Knowledge and familiarity Level of IAU faculty members with strategies and methods of teaching

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Abstract

The study aimed to identify knowledge level of IAU *faculty members 'at the Deanship of Preparatory year with teaching strategies and methods. Survey descriptive design was used. A multiple-choice test was applied on a random sample consisted of (101) faculty members. The findings showed that the Faculty Members' Knowledge of Teaching was generally moderate, were reported. High levels of teacher centered strategies were found; as lecturing and recitation ranked first. Students centered strategies ranked second with moderate levels; as field visit was the highest. Teacher and student collaborative strategies were third with moderate knowledge; as laboratory work ranked first. There were no statistically significant differences due to gender and teaching universities experience. The findings showed that faculty members at self- development and basic sciences reported high levels of collaborative instructional methods knowledge and general instructional methods compared to faculty members at other departments. The results of the study indicated that faculty members at English department showed lower levels of student- centered instructional strategies compared to their colleagues in the other four departments. Faculty members of scientific highest levels reported high levels of teachers- centered instructional strategies and collaborative strategies more than their colleagues from bachelor's degree. In light of results, some recommendations were provided.*

Keywords

Perception, Instructional Methods, Faculty Members, Academic Department, Preparatory Year Department, kingdom of Saudi Arabia..

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Introduction

As a result of the continuing technological development that has changed the reality of life in all its domains, one of them is the education sector. Because of technological development that were misperceptions in some conceptual which reflected on the role of Higher education institutions in providing efficient learning outcomes to meet the needs of society and solving its problems. Zegaoua (2017); Hamza (2015) and Damanhori (2013) reported that there was widening gap between graduated students and labor market polarization in Saudi Arabia. This requiring for the use of knowledge economics and strategies which improve the quality of education and teaching strategies that help universities to perform their role, as an educational institution that distinguish countries from each other scientifically and increases competition between them in this domain. In addition, learning outcomes is one of the criteria that comparing between universities. This requires ensuring efficiency among faculty members' knowledge of teaching methods and strategies and reflecting their impact on reality learning outcomes (Ouanouki & Hassan, 2018).

University Professors are one of the most important elements of teaching learning process. There are three main roles for the University Professors (teaching, research and community service). The interaction of three tasks together improves the core role which is teaching. The role of a University professor is no longer limited to the transfer of information. Knowledge is available in the information and communication revolution. It has become difficult to imagine a successful university education based on lecturing. This

creates the need to be familiar with effective teaching strategies that are being achieved required outcomes then employ it in teaching learning process (Al-Smadi, 2010; Ismail, 2009).

By analyzing many sources that are related to teaching learning outcomes such as: Saudi Vision (2030), Strategic Plan for Imam Abdulrahman Bin Faisal University, National Center for Academic Accreditation and evaluation and 21st century skills, the most recourses to improve learning outcomes were focusing on: specialized knowledge, communication skills, critical and creative thinking, emotional intelligence, problem solving, leadership and decision making, self-learning, social responsibility and technological skills. The role of faculty members is not concerned on learning but also it is concerned on acquisition of skills, which requires higher abilities and skills to achieve added value. According to John Hattie reported that external elements have an impact on the quality of learning outcomes such as advances curricula, nutrient environment, classes with small number of students. But the most important elements of teaching learning process is teacher (Al-Motawa, 2018; Al-Masaeed, 2017; Hamza, 2015; National Center for Academic Accreditation and evaluation, 2019; Saudi vision, 2016; University Strategic Plan 2018-2025).

Gharbi and Hafidhi (2012) emphasized on the most prominent competences of the University Professors in teaching learning process: being aware on goals of teaching in general and of the University's objectives in particular, improve positive communications skills among students, self-assessment for individual's behavior, develop a learning environment, Integrating research findings with teaching and employing technical requirement in learning process and evaluating.

A priority for Higher Education Institutions has become the attention of the academic development for faculty members as Saudi Arabia which has shown interest academic development of faculty members, according to Criteria of National Center for Academic Accreditation and Evaluation (NCAAA).

At Imam Abdulrahman Bin Faisal University a charter stated" Professional *Ethics*, and *Responsibilities, (2019)*" The need to enhance academic performance of faculty member. Promotion is a requirement of academic development teaching learning process so faculty member should be aware of modern teaching strategies to get a promotion.

In light of preparatory year department, The Academic Development Unit of the Agency of the General for Academic Affairs was established since (2012) in order to enhance teaching skills, through making training courses in teaching learning process or through training bodies such as: Deanship of University Education Development, Deanship of Quality and Deanship of e- learning.

With regard to previous studies that studied the faculty members' knowledge of teaching methods and strategies, Duchovicova and Kolenakova (2020) examined the extent to which secondary teachers were employed in Slovak Republic of teaching strategies that develop critical thinking skills. The findings showed that Apply strategies for developing critical thinking skills were moderate. The results also showed the most commonly skills used were (note-taking, summarizing, categorizing and recognition of relationships) and the least commonly skills used were (solving problems, deduction, debate and evaluation). Alhirtani (2020) identified how modern teaching methods are employed in Higher education for Arabic Language professors at Premier University. The findings revealed that lecturers used modern teaching methods at classes highly (83.6%) while at laboratory were not commonly used. Danner and Musa (2019) examined the strategies and methods for teaching Shakespeare's plays at Higher-Secondary School in Edo state. The findings showed that the most commonly traditional methods used were (lecturing and discussion). While teaching methods related on performance and technology were not commonly used. There were no statistically significant differences due to gender, training and experience.

Al-Orabi (2018) examined the reality that Islamic education teachers are teaching reflective thinking skills at Makkah. The findings showed that there were statistically significant differences due to experience, in favor of academic qualification. Balliu and Belshi (2017) examined the use of modern and traditional teaching methods among primary teachers in Albania. The results showed that (48%) teachers were used modern teaching methods. The results also showed that the dominate method was traditional teaching methods as teachers' believes that students achieve higher grades.

Zarqan (2016) examined the effect of training faculty members at Algerian University according to quality standers. The findings showed that the faculty members' assessment of themselves in teaching learning process were low. Muhammad, (2016) identified quality standers of faculty members In the Department of History at University of Diyala in Iraq. The results showed that faculty

members didn't use quality standers of teaching learning process and their performance in employing modern teaching methods was low. Bin-Omar (2016) examined teaching methods used at Faculty of Economics. The findings showed that faculty members used traditional teaching methods as lecturing, dissection and brainstorm.

Bani Yaseen (2016) examined the level of using strategies for teaching Arabic by faculty members at the Jordanian universities. The findings showed that in the higher level of teaching strategies used by faculty members, lecturing and self-learning were high; reciprocal strategy were moderate and self-accountability and mini-teaching were low.

While Al-Omary (2015) examined how physics teachers using educational activities with teaching strategies based on models. The findings showed that there were statistically significant differences due to gender, qualification and teachers with postgraduate qualification in favor of females, while there were no statistically significant differences due to experience. Al-Shanqiti and Falak (2014) examined the level of using Inter-reciprocal teaching strategies for teaching Arabic by faculty members at Northern Border University in Saudi Arabia. The findings showed that using Inter-reciprocal teaching strategies were high. The findings also showed that that there were no statistically significant differences due to gender and experience. Al-Smadi (2013) evaluated the quality of teaching strategies at Najran University in Saudi Arabia. The results revealed that there were statistically significant differences due to gender, qualification and experience in favor of females, Doctorate, whom greatest experience.

While Al-Omari (2012) examined mathematics teachers and teachers' candidates' perception level of problem-solving strategies. The findings showed that the level of using problem-solving strategies by teachers were low. The findings also showed that that there were statistically significant differences in favor of which greatest experience, while there were no statistically significant differences in favor of training-sessions. Strand and Bender (2011) examined how well teachers of physical education using problem-solving strategies. The findings revealed that most teachers were used problem-solving strategies and they used it in appropriate situations.

From the above, all studies used descriptive survey design. The sample of the studies was faculty members or teachers. The sample consisted of survey except Al-Omari (2012) used test. While Duchovicova and Kolenakova (2020); Al-Orabi (2018), and Balliu and Belshi (2017) used observation.

After reviewing the previous studies, the current study was distinguished from other by:

1- The current study focused on faculty members' knowledge of teaching methods and strategies, while other studies examined the status of teaching methods in different subject, with a few exceptions focused on the subject (Knowledge) which is the study of Al-Omari (2012) examined being aware on teaching strategies for problem-solving, while the study of Strand and Bender (2011) examined the being aware on teaching strategies for physical education which is different from the current study.
2- The current study focused on faculty members in preparatory year (First year) who are responsible of filling the gap between General-Education and University-Education. That was the justification for the establishment of the preparatory year; this requires that being aware on special teaching strategies and skills and which are not mentioned in the previous studies. It focused on faculty members in other studies or on school teachers.
3- The current study employed Test, which is the most appropriate for its objectives, and the most powerful to evaluate faculty members' knowledge level of teaching methods and strategies, which is agree with the study of Al-Omari (2012), while previous studies used survey or observation.

Problem of the Study

In light of globalization and competitiveness the world has witnessed recently, the focus on faculty member's teaching performance quality has increased as one of the basic standards used for controlling the quality of teaching. It has become clear that the availability of teaching competencies among faculty members is the key factor for achieving educational outcomes in general.

In spite of the great efforts made by universities worldwide to develop faculty members' performance, the findings of many studies indicated the presence of a general weakness in the field of knowledge and use of teaching strategies, such as (Schmidt, Hodg & Tschida, 2013; Bahrani & Asakreh, 2011; Bani Yaseen, 2016; Lee, Yoo & You, 2009).

At the domestic level, and despite of the efforts made by Saudi universities in general to develop faculty members' performance, as well as offering training programs in the field of teaching through many bodies, such as the university's Vice Rectorate for Educational and Academic Affairs, or the Deanship of Skills Development, the results of several studies, such as (Albeshr, 2019; Al-Freih, 2015; Al-Samadi, 2013), indicated the weakness of the teaching skills among faculty members.

At the level of Imam Abdulrahman Bin Faisal University in general and the Deanship of the Preparatory Year in particular, there are many bodies concerned with enhancing faculty members' competencies, such as the Deanship of Academic Development, Deanship of Library Affairs, Deanship of E-Learning, Deanship of Quality, and the Academic Development Unit. At the researchers' limited knowledge, there is a paucity in he studies examining faculty members' knowledge of teaching methods and strategies, especially within the environment of the Deanship of Preparatory Year, which contains the largest number of university students, and thus the largest number of faculty members. Accordingly, the current study attempts to answer the following main question:

- **What is the status of faculty members' knowledge of teaching strategies and methods at the Deanship of Preparatory Year in Imam Abdulrahman bin Faisal University?**

The main question is divided into the following sub-questions:

1. What is the level of faculty members' knowledge of teaching strategies and methods at the Deanship of Preparatory Year?
2. Are there a statistically significance differences ($\alpha = 0.05$) in the level of faculty members' knowledge of teaching strategies and methods at the Deanship of Preparatory Year varies in light of gender?
3. Are there a statistically significance differences ($\alpha = 0.05$) in the level of faculty members' knowledge of teaching strategies and methods at the Deanship of Preparatory Year varies in light of academic department?
4. Are there a statistically significance differences ($\alpha = 0.05$) in the level of faculty members' knowledge of teaching strategies and methods at the Deanship of Preparatory Year varies in light of academic experience?
5. Are there a statistically significance differences ($\alpha = 0.05$) in the level of faculty members' knowledge of teaching strategies and methods at the Deanship of Preparatory Year varies in light of degree?

Objectives of the study

The current study aimed to identify:

- The level of faculty members' knowledge of teaching strategies and methods at the Deanship of Preparatory Year in Imam Abdulrahman bin Faisal University.
- The extent to which the knowledge of teaching strategies and methods vary in light of gender, academic department, academic experience and academic rank variables.

Study Significance

First: The theoretical significance of the study stems from:

- The importance of the examined theme that is considered an introduction and a pre-requisite for the actual practice.
- The addressed category, that is considered the wide range of faculty members teaching more than (5800) preparatory year students are absorbed after high school in order to prepare them to be familiar with the academic life and to select a major. Therefore, there is a need for skilled teachers to achieve these objectives.

Second: The practical significance:

- Stakeholders at Imam Abdul Rahman bin Faisal University in general, and the Deanship of Preparatory Year in particular, may take advantage of study's results in order to enhance their teaching practices, and therefore achieving the intended outcomes of learning.
- This study constitutes the basis for further studies addressing the assessment of faculty members' teaching practices in classrooms.

Limitations of the study

- **Thematic Limitations**: The study was limited to investigating the level of faculty members' knowledge of academic teaching strategies and methods at the Deanship of Preparatory, in light of gender, academic department, academic experience and academic rank variables.
- **Spatial Limitations**: The study was confined to the Deanship of Preparatory Year at Imam Abdul Rahman bin Faisal University, including its branches Al-Rakah, Al-Rayyan Complex, Dammam Community College, and Community College - Qatif.

- **Time Limitations**: The second semester of (2019) academic year.

Procedural Definitions

- **Preparatory Year**: It is an academic year of two semesters (some universities add a summer semester), during which students acquire several cognitive, educational and social skills that help them integrate more fully into the academic life later (Salem, 2011)
- **Teaching strategy**: It is a set of correlated, sequential and organized procedures and steps undertaken by a faculty member and his students to achieve educational objectives using a set of teaching approaches and methods, whereas the term Strategy is more comprehensive than the two terms "Approach and Method".
- **Teaching Method**: It is the general approach followed by faculty members to achieve specific educational objectives, such as: conversation, discussion, story, and inquiry...
- **Faculty Members**: They are the professors who teach courses at the Deanship of Preparatory Year, and hold the qualifications: Professor, Associate Professor, Assistant Professor, Lecturer or Teaching Assistant.

Procedures

Study Methodology

The study followed the Survey Descriptive design, due to being the most appropriate method to achieve the objectives of the study.

Study Population & Sample

The population of the study consisted of all faculty members at the Deanship of Preparatory Year in Imam Abdulrahman Bin Faisal University / KSA, totaling (347) faculty member during the second semester of the academic year 2019, of whom (150) faculty members selected using clustered, random sampling, accounted for (43.2%) of the population size. Only (106) completed the questionnaires, and (5) questionnaires were eliminated because of missing data. Thus, the final number of study sample is (101) faculty members, accounted for (67.3%) of original sample size. Table (1) shows the distribution of the sample according to study variables.

Table (1): The distribution of study sample according to their variables

Variables	Categories	No.	%
Gender	Male	50	%49.5
	Female	51	%50.5
	Total	101	%100
Academic Department	Self-Development	23	%22.8
	Basis Sciences	24	%23.7
	Computer	10	%9.9
	English Language	32	%31.7
	Islamic Studies	12	%11.9
	Total	101	%100
Academic Experience	Less than 5 years	31	%30.7
	Between 5 – 10 years	36	%35.6
	More than 10 years	34	%33.7
	Total	101	%100.0
Degree	Bachelor Degree	10	%9.9
	Master Degree	19	%18.8
	Ph.D.	72	%71.3
	Total	101	%100

Study Instrument

The instrument of the study (multiple-choice test) was developed through reviewing many studies and related literature, such as the Bani Yaseen (2016), Al-Tuwayji (2016), Al-Omari (2012), Al- Bashaireh and his colleague (2005), and Strand and Bandar (2011) studies. It consisted of two parts, First: contained the demographic information of study sample, and second: contained (20) test situations presented as multiple choice tests, and constructed as practical teaching situations in different majors, in which the faculty member appears performing a strategy or a specific teaching method, followed by a set of four distractors and alternatives. The choice reveals the knowledge level about teaching strategies and

methods, which were divided into three domains. Table (2) shows the distribution of the (20) strategies according to their numbers in the study questioner.

Table (2): The distribution of the strategies according to their domains

Teacher-centered Strategies	Collaborative strategies between teacher and students		Student-centered Strategies
1- Lecturing	3- Guided Inquiry	11- Inference	7- Project-Based Learning
2- Means-supported lecturing	4- Numbered Heads Together	12- Deduction	8- Field Visits
15- Story	5- Think-Pair-Share	14- Problem solving	9- E-Learning
16- Demonstration	6- Group learning	18- Inductive	13- Educational Games
----------	10- Brain storming	20- Laboratory	17- Role Playing
----------	----------	----------	19- Programed Learning

Instrument Validity

The instrument was given to (10) experts specialized in curricula and teaching methods in Saudi and Jordanian universities. An agreement standard (70%) of experts' panel was approved, to take their remarks into account, which were about the rewording of some items. After the amendments, the final format of study questionnaire consisted of (20) test situation.

Instrument Reliability

The instrument was applied on a pilot sample, consisting of (30) faculty members at the Deanship of Preparatory Year selected out of the original sample. Reliability coefficient was verified using Coderrichardsson equation -20 (K,R-20). The reliability coefficients of the study instrument and its domains shown in Table (3).

Table (3): The reliability coefficients of the study instrument and its three domains

Domain	Reliability Coefficient
Teacher-centered Strategies	0.829
Collaborative strategies between teacher and students	0.847
Student-centered Strategies	0.796
Instrument (Total score)	0.881

The results shown in Table (3) indicate that the reliability coefficients of study instrument and its three domains were high, as the total score of the instrument's reliability coefficient was (0.881), and the score of the three domains' reliability coefficient was, respectively, (0.829), (0.847) and (0.796). These scores are considered adequate for the study purposes.

Statistical Analysis

The following statistical analyses were used to answer the study questions:

1- Frequencies and percentages were used to answer the first question, and the quintet Likert scale which is (Very high = 85.1%-100%, high = 70.1%-85%, moderate = 50.1%-70%, low = 30.1%-50%, very low = 0%-30%) were used for correction.
2- Means and standard deviations for the responses of the study sample were calculated to answer the second question. Also, T-Test for independent variables was used to reveal the differences in the means scores in light of gender.
3- To answer the third, fourth and fifth question, means and standard deviations for responses of the study sample on the study instrument were calculated, and One-Way ANOVA to reveal the differences in the means scores in light of academic department, academic experience and degree, in addition to Post Hoc Comparisons to define the source of the differences.

Results and Discussion

Results of the First Question: "What is the level of faculty members' knowledge of teaching strategies and methods at the Deanship of Preparatory Year?"

To answer this question, frequencies and percentages were calculated as shown in table (4).

Table (4): Frequencies and Percentages for the Level of Faculty Members' Knowledge of Teaching Strategies and Methods Ranged Condescendingly

Domain	No.	Teaching Strategies and Methods	Frequencies	%	level
Teacher-centered Strategies	1	Lecturing	86	%85.1	Very High
	15	Story	84	%83.2	High
	16	Demonstration	74	%73.3	High
	2	Means-supported lecturing	68	%67.3	Moderate
	Total of Frequencies and Percentages for the Domain		**312**	**77.2%**	**High**
Collaborative strategies between teacher and students	20	Laboratory	80	%79.2	High
	6	Group learning	68	%67.3	Moderate
	14	Problem solving	67	%66.3	Moderate
	5	Think-Pair-Share	65	%64.4	Moderate
	10	Brain storming	65	%64.4	Moderate
	11	Inference	63	%62.4	Moderate
	12	Deduction	61	%60.4	Moderate
	4	Numbered Heads Together	60	%59.4	Moderate
	3	Guided Inquiry	49	%48.5	Low
	18	Inductive	47	%46.5	Low
	Total of Frequencies and Percentages for the Domain		**625**	**61.9%**	**Moderate**
Student-centered Strategies	8	Field Visits	82	%81.2	High
	13	Educational Games	77	%76.2	High
	17	Role Playing	72	%71.3	High
	9	E-Learning	69	%68.3	Moderate
	7	Project-Based Learning	64	%63.4	Moderate
	19	Programed Learning	51	%50.5	Moderate
	Total of Frequencies and Percentages for the Domain		**415**	**68.5%**	**Moderate**
Total of Frequencies and Percentages for the Teaching Strategies and Methods			**1352**	**66.9%**	**Moderate**

Table (4) shows that faculty members' knowledge level was moderate, as the percent of faculty members' knowledge levels of teaching strategies and methods was (66.9%). This result could be attributed to the large number of faculty members, diversity of specializations, and the academic departments. Also, it can be attributed to the nature of faculty members training in the deanship of preparatory year, which is predominantly by the theoretical aspects due to lack of training time which is usually a two-hour workshop, in addition to the poor system of monitoring and evaluation to ensure that the training effect is achieved in the classrooms. Furthermore, the nature of the courses, physical environment, availability of equipment, number of students in the classrooms, and the personal convictions of faculty members direct them to the familiarity with some strategies and methods that are appropriate with the reality more than the others.

The result is consistent with the result of Duchovicova and Kolenakova (2020), Al-Orabi (2018), and Al-Omary (2015) studies which showed that the level of knowledge or the use of teaching strategies was moderate, while it differs from Alhirtani (2020) study which showed that the level of knowledge was high, also it differs from the results of Balliu and Belshi (2017), Zarqan (2016), Muhammad (2016), and Al-Omari (2012) studies which showed that the level of teachers knowledge or use for modern teaching strategies was low.

As for faculty members' knowledge with the teaching strategies and methods in the three domains, teacher-centered strategies ranked first with a high level of knowledge and a percent of (77.2%), where lecturing method ranked first in this domain with a percent of (85.1%), and a very high level of knowledge, while means-supported lecturing method ranked last with a percent of (67.3%), and a moderate level of knowledge. These results were expected and logical as these strategies are related to the traditional approach of teaching, which is based on the conception of lecturing which teachers still cling to due to its ease and suitability for many subjects, and for the number of students. Means-supported lecturing may have been ranked last because it requires lots of time and effort in preparation and implementation compared to the other methods in the same field.

student-centered strategies ranked second with a moderate level of knowledge and a percent of (68.5%), where field visits method ranked first in this domain with a percent of (81.2%), and a high level of knowledge, while programmed learning method ranked last with a percent of (50.5%), and a moderate level of knowledge. As for field visits method which was ranked first, can be attributed to the fact that it is a familiar method that is frequently employed in the preparatory year environment, in order to prepare students and train them to select their university specialization; as they are required to visit the labor market institutions. As for programmed learning method which is ranked last, it can be attributed to the fact that this teaching method is unfamiliar for lots of non-specialists, and it requires a high levels of skills in planning, implementation and evaluation phases.

While collaborative strategies between teacher and students ranked third with a moderate level of knowledge and a percent of (61.9%), where laboratory method ranked first in this domain with a percent of (79.2%), and a high level of knowledge, while Inductive method ranked last with a percent of (46.5%), and a low level of knowledge. This result can be attributed to the fact that laboratory method is a common teaching method in the preparatory year, where lecturers use laboratories in teaching the scientific subjects, computer and languages ..., and this lead to the increase in their knowledge level, while Inductive method is one of the uncommon teaching methods that requires a high levels of skills for lecturers and student to implement it.

This result is consistent with the result of presented in the studies of Alhirtani (2020), Danner and Musa (2019), Bin-Omar (2016), Bani Yaseen (2016), and Muhammed (2016), as they found that lecturing was the most used strategy, at the same time it differs from these studies in the ranking of the other teaching strategies and methods, which can be attributed to the difference in the objectives, population and instrument between the current study and the previous ones.

Results of the Second Question: "Are there a statistically significance differences (α = 0.05) in the level of faculty members' knowledge of teaching strategies and methods at the Deanship of Preparatory Year varies in light of gender?"

Table (5): T-Test Results for the Significance Differences in Faculty Members Knowledge of Teaching Strategies and Methods in light of Gender

Domains	Gender	Number	Means	Std. Devi	T	df	Sig.
Teacher-centered Strategies	Male	50	3.24	0.77	1.671	99	0.098
	Female	51	2.94	1.01			
Collaborative strategies between teacher and students	Male	50	6.32	1.79	0.759	99	0.449
	Female	51	6.06	1.67			
Student-centered Strategies	Male	50	3.92	1.28	1.342-	99	0.183
	Female	51	4.29	1.51			
Total	Male	50	13.48	2.70	0.337	99	0.737
	Female	51	13.29	2.85			

Table (5) shows that the means scores reviled a significance differences between the responses of faculty members about their knowledge level of teaching strategies and methods. T-Test for independent variables was calculated to define the differences significance between the responses in light of gender. The results showed that there are no statistically significance differences in light of gender on the three domains and the total score (T = 0.337, α ≥ 0.05), as for teacher-centered

strategies it was (T = 1.671, α ≥ 0.05), while collaborative strategies between teacher and students (T = 0.759, α ≥ 0.05), and for student centered strategies (T = -1.342, α ≥ 0.05).

This can be attributed to the similarity in faculty members' characteristics at the deanship of preparatory year; as they subject to specific criteria in selection for employment, they are also subject to the same procedures and criteria related to the quality, nature and number of the training programs for which they are nominated. Furthermore, the deanship of preparatory year is the only college in the university that undergone and completed the requirements of "QASD" developmental program, which is a program that has lasted for more than two years, and it aimed to achieve internal quality systems by developing the daily practices related to the teaching and learning processes and the professional growth of lecturers, and this have led to the similarity in the knowledge of the teaching strategies and methods between both gender (Office of the Vice President of Imam Abdul Rahman bin Faisal University for Academic Affairs, 2020).

This result is consistent with the result of the studies conducted by Danner and Musa (2019), and Al-Shanqiti and Falak (2014), which showed that there are no statistically significant differences in the knowledge level or the use of the teaching method in light of gender, while this result differs from the result of Al-Omary (2015) and Al-Smadi (2013) studies which showed that there are a statistically significant differences in favor of females.

Results of the Third Question: "Are there a statistically significance differences (α = 0.05) in the level of faculty members' knowledge of teaching strategies and methods at the Deanship of Preparatory Year varies in light of academic department?"

Table (6): One-Way ANOVA Results for the Significance Differences in Faculty Members Knowledge of Teaching Strategies and Methods in light of Academic Department

Domains	Source of Variance	Sum of Squares	df	Means Squares	F	Sig.
Teacher-centered Strategies (Score of 4)	Between Groups	5.370	4	1.343	1.678	0.161
	Within Groups	76.828	96	0.800		
	Total	82.198	100			
Collaborative strategies between teacher and students (Score of 10)	Between Groups	86.817	4	21.704	9.893	*0.000
	Within Groups	210.609	96	2.194		
	Total	297.426	100			
Student-centered Strategies (Score of 6)	Between Groups	53.375	4	13.344	8.869	*0.000
	Within Groups	144.427	96	1.504		
	Total	197.802	100			
Total (Score of 20)	Between Groups	199.752	4	49.938	8.527	*0.000
	Within Groups	562.188	96	5.856		
	Total	761.941	100			

* Significance at (α ≤ 0.05)

Results presented in table (6) shows that there are statistically significant differences in light of academic department in the collaborative strategies between teacher and students (F = 9.893, α ≤ 0.05), student-centered strategies (F = 8.869, α ≤ 0.05), and the total score (F = 8.527, α ≤ 0.05), while there were no statistically significant differences in light of academic department on the teacher-centered strategies (F = 1.678, α ≤ 0.05).

Post Hoc Comparisons using LSD were used to reveal the source of differences on collaborative strategies between teacher and students, student-centered strategies, and the total score, as shown in table (7).

Table (7): Post Hoc Comparisons (LSD) Results for the Source of Differences in light of Academic Department

Domains	Academic Department		Self-Development	Basic Science	Computer	English	Islamic Education
		$\bar{X}$	7.13	7.08	4.50	5.75	5.17
Teacher-centered Strategies (Score of 4)	Self-Development	7.13	-	0.05	*2.63	*1.38	*1.96
	Basic Science	7.08	-	-	*2.58	*1.33	*1.91
	Computer	4.50	-	-	-	*1.25	0.67
	English Language	5.75	-	-	-	-	0.58
	Islamic Studies	5.17	-	-	-	-	-
Collaborative strategies between teacher and students (Score of 10)	----------	$\bar{X}$	4.87	4.42	4.80	3.09	4.17
	Self-Development	4.87	-	0.45	0.07	*1.78	0.70
	Basic Science	4.42	-	-	0.38	*1.32	0.25
	Computer	4.80	-	-	-	*1.71	0.63
	English Language	3.09	-	-	-	-	*1.07
	Islamic Studies	4.17	-	-	-	-	-
Total	----------	$\bar{X}$	15.30	14.33	12.80	11.78	12.58
	Self-Development	15.30	-	0.97	*2.50	*3.52	*2.72
	Basic Science	14.33	-	-	*1.53	*2.55	*1.75
	Computer	12.80	-	-	-	1.02	0.22
	English Language	11.78	-	-	-	-	0.80
	Islamic Studies	12.58	-	-	-	-	-

* Significance at ($\alpha \leq 0.05$)

Table (7) shows that the source of the statistically significance differences on the collaborative strategies between teacher and students, and the total score, were between department of self-development and basic science on one hand and department of computer, English language, and Islamic studies from the other, in favor of department of self-development and basic science. There were also statistically significance differences on the collaborative strategies between teacher and students between department of computer and department of English language in favor of department of English language.

As for the student-centered strategies, the source of the statistically significant differences were between department of English language on one hand and department of self-development, basic science, computer, and Islamic education from the other, in favor of the other departments, which means that faculty members of English language department have lower knowledge than their colleagues in the other departments.

The high level of knowledge of the lecturers in the department of self-development and in the total score compared to their colleagues in the other departments is an expected and logical result, whereas the majority of faculty members in this department are holders of educational specializations. As for the superiority of lecturers of basic sciences department in the level of knowledge compared to their colleagues in computer, English language, and Islamic education departments is attributed to the nature of these courses which include math, statistics, and physics…, which depends on employing various teaching methods such as laboratory, problem solving, inductive, and group learning, which contributed in the increase of

lecturers knowledge in this department compared with their colleagues in the other departments.

Whereas lecturers of English language department superiority on the lecturers of computer department in the collaborative strategies between teacher and students can be attributed to the effectiveness of the training programs that the lecturers of this department are subject to, as lots of them are employed by operating companies which concentrate on the efficiency of its employees to ensure renewing the contract with the university. It can also be attributed to the nature of English language courses topics -Like other humanitarian specialization courses-, as they are a fertile and rich environment for employing collaborative teaching methods such as developing thinking methods (ex. Brain storming, inductive, problem solving, deduction), and social learning methods (ex. Numbered Heads Together and group learning), that is not offered by computer courses topics.

As for the lack of knowledge among lecturers of English language department compared to their colleagues in the other departments in student-centered strategies can be attributed to the nature of the methods employed by the lecturers in teaching English as a foreign language, that depends on the collaborative and interactive work with students –which showed by the previous result- more than student-centered methods, for that their knowledge level got effected. This result differs from Al-Orabi (2018) study result which found that there are no statistically significant differences in the level of knowledge in light of specialization, while the other studies did not reported this variable.

Results of the Fourth Question: "Are there a statistically significance differences (α = 0.05) in the level of faculty members' knowledge of teaching strategies and methods at the Deanship of Preparatory Year varies in light of academic experience?"

Table (8): One-Way ANOVA Results for the Significance Differences in Faculty Members Knowledge of Teaching Strategies and Methods in light of Academic Experience

Domains	Source of Variance	Sum of Squares	df	Means Squares	F	Sig.
Teacher-centered Strategies (Score of 4)	Between Groups	1.290	2	0.645	0.781	0.461
	Within Groups	80.908	98	0.826		
	Total	82.198	100			
Collaborative strategies between teacher and students (Score of 10)	Between Groups	8.004	2	4.002	1.355	0.263
	Within Groups	289.422	98	2.953		
	Total	297.426	100			
Student-centered Strategies (Score of 6)	Between Groups	2.918	2	1.459	0.734	0.483
	Within Groups	194.884	98	1.989		
	Total	197.802	100			
Total (Score of 20)	Between Groups	8.802	2	4.401	0.573	0.566
	Within Groups	753.138	98	7.685		
	Total	761.941	100			

* Significance at ($\alpha \leq 0.05$)

Results presented in table (8) shows that there are no statistically significant differences in light of academic experience in the level of faculty members knowledge of teaching strategies and methods total result ($F = 0.573$, $\alpha \leq 0.05$) and on the three domains, as the result of teacher-centered strategies was ($F = 0.781$, $\alpha \leq 0.05$), and for collaborative strategies between teacher and students ($F = 1.355$, $\alpha \leq 0.05$), while for student-centered strategies ($F = 0.573$, $\alpha \leq 0.05$).

This result shows that faculty members knowledge level of teaching strategies and methods does not differ based on their academic experience. This can be attributed to the environment provided by the preparatory year, in addition to the policies and procedures related to developing teaching skills that contributed in the similarity of the knowledge level of the teaching strategies and methods among faculty members. Also, the new faculty members are subjected to intensive training programs to raise the level of their competencies in teaching and evaluation, such as the short workshops held by deanship of the preparatory year in addition to the Long, intensive programs held by Deanship of University Education Development such as "Competencies" program, for duration of 5 days,

the lecturers preparation programs, and other workshops held by the deanship, electronic learning, and libraries.

This result is consistent with the results presented by Al-Orabi (2018), Al-Omary (2015), and Al-Shanqiti and Falak (2014) studies, which showed that there are no statistically significant differences in the level of knowledge or the use of the teaching strategies in light of experience. While this result is differ from Al-Smadi (2013) and Al-Omari (2012) studies which showed that there are statistically significant differences in light of experience, in favor of the higher experience.

Results of the Fifth Question: "Are there a statistically significance differences (α = 0.05) in the level of faculty members' knowledge of teaching strategies and methods at the Deanship of Preparatory Year varies in light of degree?"

Table (9): One-Way ANOVA Results for the Significance Differences in Faculty Members Knowledge of Teaching Strategies and Methods in light of Degree

Domains	Source of Variance	Sum of Squares	df	Means Squares	F	Sig.
Teacher-centered Strategies (Score of 4)	Between Groups	5.503	2	2.751	3.516	*0.034
	Within Groups	76.695	98	0.783		
	Total	82.198	100			
Collaborative strategies between teacher and students (Score of 10)	Between Groups	23.797	2	11.899	4.261	*0.017
	Within Groups	273.629	98	2.792		
	Total	297.426	100			
Student-centered Strategies (Score of 6)	Between Groups	9.755	2	4.877	2.542	0.084
	Within Groups	188.047	98	1.919		
	Total	197.802	100			
Total (Score of 20)	Between Groups	95.982	2	47.991	7.062	*0.001
	Within Groups	665.958	98	6.795		
	Total	761.941	100			

* Significance at ($\alpha \leq 0.05$)

Table (9) shows that there are statistically significant differences in light of degree in teacher-centered strategies ($F = 3.516$, $\alpha \leq 0.05$), in the collaborative strategies between teacher and students ($F = 4.261$, $\alpha \leq 0.05$), and the total score ($F = 7.062$, $\alpha \leq 0.05$), while there were no statistically significant differences in light of degree on student-centered strategies ($F = 2.542$, $\alpha \leq 0.05$).

Post Hoc Comparisons using LSD were used to reveal the source of differences on teacher-centered strategies, collaborative strategies between teacher and students and the total score, as shown in table (10)

Table (10): Post Hoc Comparisons (LSD) Results for the Source of Differences in light of Degree

Domains	Academic Department		Bachelor Degree	Master Degree	Ph.D.
		$\bar{X}$	2.40	3.26	3.14
Teacher-centered Strategies (Score of 4)	Bachelor Degree	2.40	-	*0.86	*0.74
	Master Degree	3.26	-	-	0.12
	Ph.D.	3.14	-	-	-
Collaborative strategies between teacher and students (Score of 10)	----------	$\bar{X}$	5.00	5.74	6.47
	Bachelor Degree	5.00	-	0.74	*1.47
	Master Degree	5.74	-	-	0.73
	Ph.D.	6.47	-	-	-
Total	----------	$\bar{X}$	10.60	13.05	13.86

	Bachelor Degree	**10.60**	**-**	***2.45**	***3.26**
	Master Degree	**13.05**	**-**	**-**	**0.81**
	Ph.D.	**13.86**	**-**	**-**	**-**

* Significance at ($\alpha \leq 0.05$)

Table (10) shows that the source of the statistically significance differences on the collaborative strategies between teacher and students, and the total score, were between bachelor degree on one hand and master degree and Ph.D. from the other, in favor of master degree and Ph.D., which means that faculty members who hold master degree and Ph.D. have higher levels of knowledge in the teaching strategies and methods in the total score and on the collaborative strategies between teacher and students than their colleagues who hold bachelor degree.

As for the statistically significant differences on the collaborative strategies between teacher and students, it was between bachelor and Ph.D., in favor of Ph.D., which means that faculty members who hold Ph.D. have higher levels of knowledge in the collaborative strategies between teacher and students than their colleagues who hold Bachelor degree.

This result is a logical and expected one, and it can be attributed to the level of academic maturity related to the specialized knowledge and the teaching methods among the holders of the higher academic degree on the collaborative strategies between teacher and students compared to Bachelor degree holders. Also, lecturers who hold bachelor degree are young fresh graduates, who are being prepared to complete their higher studies within the Kingdom, or with scholarships abroad. This result is consistent with the resulted found by Al-Orabi (2018), Al-Omary (2015) and Al-Smadi (2013), which indicated that there is a statistically significant difference in light of degree, in favor of the higher degree.

Suggestions and Recommendations

In light of its results, the study suggests the following:

4- Providing and implementing training workshops to enhance the knowledge level of student-centered teaching strategies and methods, and the collaborative strategies.
5- Making use of faculty members experiences at Self-Development Department and Basic Sciences Department in enhancing the knowledge level of their colleagues in other departments, through the use of modern methods, such as learning circles, peer observation, and the academic guidance for research assistants and those who are newly appointed ...
6- Evaluating the impact of training on improving the level of knowledge and teaching practices inside classes.

The researchers also recommend conducting further studies on:

7- Faculty members' knowledge level of teaching strategies and methods at the deanships of the preparatory year in the Kingdom of Saudi Arabia.
8- Evaluating the effectiveness of common teaching methods among faculty members and the justifications for their use in Saudi higher education institutions."

References

Al-Babtain, A. (2018). Teaching performance of the teaching staff at the faculty of education in King Saud University. *Saudi Educational & Psychological Association, Education and Psychology Thesis*, (60), 17-43.

Al-Bashaireh, Z., Al-Rawadhieh, S. & Al-Sultani, A. (2005).The Degree of Familiarity of Mutah University Faculty Members with the University Teaching Methods, the Degree of Using These Methods, and Proposed Ways of Developing them. *Dirasat: Educational Sciences, 32*(2), 15-30.

Albeshr, F. (2019) An Analytical Study of the Reality of Evaluating the Teaching Performance of Faculty Members in some Public Universities in Saudi Arabia. *International Interdisciplinary Journal of Education, 8*(7), 52-62.

Al-Freih, W. (2015). The problems that female students encounter at Imam Muhammad Ibn Saud Islamic University. *Journal of Education Stud: Al-Imam Mohammad Ibn Saud Islamic University*, (2), 417-458.

Alhirtani, N. (2020). The use of Modern Teaching Methods in Teaching Arabic Language at Higher Education Phase from the Point

View of Arabic Language Professors-A Case of a Premier University. *International Education Studies*, 13(1), 32-41.

Al-Masaeed, T. (2017). *The Challenges of Teacher Preparation and Training in Light the Skills of 21st Century*. A working paper submitted for the Fourth Scientific Conference on 5/8/2017, College of Education and Basic Sciences, Cairo, Egypt.

Al-Motawa, N. (2018). To what extent the academic courses of Shaqra University are relevant to KSA (2030) Vision. *IUG Journal of Educational and Psychology Sciences, 26*(3), 327-343.

Al-Omari, N. (2012). Recognition of mathematics teachers and students -teachers mathematics major problem solving strategies. *Saudi Educational and Psychological Association, Journal of Education and Psychology*, (39), 223-265.

Al-Omary, W. (2015). The Reality of Using Co-Curricular Model-Based Teaching Strategies Activities by the Teachers of Physics with its Practice Specifications. *Jordan Journal of Educational Sciences, 11*(4), 417-458.

Al-Orabi, A. (2018). The Reality of Teaching Reflective Thinking Skills by the Islamic Education Teachers in the Secondary Stage in Holy Mecca. *Umm Al-Qura University Journal of Education and Psychology Sciences, 9*(2), 159-202.

Alshanqiti, A. & Alkhlaif, F. (2014). The degree of Arabic language teachers practice at the northern border University of Reciprocal Teaching Style. *The International Interdisciplinary Journal of Education, 3*(10), 78-97.

Al-Smadi, I. (2010). *The Impact of Mathematics Teachers' Use of Modern Teaching Strategies on Achieving the Educational Outcomes of Mathematics Subject*, Unpublished Ph.D. Dissertation, Jordanian University, Jordan.

Al-Smadi, M. (2013). Evaluating Quality of Teaching Practices of Najran University Staff Members. *The International Interdisciplinary Journal of Education, 2*(8), 732-753.

Bahrani, P. & Asakreh, A. (2011). Identifying the faculty Members Training Need to Develop short Courses in-service Training: A Case study from Mashhahr Islamic Azad University, Iran. *Canadian Academy of Oriental and Occidental Culture (Canadian Social Science), 7*(6), 187-190.

Balliu, V. & Belshi, M. (2017). Modern Teaching Versus Traditional Teaching- Albanian Teachers Between Challenges and Choices. *European Journal of Multidisciplinary Studies, 2*(4).

Bani Yaseen, M. (2016). The Level of Faculty Members practice of Arabic Language Teaching Strategies in the Jordanian Universities. *Arab Journal of Sciences & Research Publishing*, 2(5), 1-19.

Bin-Omar, M. (2016). *The Evaluation of Teaching Methods and Strategies at the Faculty of Economics and Administrative Sciences in Al-Imam University: An analytical study, Introduction to a Seminar about developing educational outcomes at the Faculties of Economics and Business Administration during (20-21/ 4/2016)*. Saudi Arabia: Riyadh.

Damanhori, H. (2013). Causes for non adequate of higher education output the requisites of the Saudi labour market. *Journal of King Abdulaziz University: Economics & Administration, 27*(1), 169-225.

Danner, R. & Musa, R. (2019). Evaluation of Methods Teachers Use in Teaching Shakespearean Drama in Senior Secondary Schools in Edo State. *Journal of Teaching and Teacher Education, 7*(2), 87-98.

Duchovicova, J. & Kolenakova, R. (2020). Application of Critical Thinking Strategies in Educational Practice of Lower Secondary Education. 10th International Conference the Future of education Florence, Italy¸18-19 Jun 2020 p1-5

Duties and Ethics Charter for IAU Faculty Members at Imam Abdulrahman Bin Faisal University (2019). Retrieved on 28/5/2020, from: https://www.iau.edu.sa/sites/default/files/resources/mythq_wjbt_wkhlqyt_dw_hyy_ltdrys_bjm_lmm_bdlrhmn_bn_fysl_2.pdf

Gharbi, A. & Hafidhi, S. (2012). The Academic Practices of University Professor. *Algeria University: Humanities and Social Sciences Journal, (2)*, 15-34.

Hamza, A. (2015). Alignment between the outputs of universities and the needs of the labor market: "future vision". *Journal of Counseling 42*(1), 365-391.

Ismail, M. (2009). *Teacher's Required Competencies in E-Learning Field*. Egypt: Mansoura University.

Lee, K., Yoo, J. & You, Y. (2009). Why do Professors Refuse to use Constructivist Teaching Methodologies?. *The International Journal of Learning, 8*(16), 47-56 .

Muhammad, A. (2016). The Assessment of the Staff Members` Performance in the Light of Teaching Quality Criteria. *Journal of Research Diyala humanity, (70*), 527-558.

Ouanouki, A. & Hassan, H. (2018). The relationship between the Professors Skill in Teaching and the Motivation of Student to Learn: A Field Study on a Sample of Social Sciences' Students at Ziane Achour University of Djelfa. *Journal of Dirasat & Abhath.* 10(4), 452-462.

Salem, A. (2011). The Preparatory Year at the Islamic University of Madinah (A Proposed Perception). *Culture & Development Magazine, 2*(48).

Saudi Vision 2030. (2016). Kingdom of Saudi Arabia: Riyadh.

Schmidt, S. & Hodge, E. & Tschida, C. (2013). How University Faculty Members Developed Their Online Teaching Skills. *Quarterly Review of Distance Education, 14*(3), 131-140

Strand, B. & Bender, V. (2011). Knowledge and use of appropriate instructional strategies by physical education teachers. *The Physical Educator Journal, 68*(1), 1-17.

The Strategic Plan of Imam Abdulrahman Bin Faisal University, retrieved on 01/04/2020, from: https://www.iau.edu.sa/ar/about-us/vision-mission-and-values.

Tuwayji, A. (2016).The level of teaching performance of lecturers at University of Science and Technology in Yemen, from student's points of view. *Arab Journal for Quality Assurance in Higher Education, 9*(25), 59-90.

Updated Forms of the National Center for Academic Accreditation and Assessment (2019). Retrieved on 7/2/2020, from: https://uqu.edu.sa/en/quality/App/FILES/48706

Zarqan, L. (2016). A Proposed Training Program of the Instructors in light of Their Training Needs and Standards of Performance Learning Quality in Higher Education at The University of Setif 1-2- Algeria. *Arab Journal for Quality Assurance in Higher Education, 9*(25), 3-32.

Zegaoua, A. (2017). University Programs and Their Responsiveness to Labor Market Needs, *Journal of Human Resource Development 1*(7), 159-188.