as a lack of expertise and experience in the area. This was obvious when one consider the mean score of each concept of differentiated instruction especially differentiating learning.

Discussion of the Results

Differentiated instruction was regarded by most of the teachers as vital and essential to implement in their classes although it requires some changes, which was considered as difficult to implement. Personal situations and research reports have indicated the effectiveness of differentiation in aiding learning. This was in line with the finding of the present paper.

One of the most important factors influencing a teacher's capacity and competence to differentiate education is the chance to converse and collaborate with other competent teachers.

The number of classroom teachers included in this study is 19 and they are all from Baghdad District. A larger sample size can improve the generalizability of the findings. Second, additional data gathering tools, like observations and pre-post testing, can help to strengthen the generalization. Teachers hold various misconceptions about differentiated

instruction. Tomlinson (2001) emphasized that differentiated instruction is not individualized instruction, chaotic instruction, homogeneous grouping, or tailored instruction. teachers reported that the survey questions helped to clarify their ideas regarding differentiating instruction. Under open-ended questions, they stated that, they will discuss instructional strategies for differentiation and designing lessons based on students'' needs with their colleagues. In order to integrate differentiated instuction in their classes, they can all learn ways for doing so or look for professional development opportunities. Teachers also mentioned the value of discussing differentiated instruction with principals, mentors, instructional coaches, and other teachers.

Pedagogical Recommendation

It is strongly advised that educational leaders, district and institute officials understand the forms of support that teachers need to improve instruction based on the comments from the study's participants. In order to help teachers meet the needs of their academically diverse students, it is essential to provide time and structure for collaboration, especially collaboration focused on institute improvement, better instructional resources and practices, and teachers' input into professional development.

When establishing courses employing differentiated instruction and learning, instructors need to be encouraged to demonstrate appropriate adaptations to diversities in the classroom. Instructors also need to be given support, information, and suggestions linked to the implementation of differentiated instruction effectively.

Future research on the creation and assessment of differentiated instruction interventions may expand our understanding of how to implement differentiated instruction.

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