

Factors Influencing Academic Staff Attitudes Towards Smart Boards Use in Education Process in Applied Science University

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ABSTRACT

This research aims to study Factors Influencing Academic Staff Attitudes Towards Smart Boards Use in Education Process in Applied Science University. Additionally, it seeks to examine the moderating role of the type of school. The research's independent variables consist of Factors (interaction, self-efficacy, course design, technical support, convenience and accessibility), while the dependent variable is Attitudes towards smart board. A quantitative method used the primary data was collected through academic staff university email and through whatsapp. A sample of 271 respondents, who are academic staff in Applied Science University. The result of this research confirms showed that there is a significant positive impact of the smart board on the attitudes of faculty members through positive interaction between them and students and educational materials. The result of interviews this research confirms that the smart board supports the process of interaction between the lecturer and the students in one hand, and on the other hand, it supports the process of interaction between students and educational materials.

Keywords: Factors Influencing Academic Staff, Attitudes, Smart Boards, Jordan.

INTRODUCTION

In recent years, modern educational technology has provided many innovations that have played a diverse and important role in the educational process and are working to increase its efficiency and development. The educational process is no longer the same as the means that serve goals; it has its various sources that help. In the ancient era, it was just mere indoctrination and recitation of the textbook. Rather, it has become a diversified activity to keep pace with this technological development, keep pace with it, and coexist with it in meeting the desires and tendencies of the students. Therefore, it has become very necessary, and we use it in the educational process to reach the desired goal (Akcaay, Arslan & Guven, 2016).

The Smart board comes on top of the pyramid of these technological innovations, which represent a revolution in educational means, and this was confirmed by a number of educators in terms of its importance and impact in creating interactive learning, which leads education to a new stage in terms of renewal, change and exit from the repetitive, routine that dominates our teaching performance (Sad, 2012; McNamara, 2012). Therefore, at the present time, we find that many schools prefer to use the interactive whiteboard over the traditional blackboard. Attraction and proximity to the environment and lifestyle of the new generation and preparing it to face the real world full of technological situations

The Smart board is a special type of sensitive interactive white boards or boards that are handled by touch and are used to display various applications on the computer screen, whether for a class or otherwise. It also enables the teacher to freely navigate Internet programs, which contributes directly

to Enriching the educational material by adding dimensions, special effects, and distinctive programs that help expand the learner's experiences and satisfy his needs (Abu Al-Enein, 2011). The National Institute of Learning Technology defines smart boards as a large, touch-sensitive display that facilitates interactive participation in information technology, connected to a computer and projector, similar to a traditional whiteboard and can be used similarly, and the computer connected to it can be controlled by touching the board directly or by using a special pen (National Centre for Technology in Education, 2009). Smart boards assist the teacher in defining the general objective, highlighting, and simplifying ideas, as well as explaining difficult concepts and dangerous or rare natural phenomena. And the student, so changing the role of the

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teacher and changing the procedures followed in the classroom activity, making it more interesting, and the possibility of using it without darkening the room, which helps the teacher to follow the reactions of the students and their behavior during the lesson (Qazaq, 2012; Al- Faki & Khamis, 2014; Dweck, 2019).

The smart boards also display content in an interesting, fun and attractive way by interacting with the content by writing on it and transferring and moving graphics and shapes. And return to it easily, and access content in different formats and from a wider range of sources, Effective management of educational time (Campbell, 2010; Karsenti, 2016).

It also works to motivate students to participate in the classroom, verify their knowledge, increase the students' confidence in themselves, break the barrier of shyness while dealing with their peers, help slow learners by making use of them in the design and use of symbols and images, and accustom students to the love of teamwork and remove the monotony factor. Boredom, and the interactive whiteboard contributes to addressing individual differences among students, attracting students' attention and raising their motivation through the use of more than one sense during the educational situation (Turel & Johnson, 2012; Al-Zoubi, 2011; Sabbagh, 2012).

LITERATURE REVIEW

This part of the research reviews the previous literature on the factors affecting faculty members' attitudes towards the use of smart boards in the educational process. Most pre-existing research focused significantly on the benefits of using the smart board in the educational process. However, it also focused specifically on the factors affecting the acceptance and adoption of the smart board. So this study came to highlight the impact of these factors on teachers' attitudes towards the use of smart boards in the educational process and to support the answer to the main research question. The influencing factors are as follows: interaction, self-efficiency, course design (content), course design, technical support, convenience and accessibility. The literature review gives insight into the influencing factors by identifying each factor and explaining how it affects faculty members' attitudes towards accepting and using smart boards in the educational process.

The framework of factors affecting trends

The use of technological techniques in the learning process is seen as one of the primary things at present, and it works to improve the quality of education. It is considered one of the events and strategies adopted by universities to provide high-quality education to their students (Al-Sallehi, 2019). Smart boards are considered one of the technological techniques that can be used to provide quality education based on the use of smart boards with high efficiency in teaching. This lies in

teachers' creativity and skill in using them (Tsayang, Batane & Majuta, 2020).

Many studies have shown that the use of the smart board improves the educational process and makes the teacher and the student more interactive (Sharman, 2010). It provides a qualitative learning environment different from the usual learning contexts and as new technologies that provide interactive teaching aids capable of changing the usual teaching patterns of teachers and students (Zincume & Marimuthu, 2022).

Factors influencing academic staff

Interaction

Smart boards are modern technological means that use and create an attractive learning environment. It provides students with an effective learning environment different from regular learning, increases their level of interest and allows them a better chance to participate (Tsayang, Batane & Majuta, 2020). The smart board is not just a teaching tool used by the teacher but also enhances classroom interaction between the teacher and students and between students and the educational material. Thus, it allows students to participate in the learning process based on verbal and non-verbal interactions (Al-Sallehi, 2019) so that the student is an active participant in his knowledge and encourages verbal interaction through the sharing of ideas as well as the coexistence of students with the educational situation (Jelena, Daliborka & Jelena, 2017). In this context, the smart board is a supportive educational method that helps students acquire knowledge on their own by supporting interaction, dialogue, discussion and presentation of educational material in an attractive way. This enables students to acquire skills better than the usual teaching method (Farah, 2011). Studies (Zincume & Marimuthu, 2022) have shown that teaching using smart boards is more enjoyable (Jelena, Daliborka & Jelena, 2017; AL_Sallehi, 2019) and increases students' focus, understanding and interaction with the learning material through the practice of successful discussions. From the previous literature, the following hypothesis can be hypothesized:

H1: Interaction has a significant effect on academic staff attitudes towards smart board use in education process in ASU at sig. level ≤ 0.05 .

Course Design (Content)

The use of the smart board in the educational process helps in presenting the educational material attractively. This is due to its ability to combine written content, images, video and the Internet in one board, which motivates the student to learn (Almalah & Alyoussef, 2019). The teacher can also combine more than one educational content with several boards and move between them back and forth with a pen or hand. This

feature helps the teacher to move to previous content and link it to the new content, as it links concepts to each other (Yang, 2017). However, some studies (Al-Sallehi, 2019; Baldwin, Ching & Friesen, 2018) showed that teachers did not use the smart board adequately, as they often use it as a presentation device only. From the previous literature, the following hypothesis can be hypothesized:

H2: Self-efficiency has a significant effect on academic staff attitudes towards smart board use in education process in ASU at sig. level ≤ 0.05 .

Technical Support

Studies (Oigara & Wallace, 2012; Farah, 2011) have shown the effect of facilitating appropriate conditions on teachers' adoption of technological means in the educational process. It is considered one of the factors affecting the adoption of new technology. Teachers consider it necessary to provide technical support related to the basic matters in the use of the smart board and its adoption in the learning process. The absence of this skill will greatly affect their adoption and use of smart boards (Almalah & Alyoussef 2019). From the previous literature, the following hypothesis can be hypothesized:

H3: Course design has a significant effect on academic staff attitudes towards smart board use in education process in ASU at sig. level ≤ 0.05 .

Self-efficiency

The educational situation using the smart board requires cognitive self-efficacy among teachers to improve the quality of the cognitive content of the educational material presented to students. Studies have shown teachers' positive attitudes towards using smart boards in education and lesson planning (Bicak1, 2019). In addition, using smart boards increases students' motivation, interest and participation in education, and some studies showed that teachers' self-efficacy levels in using the features of smart boards were relatively low. (Hillier, Beauchamp & Beutel, 2013) The teacher's limited and weak efficiency in using the smart board reduced the level of efficiency of the smart board in teaching. As a result, it took a longer period of time for teachers with poor efficiency to prepare digital educational material (Gursul & Tozmaz 2010), and teachers expressed in a study (Bicak1, 2019) their need for more applied training courses to raise their level in the practice of education using the smart board. From the previous literature, the following hypothesis can be hypothesized:

H4: Technical support has a significant effect on academic staff attitudes towards smart board use in education process in ASU at sig. level ≤ 0.05 .

Convenience and Accessibility

Teaching using smart boards facilitates the teaching process. It makes it more enjoyable through effective communication

with the smart board's technical tools and digital methods in displaying and designing the material. It also saves time through access to learning resources available around the clock in a centralized location (Heirdsfield, Walker, Tambyah & Beutel, 2011). The smart board provides a plethora of learning styles and important experiences that enhance student participation and interaction and boost their motivation. Thus, it affects the improvement of academic achievement among students. The ability of educational technologies may lead to transforming educational paths and increasing students' skills with advanced learning that is compatible with the criteria of an early, effective and competitive economy in the world of modern and contemporary education in the twenty-first century (Tsayang, Batane & Majuta, 2020). From the previous literature, the following hypothesis can be hypothesized:

H5: *Convenience and accessibility have a significant effect on academic staff attitudes towards smart board use in education process in ASU at sig. level ≤ 0.05 .*

Smart Boards

The modern technological revolution introduced new patterns of learning that depend on the digital environment in the educational process based on data computing and effective communication between the teacher, the student and the educational material. Therefore, smart boards are considered an attractive qualitative educational environment. New technologies provide interactive teaching aids capable of transforming traditional education patterns into an educational experience that reduces effort at work, saves time and provides learning resources for students all the time (Tsayang Batane, 2020). In addition, it enables electronic communication between the teacher and the students in pursuing the development of students' learning stages. This development is revealed by students' application of what they have learned in solving homework and exercises and conducting educational presentations using smart boards (Bicak1, 2019). It also indicates the extent to which smart boards motivate students, arousing their motivation, and raising levels of learning skills. This is represented by the student's active participation in learning which is based on the critical thinking of knowledge content and educational process procedures (Heirdsfield, walker, Tambyah and Beutel, 2011).

Conceptual Framework

The current research aims to investigating the academic staff attitudes towards smart boards use in education process in Applied Science Private University. The researchers developed the model for this research based on the literature review (Tsayang, Batane & Majuta, 2020; Zincume & Marimuthu, 2022; Jelena, Daliborka& Jelena, 2017; Baldwin, Ching &



Fig. 1: Research Model

Friesen, 2018; Almalah & Alyoussef, 2019; Al sallehi, 2019; Heirdsfield et al., 2011).

1. H1: Interaction has a significant effect on academic staff attitudes towards smart board use in education process in ASU at sig. level ≤ 0.05 .
- H2: Self-efficiency has a significant effect on academic staff attitudes towards smart board use in education process in ASU at sig. level ≤ 0.05 .
- H3: Course design has a significant effect on academic staff attitudes towards smart board use in education process in ASU at sig. level ≤ 0.05 .
- H4: Technical support has a significant effect on academic staff attitudes towards smart board use in education process in ASU at sig. level ≤ 0.05 .
- H5: Convenience and accessibility have a significant effect on academic staff attitudes towards smart board use in education process in ASU at sig. level ≤ 0.05 .

RESEARCH METHODOLOGY

Research Design

The most suitable type of research for the chosen matter is causal research, since this paper aims to study a cause-and-effect type of relationship (interaction, self-efficiency, course design, technical support, convenience and accessibility) and attitudes towards smart board.

Data Collection Method

This research conducts a questionnaire-based survey-fifth Likert Scale. Academic staff were asked to rate how strongly they agreed with each statement on a scale of strongly disagree (1) to strongly agree (5). The primary data was collected through academic staff university email and through whatsapp.

Population, Sample, and Procedure

University academic staff in Applied Science Private University are the target demographic of this research paper. Respondents are chosen on the basis of the convenience sampling technique.

The researchers were obtaining contacted to collect data in the 2021/2022 academic year. After the approval from the university, an email with the online form of the questionnaire was sent to targeted academic staff in ASU. The valid research respondents are 27 questionnaires.

Measurement and Scaling

Published literature was examined to collect well-defined and tested measurements scale for the variables used in this study. Items were revised to suit the attitudes toward smart boards. As seen in Table 2, the independent variable, which was divided into the five main dimensions (interaction, self-efficiency, course design, technical support, convenience and accessibility). The second construct is dependent variable represents by the attitudes towards smart board.

Respondents Demographic Profile

A set of 27 responses were analyzed.

Table 1: Demographics

		Frequency	Percent
Gender	Female	9	0.333
	Male	18	0.667
	Total	27	100.0
Age	Less than 30 Years	3	0.111
	31-40 Years	14	0.519
	41-50 Years	7	0.259
	More than 50	3	0.111
	Total	27	100.0
Education Level	Master	8	0.297
	Ph. D	19	0.703
	Total	27	100.0

		Frequency	Percent
Academic Ranking	Teacher	8	0.297
	Assistant Prof.	13	0.481
	Associate Prof.	4	0.148
	Full-Prof.	2	0.074
	Total	27	100.0
School	Humanities	16	0.593
	Scientific	11	0.407
Total		27	100.0

In table 1, the demographics details of the analyzed sample are listed. The demographics data revealed that most of the

responders were male, males were approximately 67 percent of the responders, and the remaining 33 percent were females. Regarding education level nearly 70 percent of the respondents were Ph. D holders. Approximately half of respondents were assistant professors. A percentage of 59.3% of the respondents belong to humanities schools, and 40.7% of the respondents are in scientific schools.

Data Analysis

Descriptive Analysis

Table 2 shows the means and standard deviation of each variable in the questionnaire. All variables mean ranged from 2.64 (self-efficiency) to 4.09 (interaction) representing that

Table 2: Means and Standard Deviations

Dimension	Mean	Std. Deviation	Importance
Interaction			
Smart boards increase my interaction with students	4.32	0.934	High
Smart boards for make learning more realistic learning	3.92	0.854	High
Smart boards encourage class-room participation	4.00	0.956	High
Smart boards increase students' attention and concentration	4.07	0.965	High
The lack of optimal use of smart boards leads to students feeling bored	4.14	0.856	High
	4.09		High
Self-efficiency			
My ability to make better use of smart boards leads to improved educational material	4.17	0.854	High
Smart boards enhance my ability to adjust the lecture	3.32	0.855	Medium
Smart boards improve my performance and raise the level of lecture	3.17	0.847	Medium
The smart board requires many hours of training	2.20	0.954	Low
Using the smart board makes me confused while explaining the educational material	1.60	0.814	Low
Smart boards reduce my role in the lecture	1.41	0.960	Low
	2.64		Medium
Course design			
Smart boards increase interest in the lesson	3.80	0.925	High
Smart boards help me communicate ideas better (through audio-visual learning)	3.60	1.05	Medium
Smart panels help provide rich content	3.36	0.922	Medium
Smart boards successfully display the educational material	3.57	0.857	Medium
The use of the smart board helps to increase the use of the educational material	3.57	0.965	Medium
Use the smart boards for display purposes only	3.71	0.857	High
The use of the smart board enriches the educational material	3.28	0.909	Medium
	3.55		Medium
Technical support			
Power outages cause lecture disruption problems	3.53	0.892	Medium
Internet connection problems affect the educational process	4.25	1.025	High
Using the smart board takes a long time to transfer information to it	3.78	0.8913	High
Technical support by specialized people facilitates the process of using the smart board	3.89	1.132	High
	3.86		High

<i>Dimension</i>	<i>Mean</i>	<i>Std. Deviation</i>	<i>Importance</i>
Convenience and accessibility			
Smart boards make my teaching process easier	3.92	0.991	Medium
Smart boards make learning easy and fun	1.96	0.452	Low
Smart boards save my time	1.75	0.951	Low
Smart board has less space than normal board	3.92	0.842	High
	2.88		Medium
Academic Staff Attitude			
Personally, smart board has the greatest priority in my education process.	4.05	0.971	High
In my opinion, we should generalize adoption of smart board in our university.	3.82	0.882	High
Personally, I care about using smart board in my classes.	3.98	0.851	High
I advocate using smart boards in our university.	4.02	0.942	High
	3.96		High

Table 3: Regression model between Interaction and Attitudes towards smart board use

<i>Dependent Variable</i>	<i>Model Summary</i>			<i>ANOVA</i>			<i>Coefficient</i>		
	<i>R</i>	<i>R2</i>	<i>Adj. R2</i>	<i>F</i>	<i>df</i>	<i>Sig.</i>	β	<i>t</i>	<i>Sig.</i>
Attitudes towards smart board use	0.712	0.506	0.531	319.11	1	0.000	0.618	17.013	0.000

most respondents agreed with the variables. The statement under self-efficiency “Smart boards reduce my role in the lecture” shows to have the lowest value among all items, with a mean of 1.41. In contrast, the statement under interaction dimension “Smart boards increase my interaction with students” shows to have the highest value among all items, with a mean of 4.32.

Simple Linear Regression Analysis

To investigate **H1:** Interaction has a significant effect on academic staff attitudes towards smart board use in education process in ASU at sig. level ≤ 0.05 (Table 3).

It was tested as seen in table 3, the (R) value for simple correlation is 71.2%, indicating that the association between two variables is commonly thought to be a very strong positive relationship. The (R^2) value indicates how much of the difference in attitudes towards smart board use in education process can be explained by interaction between academic staff and students. In this case, 50.6% of the variance can be interpreted, with the remaining 49.4% explained by factors not used in the regression model. Hypothesis 1 is therefore accepted.

To investigate **H2:** Self-efficiency has a significant effect on academic staff attitudes towards smart board use in education process in ASU at sig. level ≤ 0.05 .

It was tested as seen in table 4, the (R) value for simple correlation is 60.1%, indicating that the association between two variables is commonly thought to be a very strong

positive relationship. The (R^2) value indicates how much of the difference in attitudes towards smart board use in education process can be explained by interaction between academic staff and students. In this case, 36.1% of the variance can be interpreted, with the remaining 63.9% explained by factors not used in the regression model. Hypothesis 1 is therefore accepted.

To investigate **H3:** Course design has a significant effect on academic staff attitudes towards smart board use in education process in ASU at sig. level ≤ 0.05 .

It was tested as seen in table 5, the (R) value for simple correlation is 65.4%, indicating that the association between two variables is commonly thought to be a very strong positive relationship. The (R^2) value indicates how much of the difference in attitudes towards smart board use in education process can be explained by interaction between academic staff and students. In this case, 42.7% of the variance can be interpreted, with the remaining 57.3% explained by factors not used in the regression model. Hypothesis 1 is therefore accepted.

To investigate **H4:** Technical support has a significant effect on academic staff attitudes towards smart board use in education process in ASU at sig. level ≤ 0.05 .

It was tested as seen in table 6, the (R) value for simple correlation is 42.1%, indicating that the association between two variables is commonly thought to be a very strong positive relationship. The (R^2) value indicates how much of the difference in attitudes towards smart board use in education

Table 4: Regression model between Self-efficiency and Attitudes towards smart board use

Dependent Variable	Model Summary			ANOVA			Coefficient		
	R	R2	Adj. R2	F	df	Sig.	β	t	Sig.
Attitudes towards smart board use	0.601	0.361	0.551	341.15	1	0.000	0.546	18.026	0.000

Table 5: Regression model between course design and Attitudes towards smart board use

Dependent Variable	Model Summary			ANOVA			Coefficient		
	R	R2	Adj. R2	F	df	Sig.	β	t	Sig.
Attitudes towards smart board use	0.654	0.427	0.578	371.12	1	0.000	0.567	16.014	0.000

Table 6: Regression model between Technical Support and Attitudes towards smart board use

Dependent Variable	Model Summary			ANOVA			Coefficient		
	R	R2	Adj. R2	F	df	Sig.	β	t	Sig.
Attitudes towards smart board use	0.421	0.177	0.322	237.051	1	0.000	0.487	17.016	0.000

Table 7: Regression model between Convenience and Accessibility and Attitudes towards smart board use

Dependent Variable	Model Summary			ANOVA			Coefficient		
	R	R2	Adj. R2	F	df	Sig.	β	t	Sig.
Attitudes towards smart board use	0.586	0.343	0.498	309.60	1	0.000	0.577	18.098	0.000

process can be explained by interaction between academic staff and students. In this case, 17.7% of the variance can be interpreted, with the remaining 82.3% explained by factors not used in the regression model. Hypothesis 1 is therefore accepted.

To investigate **H5:** Convenience and accessibility have a significant effect on academic staff attitudes towards smart board use in education process in ASU at sig. level ≤ 0.05 .

It was tested as seen in table 7, the (R) value for simple correlation is 58.6%, indicating that the association between two variables is commonly thought to be a very strong positive relationship. The (R²) value indicates how much of the difference in attitudes towards smart board use in education process can be explained by interaction between academic staff and students. In this case, 34.3% of the variance can be interpreted, with the remaining 65.7% explained by factors not used in the regression model. Hypothesis 1 is therefore accepted.

Interviews Analysis

Q1 *The smart board helps in the process of **interaction** between you and your students?*

The smart board supports the process of interaction between the lecturer and the students in one hand, and on the other hand, it supports the process of interaction between students

and educational materials, since the students can use the smart board for presenting tasks, homework, presentations, etc.

Q2 *Does the smart board play a major role in enriching the educational material (**content**)?*

There is a consensus that the smart board helps enrich the educational material, and the corresponding faculty members mentioned that the smart board facilitates access to various learning resources and review of information through its connection to the Internet. Its location in the classroom and its size are also things that facilitate the educational process for the teacher and the students.

Q3 *Is the smart board easy and convenient in the educational process?*

The smart board allows teachers to access data from different sources, such as by entering a flash memory (USB), or by accessing e-learning or additional websites through the net. These processes can be performed easily.

Q4 *The smart board helps to raise the **performance** of the lecture?*

The smart board helps raise performance by being able to present the educational materials to students, as well as to be able to alter and modify the material regularly for it to be suitable for the lecturer. The smart board also allows the lecturer to use additional sources for support, such as: images, films, videos, etc.

Q5 What **problems** did you encounter when using the smart board? What are your **suggestions** for solving these problems?

The problems faced with the smart board include the use of certain options. Also, there may occur technical issues, such as a power outage or a problem with the connection to the Internet which may influence the outcomes of the lecture negatively. Therefore, there should be a technical support to help with maintenance when needed. Additionally, continuous training should take place when in demand.

RESULTS AND DISCUSSION

The main study question has been answered, which is: What are the academic staff attitudes towards the smart boards use in education process in Applied Science Private University?

Tables (2-7) showed that there is a significant positive impact of the smart board on the attitudes of faculty members through positive interaction between them and students and educational materials, and through enriching the educational content, as well as the ease of dealing with it in order to access different learning resources, and provide flexible and attractive content to students.

A large amount of research has shown that many countries across the globe, for so many years, have employed teaching and learning methods that have failed to provide essential learning. To be really taught in the present century, students need to be creative and innovative, deep and critical thinkers, as well as capable of collaborating in groups while also being skilled communicators and leaders. Hence, we must design and develop new teaching strategies, approaches, and Technological teaching aids that may help students grow the qualities they want to improve. Teaching method focusing on technological learning has recently gained in popularity for cultivating the qualities that lead to effective learning (Qazaq, 2012; Al- Faki, & Khamis, 2014; Dweck, 2019; Campbell, 2010; Karsenti, 2016).

Through previous findings, we conclude that the smart board supports the interaction process between lecturers and students on the one hand, and the interaction process between students and educational materials on the other. They also help enrich educational material and facilitate access to different learning sources. As well as easy and convenient in the educational process, it allows access to data from different sources, such as the introduction of flash memory (USB), or by accessing e-learning or additional websites over the network. The Smart Board also offers additional sources of support for students, such as photos, and films. Modify content so that it is suitable for the required objectives; This contributes to the improvement of the education process. This is largely consistent with the studies: (Tsayang, Batane & Majuta, 2020; Zincume & Marimuthu, 2022; Jelena, Daliborka & Jelena, 2017; Al_Sallehi, 2019; Zincume & Marimuthu, 2022). However, some studies (Al-Sallehi, 2019; Baldwin, Ching & Friesen, 2018)

showed that teachers did not use the smart board adequately, as they often use it as a presentation device only.

Some studies also showed that the teacher's limited competence in how to use the smart board led to a decrease in its effectiveness in teaching (Hillier, Beauchamp & Beutel, 2013; Gursul & Tozmaz 2010; Bicak1, 2019).

This research found that technology-based teaching and learning leads to better outcomes, and better attitudes among teachers and students. Since integrating digital technology tools and equipment like the smart board are known to help set up an engaging and productive learning environment for teachers and students equally, the universities are more prone to utilize them in their teaching pedagogy. This study's findings were supported by (Karsenti, 2016; Turel & Johnson, 2012; Sabbagh, 2012; Heirdsfield et al., 2011).

As for the problems facing the smart board, they are the problems facing educational technology in general, such as a power outage, a problem with Internet connection, or how to use it, and this requires technical support for maintenance and training.

CONCLUSION AND RECOMMENDATION

Our findings showed the impact of using smart board in university education had a positive effect on the attitudes of faculty members and students, which appeared through the classroom interaction between them and students and educational materials, and relying on presenting material in a flexible and attractive way to students, depending on the various available means.

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