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Abstract

Differentiated instruction is a teaching philosophy in which faculty members recognize that no two students are identical and that each student can succeed with appropriate guidance. This study assesses the degree of implementing differentiated instruction by the faculty members of the College of Educational Sciences, The World Islamic Science and Education from their perspective. The researcher utilized a survey research method, employing a questionnaire with three dimensions and 28 items to collect data. The questionnaire's validity and reliability were confirmed, and it was distributed to the study population comprising 41 faculty members. The study found that faculty members the College of Educational sciences implement differentiated instruction at a high degree. Additionally, the study identified statistically significant differences in the perceptions of the study sample regarding the degree of implementing differentiated instruction attributed to the variable of academic rank. In light of the results, the study recommends exchanging experiences among faculty members in the College of Educational Sciences and other colleges within the university by facilitating workshops on differentiated instruction.

Introduction

The diversity of university students in the age of technology and online education, as they are the focal point of the educational process, necessitates faculty members to explore diverse teaching methods aimed at improving learning and education outcomes. The concept of differentiated instruction has garnered the attention of many interested in this field. Differentiated instruction is not merely a set of teaching techniques; it is an educational philosophy in which a faculty member acknowledges that there are no two identical students, and each student can succeed with appropriate guidance. Differentiated instruction includes differentiation of content (what is taught and how students access it), differentiation of processes (how the learning process occurs), and differentiation of outputs (how assessment is conducted). Most faculty members excel in their respective fields, but some may not have acquired modern teaching methods or may be new to the academic profession, lacking familiarity with differentiated teaching strategies that consider individual differences among students, taking into account learning styles and theories of multiple intelligences. Chessey (2018) pointed out that many faculty members are outputs of lecture-based education and research as a result of established graduate programs that have perpetuated the culture of lectures in higher education. While emphasizing the importance of lectures in

efficiently imparting a large amount of information to a large number of students simultaneously, Hoidn and Klemencic (2021) noted that lectures are not the sole teaching method in universities. This led to the idea of seeking ways and methods to help faculty members adapt to changing circumstances, especially those brought about by the COVID-19 pandemic.

Research has indicated that the rapid transition to the use of online educational platforms and the challenges that followed prompted faculty members to seriously consider student-centered teaching methods supported by technology (Treve, 2021). Differentiated instruction provides an active learning environment between teachers and students by achieving harmony and alignment between them (Sarzhanova, et al. 2023). It, in turn, contributes to achieving the learning goals of the students and goes beyond that, as students feel happiness and a love for what they are learning (Tomlinson, 2016). Therefore, the knowledge of faculty members regarding differentiated instruction and its strategies can help them understand student-centered techniques, how to share information and knowledge with students, and how to choose appropriate means and methods, as well as effective assessment strategies to achieve the goals of the teaching and learning process. Hence, this study aims to explore the extent to which faculty members at the College of Educational Sciences, The World Islamic Science and Education perceive the use of differentiated instruction strategies. One of the methods used to assess the employing differentiated instruction is by considering it as an integrated system consisting of inputs, processes, and outputs. Inputs represent what is being learned, processes represent how it is learned, and outputs represent how learning is assessed. The researcher relied on this framework when designing the questionnaire directed at faculty members to assess the differentiation of learning content as inputs, differentiated processes as processes, and differentiated assessment methods as outputs. It is expected that Jordanian universities, in general, and the International Islamic University, in particular, will benefit from the study's results to better understand differentiated instruction and its profound impact on the educational and teaching processes. The study also contributes to enriching the knowledge base by providing a theoretical framework, reviewing previous studies, and building a research tool for differentiated instruction. Therefore, the study aimed to answer the following questions:

1- What is the degree of employing differentiated instruction as perceived by the faculty members of the College of Educational Sciences, The World Islamic Science and Education?

2- Are there statistically significant differences at the significance level (p=0.05) in the study sample's assessment of the degree of employing differentiated instruction as perceived by the faculty members of the College of Educational Sciences, The World Islamic Science and Education, attributable to variables such as gender, academic department, and academic rank?

Key Terms of the Study

Differentiated Instruction: Shareefa et al. (2019) defined differentiated instruction as an approach that provides students with opportunities to learn by taking into account their individual differences and needs. Also, Awad (2020) defined it as a modern educational strategy that places the learner at the center, taking into consideration the diversity and variations among students within the same classroom. Procedurally, it is the approach adopted by faculty members to provide learning opportunities for students by considering their individual differences and needs at the College of Educational Sciences, The World Islamic Science and Education.

Review of Literature

Several previous Arab and foreign studies on differentiated instruction were reviewed, and they have been chronologically arranged from the oldest to the most recent. Shareefa et al.'s (2019) study aimed to explore the definition of differentiated instruction as perceived by teachers and to identify the challenges they face in implementing differentiated instruction strategies. The study's sample consisted of 368 regular school teachers and 32 special education teachers. The study concluded that the definition of differentiated instruction is determined by three factors: the use of different strategies, addressing student diversity, and promoting student learning. The study also highlighted the main challenges, including time, resources, knowledge, and class size. Based on this, the study recommended daily monitoring of teachers to improve their performance and conducting similar studies. Al-Nasser's (2021) study aimed to propose a proposed concept for differentiated teaching based on an analytical theoretical approach. The approach relied on investigating educational literature and previous studies. The researcher found that the theories of multiple intelligences and learning styles play a crucial role in differentiated teaching. As a result, the study recommended the development of curricula in Arab countries to be suitable for differentiated teaching, integrating the theories of multiple intelligences and learning styles. In addition, Al-Furaih and Al-Qahtani's (2021) study determined the degree of use of differentiated instruction strategies by teachers of gifted students and the obstacles to their implementation. The study included 54 male teachers and 43 female teachers of gifted students. The study found that the degree of use of differentiated instruction strategies by teachers of gifted students and the obstacles to their implementation were high. As a result, the study recommended encouraging teachers of gifted students at various educational levels to wholeheartedly embrace the philosophy of differentiated instruction in their classrooms. Moreover, Abdul-Sattar's (2021) study investigated the effectiveness of a program based on some differentiated instruction strategies in developing linguistic skills among kindergarten children. The study's sample consisted of 60 male and female children from the first level of kindergarten. The study found statistically significant differences between the pre-test and post-test scores for employing differentiated teaching activities on the linguistic skills scale in favor of the post-test. The study recommended raising awareness among kindergarten teachers about the nature and importance of differentiated instruction and its various educational strategies.

Furthermore, Shakah's study (2022) explored the degree of using modern teaching strategies by first-grade teachers from the perspective of government school principals in Ajloun Governorate. The study included 110 male and female school principals. The study found that the degree of using modern teaching strategies by first-grade teachers, from the perspective of government school principals in Ajloun, was moderate. Consequently, the study recommended conducting training workshops for first-grade teachers to clarify the concept of modern teaching strategies, how to use them, and how to effectively apply this knowledge and skills in their classrooms. Finally, Hassel's (2023) study investigated the impact of teaching physics using differentiated instruction strategies on developing physics problem-solving skills and students' attitudes toward the subject among third-grade high school students in the Directorate of Sanhan, Sanaa Governorate. The study was conducted on a sample consisting of 75 male and female third-grade high school students. The study results demonstrated the effectiveness of differentiated instruction strategies in enhancing physics problem-solving skills and fostering a positive attitude toward physics. The study found a significant impact in favor of both male and female

experimental groups. Consequently, the study recommended developing physics problem-solving skills through curriculum implementation with a direct approach.

The current study benefited from previous research in writing the theoretical framework, research tool, and the selection of the study method in this study (Al-Nasser, 2021; Shakah, 2022; Hassel, 2023). They shared a common focus on differentiated instruction and utilized theories of multiple intelligences, learning styles, and modern teaching strategies. What distinguishes this study from previous research is its exploration of a novel topic that is the degree of employing differentiated instruction by faculty members of the College of Educational Sciences, The World Islamic Science and Education from their perspective. As far as the researcher's best knowledge, no previous study has delved into this subject.

Methods

The study aimed to identify the degree of employing differentiated instruction by faculty members of the College of Educational Sciences, The World Islamic Science and Education, from their perspective. Therefore, it followed a descriptive survey method, most suitable for this type of research, where a questionnaire was employed to collect data from the study's sample. The study included the independent variable (Differentiated Instruction) and the dependent variable (the degree of employing differentiated instruction by the faculty members of the College of Educational Sciences, The World Islamic Science and Education from their perspective). The demographic variables considered in the study were gender, academic department (Curriculum and Instruction Department, Counseling and Psychological Health Department, and Special Education Department), and academic rank (Professor, Associate Professor, Assistant Professor, and Lecturer).

Population and Sample of the Study

The study's population consisted of all the faculty members at the College of Educational Sciences who were actively employed at the International Islamic University for the academic year 2022/2023. The total number of faculty members was 41, distributed among the three departments: Curriculum and Instruction, Counseling and Psychological Health, and Special Education, based on the 2022/2023 academic statistics of the International Islamic University. The comprehensive census method was utilized to select the study's sample. The study instrument was distributed to them electronically via a provided link. Table 1 below illustrates the demographic distribution of the study sample.

Table 1 reveals that approximately 51.2% of the faculty members at the College of Educational Sciences, International Islamic University, are male, while about 48.8% are females. These percentages demonstrate a high level of gender balance among the study participants. Additionally, Table 1 shows that around 39% of the faculty members work in the Curriculum and Instruction Department, 26.8% of the participants are affiliated with the Special Education Department, and 34.1% are part of the Counseling and Psychological Health Department. Regarding their academic ranks, the distribution among the study participants includes 39% as professors, 26.8% as associate professors, and 34.1% as assistant professors.

Table 1. Distribution of the Study Sample Based on Demographic Variables

Variable	Category	Freq.	%
Gender	Male	21	51.2
	Female	20	48.8
	Total	41	100.0
Department	Curriculum and Instruction	16	39.0
	Special Education	11	26.8
	Counseling and Psychological Health	14	34.1
	Total	41	100.0
Academic rank	Professor	16	39.0
	Associate professor	11	26.8
	Assistant professor	14	34.1
	Total	41	100.0

Tool of the Study

The study tool related to the degree of implementing differentiated instruction by the faculty members of the College of Educational Sciences, The World Islamic Science and Education from their perspective was constructed based on a review of relevant previous studies, particularly from the works of Shakah (2022) and Frih and Alqhatani (2021). The study tool consisted of two sections. The first section included demographic information such as gender, academic department, and academic rank. The second section comprised the study questions, consisting of (28) items, all addressing the degree of implementing differentiated instruction by faculty members of the College of Educational Sciences, The World Islamic Science and Education from their perspective. The tool design follows a five-point Likert scale, and it encompasses three domains. The first domain addressed differentiated content, focusing on inputs, i.e., what is taught and how students access it, including eight items. The second domain is related to differentiated procedures, encompassing processes, i.e., how the learning process occurs, with 13 items. The third domain concerned differentiated output, dealing with assessment processes, i.e., how the evaluation process takes place, with seven items.

Validity

The content validity of the tool was verified through expert validation. The preliminary scale was presented to ten experts, and faculty members in the Curriculum and Instruction Department at the International Islamic University and the Educational Management Department at the University of Jordan. They were asked to assess the content validity, relevance of the statements to the scale's purpose, and the clarity of the items. Appropriate modifications were suggested based on their feedback. A criterion of 80% agreement was adopted to assess item validity. Some items were modified for clarity based on the experts' feedback, and a few redundant items were removed. Consequently, the scale was refined to include 28 items distributed across three domains. The researcher considered the experts' opinions and suggested modifications as an indication of the content validity of the study tool, suggesting apparent face validity.

Additionally, construct validity was assessed by calculating the validity correlations for the scale by examining the correlation of each item with the domain to which it belongs, using Pearson's correlation. The results of this validation process are shown in Table 2. The values of the correlation coefficients in Table 2 for the items with their respective domains were all higher than 0.30, which is the minimum acceptable threshold for item discrimination (Pallant, 2005). This indicates that all items effectively contribute to the total score of the scale, and that all scale items measure the same underlying construct, affirming the internal construct validity of the scale.

Table 2. The Correlation Coefficients for Each Item with the Total Score within Its Respective Domain Using the Pearson Correlation Test to Assess the Construct Validity of the Study's Scale

Differentiated content		Differentiated procedures		Differentiated output	
Item	Correlation coefficient with scale	Item	Correlation coefficient with scale	Item	Correlation coefficient with scale
1	.521**	1	.414**	1	.544**
2	.472**	2	.419**	2	.639**
3	.515**	3	.695**	3	.668**
4	.467**	4	.590**	4	.725**
5	.624**	5	.630**	5	.643**
6	.674**	6	.713**	6	.590**
7	.455**	7	.666**	7	.503**
8	.612**	8	.670**		
		9	.646**		
		10	.575**		
		11	.627**		
		12	.542**		
		13	.546**		

Reliability

To assess the reliability of the study instrument, the researcher used Cronbach's Alpha coefficient. The results of the test are presented in Table 3. The values of Cronbach's Alpha reliability coefficients for the sub-dimensions of the scale ranged from 0.873 to 0.889, demonstrating high internal consistency and reliability within these sub-dimensions. Additionally, the overall Cronbach's Alpha coefficient for the total scale was 0.948, which is considered an acceptable level of reliability for this study (Black et al., 2010).

The Likert scale used in the study was structured as follows: Always = 5, Often = 4, Sometimes = 3, Rarely = 2, Never = 1. Based on this scaling, the study calculated the average values as follows:

- The range between the highest value (5) and the lowest value (1) of the response alternatives is 4.
- Since there are three levels (Low, Moderate, and High), the range (4) is divided by the number of levels (3), resulting in a range for each level of approximately 1.33. Using this information, the study

categorized the results as follows: Low Level: 1.00 to 2.33, Moderate Level: 2.34 to 3.67, High Level: 3.68 to 5.00.

Table 2. Reliability Coefficients for the Study Instrument's Items Using Cronbach's Alpha Test

Domains	Items	Cronbach's Alpha
Differentiated content	8	0.879
Differentiated procedures	13	0.873
Differentiated output	7	0.889
Total	28	0.948

Procedures of the Study

The study followed several steps. Firstly, the researcher reviewed previous studies related to the study's topic and utilized some of these studies and measurement tools to construct the domains and items of the questionnaire in a way that aligns with the research questions. The scale was also subjected to peer review by experts and suggested modifications were incorporated based on their feedback. The questionnaire was then distributed electronically to the study participants (faculty members of the College of Educational Sciences, The World Islamic Science and Education). The participants were briefed on various aspects of the study, including its objectives and significance, the importance of data confidentiality, and the use of data solely for scientific research purposes. They were also encouraged to respond to the questionnaire items seriously and accurately. Upon receiving the responses, the study collected and sorted the data, excluding any invalid or incomplete entries. The responses were transformed into raw scores, and the data was entered into a statistical software package, such as SPSS. The appropriate statistical analyses were conducted to answer the study's research questions and extract the results for further discussion.

Data Analysis

Descriptive statistical methods, such as frequencies and percentages, were used to describe the study sample. Pearson Correlation and Cronbach's Alpha were employed to assess the reliability and validity of the study's instrument. To answer the first research question, means and standard deviations were calculated and analyzed. For the second research question, the study utilized a Multiple Analysis of Variance (MANOVA) and Scheffe's test to make multiple comparisons.

Results

The Degree of Implementing Differentiated Instruction by the Faculty Members of the College of Educational Sciences, the World Islamic Science and Education

Table 4 displays the means and standard deviations of the responses from the study sample regarding the level of employing differentiated instruction by the faculty members of the College of Educational Sciences, The World Islamic Science and Education.

Table 4. Means and Standard Deviations of the Responses of the Study Sample Regarding the Degree of Implementing Differentiated Instruction in Descending Order

No	Differentiated instruction	Mean	Std. deviation	Ranking	Degree
1	Differentiated content	4.25	0.47	1	High
2	Differentiated procedures	3.95	0.49	2	High
3	Differentiated output	3.92	0.61	3	High
	Total	4.03	0.48		High

The results in Table 4 show that the means for the degree of implementing differentiated instruction by the faculty members of the College of Educational Sciences, The World Islamic Science and Education ranged between (4.25 and 3.92). The overall application score obtained an arithmetic mean of (4.03), which is a high level. Differentiated content as inputs (what is taught and how students access it) ranked first, achieving the highest mean score of (4.25) with a standard deviation of (0.47), indicating a high level of application. Secondly, differentiated procedures as processes (how the learning process occurs) had an average score of (3.95) and a standard deviation of (0.49), also indicating a high level of application. In the third place, differentiation of outcomes (how the assessment process takes place) received an average score of (3.92) with a standard deviation of (0.61), indicating a high level of application. To understand the sub-item levels for each domain of differentiated instruction application by the faculty members of the College of Educational Sciences, The World Islamic Science and Education, the means and standard deviations were calculated. The following are the results:

Differentiated Content as Inputs (What Is Taught and How Students Access It)

Table 5 displays the means and standard deviations of the responses of the study participants regarding the degree of implementing differentiated content as inputs by the faculty members of the College of Educational Sciences, The World Islamic Science and Education.

Table 5. Means and Standard Deviations of the Responses of the Study Participants Regarding the Degree of Implementing Differentiated Content as Inputs in Descending Order

No.	Item	Mean	Std. deviation	Ranking	Degree
1	I explain to the students what I want them to know and understand and be able to apply	4.51	0.55	1	High
2	I acknowledge the difficulties of learning and its obstacles.	4.51	0.64	1	High
3	I build the curriculum starting with the fundamental concepts of the subject.	4.46	0.60	3	High
4	I understand how students' life situations affect their learning.	4.22	0.79	4	High
5	I use a variety of teaching materials that cater to different learning styles in addition to the textbook.	4.15	0.73	5	High
6	I know the students' interests through the teaching process.	4.15	0.57	5	High

No.	Item	Mean	Std. deviation	Ranking	Degree
7	I understand the students' expectations through the teaching process.	4.02	0.65	7	High
8	I reframe the content based on formative assessment.	4.00	0.59	8	High
	Total	4.25	0.47		High

Table 5 shows that the averages for "Employing differentiated content as inputs" ranged from 4.00 to 4.51. The overall average for the application was 4.25, which is considered high. Two items, Item 1 (I explain to the students what I want them to know and understand and be able to apply") and Item 2 (I acknowledge the difficulties of learning and its obstacles.), received the highest average score, both scoring 4.51, with standard deviations of 0.55 and 0.64, respectively, indicating a high level of application. In third place was Item 1 (I build the curriculum starting with the fundamental concepts of the subject), with an average score of 4.46 and a standard deviation of 0.60, which is considered high. In the last position was Item 8 ("I reframe the content based on formative assessment"), with an average score of 4.00 and a standard deviation of 0.59, which is still in the high range.

Differentiated Procedures as Processes (How the Learning Process Occurs)

Table 6 presents the means and standard deviations of the responses of the study sample regarding the degree of employing differentiated instructional procedures as processes by the faculty members at the College of Educational Sciences, The World Islamic Science and Education.

Table 6. Means and Standard Deviations of the Responses of the Study Sample Regarding the Degree of Employing Differentiated Instructional Procedures as Processes in Descending Order

No.	Item	Mean	Std. deviation	Ranking	Degree
9	I provide practical activities for students to enhance their understanding.	4.24	0.70	1	High
10	I assess students during the lecture to measure their comprehension.	4.24	0.58	1	High
11	I identify students' learning methods and strategies.	4.24	0.62	1	High
12	I vary sources to adapt to students' reading, interests, and abilities.	4.20	0.75	4	High
13	I make sure that each student works to their fullest potential during the lecture.	4.07	0.65	5	High
14	I evaluate students at the end of the lecture to determine their cognitive achievement.	3.98	0.76	6	High
15	I adapt the teaching pace based on individual learner needs.	3.98	0.61	6	High
16	I encourage student participation in designing educational	3.93	0.98	8	High

No.	Item	Mean	Std. deviation	Ranking	Degree
	activities.				
17	I use teaching strategies based on theories such as multiple intelligences to meet the diverse needs of students.	3.93	0.75	8	High
18	I assess students' readiness to adapt to the lesson.	3.80	0.81	10	High
19	I prepare the lecture environment to support a variety of activities.	3.73	0.81	11	High
20	I assess students in advance before teaching them.	3.61	1.02	12	Medium
21	I create groups for students based on their preferred learning methods.	3.39	0.92	13	Medium
	Total	3.95	0.49		High

The results in Table 6 show that the means for "Employing differentiated Procedures as processes" ranged from 3.39 to 4.24. The overall average for the application was 3.95, which is considered high. The following items received the highest average scores: Item 9 (I provide practical activities for students to enhance their understanding), Item 10 (I assess students during the lecture to measure their comprehension), and Item 11 (I identify students' learning methods and strategies), with an average of 4.24, and standard deviations of 0.70, 0.58, and 0.62, respectively. All of these items are considered high in rating. In the last position was Item 21 (I create groups for students based on their preferred learning methods) with an average score of 3.39 and a standard deviation of 0.92, which falls into the medium category.

Differentiation of Outcomes (How the Assessment Process Takes Place)

Table 7 presents the means and standard deviations for the responses of the study participants regarding the degree of employing differentiated output in teaching by the faculty members at the College of Educational Sciences, The World Islamic Science and Education.

Table 7. Means and Standard Deviations for the Responses of the Study Participants Regarding the Degree of Employing Differentiated Output in Descending Order

No.	Item	Mean	Std. deviation	Ranking	Degree
22	I give students tasks related to real-life problems.	4.22	0.79	1	High
23	I use differentiated questions in discussions, assignments, and tasks.	4.17	0.59	2	High
24	I link learning outcomes with students' interests.	4.07	0.72	3	High
25	I provide a variety of assessment tasks.	4.02	0.65	4	High
26	I offer multiple ways of expression in final outputs.	3.83	0.63	5	High
27	I ask each student to complete tasks in their own style, according to their interests and learning style.	3.71	0.87	6	High

No.	Item	Mean	Std. deviation	Ranking	Degree
28	I give students the option to work individually or in small groups.	3.39	1.09	7	Medium
	Total	3.92	0.61		High

Table 7 illustrates that the means for the "Employing differentiated outputs" ranged from 4.22 to 3.39. The application score obtained an overall mean of 3.92, indicating a high level of application. Item 22 (I give students tasks related to real-life problems) secured the top position with a mean score of 4.22 and a standard deviation of 0.79, signifying a high level of application. In the second position was item 23 (I use differentiated questions in discussions, assignments, and tasks.) with a mean score of 4.17 and a standard deviation of 0.59 at a high level. In the last position, item 28 (I give students the option to work individually or in small groups) received a mean score of 3.39 and had a standard deviation of 1.09, indicating a high level of application.

Assessments of the Study Sample Regarding Employing Differentiated Instruction Attributed to Gender, Academic Department, and Academic Rank

Table 8 shows the means and standard deviations to identify differences in the assessments of the study sample regarding the degree of employing differentiated instruction by faculty members at the College of Educational Sciences, International Islamic University, from their perspective. These differences are attributed to gender, academic department, and academic rank.

Table 8. Means and standard deviations to Identify Differences in the Assessments of the Study Sample Regarding the Degree of Employing Differentiated Instruction According to Gender, Academic Department, and Academic Rank

Differentiation	Variable	No.	Mean	Std. deviation
Differentiated content	Male	21	4.37	0.45
	Female	20	4.13	0.47
Differentiated procedures	Male	21	4.05	0.53
	Female	20	3.85	0.43
Differentiated outputs	Male	21	4.05	0.60
	Female	20	3.78	0.59
Total	Male	21	4.14	0.49
	Female	20	3.91	0.44
Differentiated content	Curriculum and Instruction	16	4.40	0.49
	Special Education	11	4.39	0.36
	Counseling and Psychological Health	14	3.98	0.45
	Total	41	4.25	0.47
Differentiated procedures	Curriculum and Instruction	16	4.12	0.62
	Special Education	11	3.90	0.39
	Counseling and Psychological Health	14	3.79	0.32

Differentiation	Variable	No.	Mean	Std. deviation
	Total	41	3.95	0.49
Differentiated outputs	Curriculum and Instruction	16	4.08	0.73
	Special Education	11	3.87	0.54
	Counseling and Psychological Health	14	3.77	0.48
	Total	41	3.92	0.61
Total	Curriculum and Instruction	16	4.19	0.59
	Special Education	11	4.03	0.36
	Counseling and Psychological Health	14	3.84	0.36
	Total	41	4.03	0.48
Differentiated content	Professor	11	4.51	0.38
	Associate professor	10	4.45	0.46
	Assistant professor	20	4.01	0.42
	Total	41	4.25	0.47
Differentiated procedures	Professor	11	4.15	0.44
	Associate professor	10	4.15	0.68
	Assistant professor	20	3.74	0.31
	Total	41	3.95	0.49
Differentiated outputs	Professor	11	4.09	0.59
	Associate professor	10	4.07	0.73
	Assistant professor	20	3.74	0.52
	Total	41	3.92	0.61
Total	Professor	11	4.24	0.40
	Associate professor	10	4.21	0.61
	Assistant professor	20	3.82	0.36
	Total	41	4.03	0.48

The differences in means between the assessments of the study sample regarding the degree of employing differentiated instruction by faculty members at the College of Educational Sciences, International Islamic University, from their perspective, attributed to gender, academic department, and academic rank, are evident in Table 8. To confirm the significance of these differences, a Multivariate Analysis of Variance (MANOVA) was conducted, and the results are shown in Table 9. The results in Table 9 indicate that the statistical values (F) were (0.453, 0.045, 0.469, 0.261) for differentiated content, differentiated procedures, differentiated output, and overall assessment, respectively. These values were attributed to the gender variable and were not statistically significant at the 0.05 significance level. Additionally, the results in Table 9 show that the statistical values (F) were (2.672, 0.938, 0.460, 1.050) for differentiated content, differentiated procedures, differentiated output, and overall assessment, respectively. These values were attributed to the academic department variable and were not statistically significant at the 0.05 significance level. Furthermore, the results indicate that the statistical value (F) was 3.945 for differentiated content, which was attributed to the academic rank variable. This value was statistically significant at the 0.05 significance level.

Table 9. Multivariate Analysis of Variance (MANOVA) to Examine the Significance of Differences in the Assessments of the Study Sample Regarding the Degree of Employing Differentiated Instruction According to Gender, Department, and Academic Rank

Source	Dependent variables	Sum of squares	df	Mean of squares	F	Sig.
Gender	Differentiated content	.074	1	.074	.453	.505
	Differentiated procedures	.010	1	.010	.045	.833
	Differentiated output	.172	1	.172	.469	.498
	Total	.052	1	.052	.261	.613
Department	Differentiated content	.876	2	.438	2.672	.083
	Differentiated procedures	.398	2	.199	.938	.401
	Differentiated output	.337	2	.169	.460	.635
	Total	.415	2	.207	1.050	.361
Academic rank	Differentiated content	1.293	2	.646	3.945	*.028
	Differentiated procedures	1.165	2	.583	2.747	.078
	Differentiated output	.599	2	.299	.816	.450
	Total	1.038	2	.519	2.629	.086

* Sig. at (0.05) or less.

To identify the source of the differences, Scheffé's test was used for multiple comparisons, and the results are shown in the following Table 10. From the results presented in Table 9, it is evident that the statistical values (F) were (2.747, 0.816, 2.629) for differentiated procedures, differentiated output, and overall assessment, respectively. These values were attributed to the academic rank variable and were not statistically significant at the 0.05 significance level. Furthermore, when examining the differences between the means, if any, the statistical significance level was not reached.

Table 10. Scheffé's Test for Multiple Comparisons to Determine the Source of the Differences in Differentiated Content Attributed to the Academic Rank Variable

Academic rank (I)	Academic rank (J)	Mean difference (I-J)	Sig.
Professor	Associate professor	.06136	.946
	Assistant professor	.49886*	.012
Associate professor	Professor	-.06136	.946
	Assistant professor	.43750*	.037
Assistant professor	Professor	-.49886*	.012
	Associate professor	-.43750*	.037

*Sig. at (0.05).

The results in Table 10 indicate that the source of differences in differentiated content was the highest among the faculty members of the College of Educational Sciences, The World Islamic Science and Education who hold the academic rank of "Professor," and subsequently in favor of faculty members with the academic rank of "Associate Professor." This suggests that professors showed higher levels of differentiated content compared to other

academic ranks, and the trend continued with associate professors having the next highest level of differentiated content. It is important to note that these results can be valuable for understanding the role of academic rank in differentiated content among faculty members.

Discussion

The results from the first question show that the average scores for the degree of employing differentiated instruction by faculty members of the College of Educational Sciences, The World Islamic Science and Education ranged from 4.25 to 3.92. These results indicate that, from their perspective, all faculty members have rated the employing differentiated instruction as high. The researcher attributes these findings to the significant emphasis placed by faculty members on staying updated with the latest topics related to differentiated instruction and modern teaching strategies. Additionally, faculty members seem to consider various learning styles and their relationship with the theory of multiple intelligences, as it has a noticeable impact on the cognitive and skill performance levels of students. These results partially align with a study conducted by Al-Furaih and Al-Qahtani (2021), which revealed that teachers' use of differentiated instruction strategies for gifted students and the obstacles to its implementation were rated significantly. However, there is some discrepancy with another study by Shakah (2022), which found that the degree of utilization of modern teaching strategies by teachers of the first three grades, from the perspective of school principals in the government schools in Ajloun Governorate, was rated as moderate. It is important to consider that differences in results may arise due to variations in the study's scope, sample size, or regional differences.

The results of the second question indicate significant differences in the average scores for the degree of employing differentiated instruction among faculty members of the College of Educational Sciences, The World Islamic Science and Education based on the variables of gender, academic department, and academic rank. Regarding the variable of gender, the results suggest that there is no significant difference between male and female faculty members in their interest and performance in the area of differentiated instruction. Both male and female faculty members are equally committed to delivering the highest quality of education to their students, striving to reach the best educational levels. Concerning the academic department variable, it is evident that all faculty members, regardless of their academic department, are equally dedicated to enhancing their respective academic departments. They make efforts to promote excellence and innovation among their students through the implementation of effective teaching strategies within their departments. This demonstrates a shared commitment to the success of the overall educational process within the College. As for the academic rank variable, the results suggest that faculty members holding the rank of "Professor" exhibited a higher degree of employing differentiated instruction compared to those with the rank of "Associate Professor." This implies that faculty members with the "Professor" rank have a higher level of experience and expertise, which is correlated with a higher degree of employing differentiated instruction. In contrast, "Associate Professors" may have less experience and exposure to modern teaching strategies related to differentiated instruction. It is important to note that no specific studies are referenced in this context, and these findings are specific to the study conducted at the College of Educational Sciences, The World Islamic Science and Education. These results provide valuable insights into the factors that influence the employment of differentiated instruction among faculty members.

Conclusion

The study assessed the degree of implementing differentiated instruction by the faculty members of the College of Educational Sciences, The World Islamic Science and Education from their perspective. The results indicated that the degree of implementing differentiated instruction by the faculty members of the College of Educational Sciences, The World Islamic Science and Education, as per their views, was high. Furthermore, there were statistically significant differences in the study sample's assessments of the degree of implementing differentiated instruction by faculty members of the College of Educational Sciences, The World Islamic Science and Education, attributed to the academic rank variable. These results emphasize the role of differentiated instruction in improving the quality of education and the learning experience for students. The study was specifically focused on evaluating the degree of implementing differentiated instruction among the faculty members of the College of Educational Sciences, The World Islamic Science and Education during the academic year 2022/2023. Based on the study's results, it is recommended to promote the exchange of experiences among faculty members in the College of Educational Sciences and other colleges within the university through the activation of training workshops on differentiated instruction. It is also advised to encourage educational institutions and curriculum developers to integrate strategies for differentiated instruction into educational curricula and prioritize their implementation to achieve continuous learning. Additionally, there is a need to continuously engage faculty members in the College of Educational Sciences in modern teaching strategies related to differentiated instruction and the consideration of individual differences. Finally, the researcher recommends conducting diverse studies, such as experimental research to further explore the impact of differentiated instruction on students' educational levels.

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