

# Trends of University Students in the College of Basic Education Towards the Use of Interactive Blackboard Technology in Education in Kuwait 2020/2021

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## **Abstract**

The study aimed to investigate the trends of university students in the College of Basic Education towards the use of interactive blackboard technology in education in Kuwait. The researcher used the scan descriptive method, the sample was selected randomly, and they prepared a questionnaire to measure the trends of university students towards the use of the interactive blackboard, and the resolution consisted of (32) paragraphs. The study sample consisted of (393) students from College of Basic Education. The results showed that the trends of university students of Basic Education were highly positive towards the use of interactive blackboard technology in education, as the averages of arithmetic ranged from (2.95 to 4.17), and the results also showed no statistically significant differences  $\alpha \le 0.05$  attributable to the effect of gender.

**Keywords:** trends, university students, interactive blackboard technology, education, college of basic education, Kuwait



#### 1. Introduction

The integration of technological innovations into the educational process has become a priority of educational institutions because of the necessity and importance of these innovations in the development of human beings and society, and the building of personalities capable of keeping up with the changes and developments of the times, also helps these innovations to arouse the interest of students and motivate them and raise their level of educational achievement and overcome individual differences between them effective wavyleaf. The role of the student in the light of technological innovations is elevated from mere recipient of information to participant, actor, cocreator producer of knowledge, capable of interacting with his community and the world with changes.

Among the technological innovations in interactive black, board Educa tithe on is the Interactive Smart Board, an innovative learning tool that gives unlimited hectivity in the hands of teachers, and smart blackboard of revolutionary ways in the relationship between teacher and Lethe classroom the classroom. Many Arab and foreign studies have emphasized the importance and effectiveness of this technique in educational proceeding the study (Abdel Moneim, 2015; Al-Rasheed, 2014; Bahadur, 2019; Hamadanamidan, 2013; Abu Rizk, 2012).

The interactive blackboard has multiple uses and applications, as it can be used in the classroom to serve the teacher in the teaching method, and also used in the halls of meetings, conferences, seminars, workshops and, communication through the Internet, as it avoids the use of the projector known as Projector.

The interactive blackboard is classified as an electronic projector, it does not work independently but works by connecting it to a pc or data poor, but its name is "blackboard" it is used as a traditional whiteboard, where the teacher can write on it using special pens Attached to the device and has to erase what was written, but in terms of being (smart or interactive) the information paths of the device go in two directions, and the writing is not done in traditional ink or chalk but through touch, when the teacher pulls a pen tool audioboard and writes on the surface of the device (supplied With touch sensors) the device sends that data to a computer program to convert the points touched to a color displayed through the data prom tor and t n the data goes from the whiteboard to the computer to the data monitor to be displayed again on the blackboard (Preston& Mowbray, 2008).).

Thus, the interactive blackboard is a screen that stores what is written on it and can then be referenced and stored, as well as can erase what is written on it with an elegant electronic eraser, and is equipped to connect to the computer and projectors and once connected it turns in seconds to a giant high definition computer screen, as well as It is equipped with speakers and microphones to transmit sound and image, and if the teacher writes a sentence or draw a form of illustration or displays a picture from the computer or the Internet, it can immediately save it in memory and transfer it to the computers of students and students if they want, and any student can send his notes Contributions to the lesson to be shown on the blackboard (Qandil, 1999).

The interactive blackboard allows the possibility offing Microsoft off Office grams, and the



possibility of freely navigating internet programs, which directly contributes to the enrichment of the scientific material by adding dimensions and special effects and special programs that help expand the experiences of the learner and arouse his interest and satisfy his need to learn because it presents the material in interesting, interesting and engaging ways (Al-Kasbani, 2002).

In addition, it helps facilitate the educational process by provoking dialogue and discussion during the show because it attracts, puts students focused on the educational material being presented, and helps teachers to plan through arrangement and, organization and add some aesthetics of sound. The image increases the pleasure in education and taking into account individual differences, providing feedback and acquiring new skills, acquiring positive trends and trends, reducing learning time and teacher effort, implementing many difficult experiences in a fun way, ad stabilizing concepts, which increases student interaction and improves Their responses to education (Abdel Moneim, 2015; Abu Rizk, 2012).

Accordingly, there is an urgent need to know the trends of students towards the use blackboard sack board in education and we seek to develop it and direct them towards it, as it is a necessity to reach students with technological, in addition, motivate them towards learning through those innovations, and we must be aware of the labor market, where it has become Most government and private sectors require experience and skill in the use of modern technology, so preparing the student in his studies in the field of technology has become an important point to guide him and prepare him to enter a technological world that works with human energy and speaks the name of modern technology science.

#### 2. Theoretical Framework

# 2.1 The Genesis of the Interactive Blackboard

The idea of finding an interactive blackboard began in the mid1980s when David Martin and his wife Nancy Knowlton tried to find an alternative to traditional blackboards such as al-Wabria, Chalk and Magnetism, and their idea was to connect the computer to a sensitive display screen (panel) that functioned as an Alterna For a computer screen so that it does not use a mouse or keyboard, but a touch, (Abu El Ain, 2011; Marzano & Haystead, 2009).

After seven years of technological experimentation and research, in 1987, Knowlton and her husband Martin began designing smart, interactive, or elect painting glinting in one of the leading companies in education technology in Canada and the United States of America, after which research on the smart board continues. In early 1991, the first interactive black boat ally was produced by Smart (Rashidi, 2012).

The year 1998 saw a qualitative shift in the work of the interactive blackboard, as it became possible to operate not only on the computer but also on the notebook, starting the following year to start marketing and selling it in the market (Ammar, 2011). In 2001, for the first, recording and audio features were introduced to the interactive blackboard.

In 2005, the list of wireless Integra blackboard skyboard, and a computer disk that allows users to start applications, deal with what appears on the screen, and create and save notes,



were revealed. The year 2008 witnessed the most significant development in the history of the interactive blackboard, with new products including smart cameras and collaborative learning programs, and its use spread to the Middle East markets (Rashidi, 2012).

# 2.1.1 Defining the Concept of Interactive Blackboard

The interactive blackboard is a modern and important means of education, a special type of sensitive Integra white board blackboarded this is handled using a sense of touch and being connected to the computer to display the various applications on the computer screen so that the computer is controlled for its way, it's the desktop of the computer. The new generation of interactive blackboards does not require an LCD device as the viewer is available on the interactive blackboard screen. There are several definitions of the interactive blackboard, the most important of which are:

Saraya (2009, p. 167) defined the interactive blackboard as "a sensitive white electronic display that is handled using a sense of touch with a finger or a digital pen and is connected to a computer, projector and printer where all educational programs stored on the computer or (video projector) are displayed, that are on the Internet directly or remotely."

Haystead and Marzano (2009) noted that an interactive or smart blackboard is a large display device attached to the computer and a projector that displays the desktop of the computer on the blackboard and the blackboard elements are planned using special pens or by clicking.

Campbell (2010) explained the concept of an interactive blackboard as "a large white screen connected to a computer that is touch-handled or written with a special pen, and can be used to display a computer screen clearly for all class students."

Accordingly, the researcher defines the interactive blackboard as a white flat electronic display that works by connecting to a computer, or a special base, or without them, to help facilitate the learning process and has several names such as: interactive blackboard, interactive touchscreen, electronic blackboard, blackboard, blackboard Digital, interactive whiteboard."

# 2.1.2 Benefits of Using Interactive Blackboard in Education

According to both Shenton and Pagett (2007), Preston and Mowbray (2008) The benefits of using interactive painting in education are shown in the following:

- 1) **Save time:** The teacher using the interactive blackboard can save a lot of time and effort, as he can write lessons in advance and add comments and notes during the explanation, and the problem of the many educational issues used is eliminated so that the focus is on using one effective teaching tool.
- 2) Solving the problem of faculty shortage: the use of the interactive blackboard allows to solve the problem of the shortage of faculty staff, through the application of smart classes in them, so that the professor is in a lecture (1) and followed by student's lecture (2) and students in a lecture (3) in another university, the professor is present in all these halls according to an organized schedule.



- 3) Presentation of lessons in an interesting way and teaching computer skills: The interactive blackboard is characterized by the provision of a dynamic element where the teacher can use the PowerPoint program to view lessons and move drawings and shapes using the interactive panel, write on most applications of Microsoft Ophis software, and can also teach the skills of using the computer.
- 4) Recording and re-viewing lessons: The interactive panel provides the possibility to record review view the entire lessons after they are saved in other classes, or to send the saved lessons to absent students online so that no absent student will miss any lesson.
- 5) Distance learning: One of the most important features of the interactive panel is the possibility of using it in distance learning, where through its use and use of the video conferencing feature and connecting it to the Internet display some seminars, workshops, and conferences between different countries.
- 6) **Suitable for people with special needs:** The interactive blackboard is characterized by its ability to meet the needs of people with disabilities through touch the and use of the finger to write and control the blackboard without the need for the mouse that is difficult to control according to the type of disability, and the ability to move the toolbar from top to bottom, in addition to meeting the of the teacher.

The use of an interactive blackboard eliminates the tension and fear of some students from using technology and technology so that they are able to use technology in their lives without hesitation and awe. The interactive blackboard is a flexible blackboard, it is the late displays for universities and schools, and exists in different sizes, do not face the problem of the size of the classroom, as it is equipped with special electronic pens, equipped with wireless remote control system, usb cable, and characterized by its rigidity and bearing of shocks and pressures The school process, which can be hung on the wall or placed on the blackboard holder, all of these facilities in use benefit the teacher and learners and make it easy to buy and use.

### 2.1.3 Uses of Interactive Blackboard in Education

The interactive blackboard is used for many purposes as noted by Salama and The Dell (2005) including: 1- used as an alternative magnifying display to the computer screen. 2- It is used as a white paper that can be written, painted and configured with special pens. 3- It is used to display and explain different information from afar. 4- And save the information written on it on the computer. 5- Handwriting can be converted into electronic writing with one touch. 6- The ability to adapt data, images, and shapes by the printer attached to it. 7- Teachers use interactive blackboard in virtual laboratories to explain and view experiments for lessons in scientific subjects such as chemistry, physics, astronomy, etc., where symbols and graphs are used in the interactive panel. 8- Used in teaching language skills such as grammar, drainage, words and speech training. 9- Use educational games on the interactive blackboard. 10- Use the images and pull them from the interactive blackboard and the possibility of moving them and making a cartoon. 11- Teachers were able to use online resources to teach the entire class. 12- Teachers are able to use multimedia materials that help



them present and explain different concepts. 13- Allows teachers to exchange and reuse materials and reduce workloads.

# 2.1.4 Defects Affecting the Use of an Interactive Blackboard

There are a range of disadvantages that can affect the application process of using the interactive blackboard, including the following (Mandor, 2009):

- 1) The cost of purchasing and maintaining them is high.
- 2) You need high-level training so that the teacher can use it effectively.
- 3) It may be a waste of time for those who do not master the skill of using it from teachers.
- 4) It is also a negative if the teacher does not develop an alternative plan in the event of a power outage.
- 5) Focus more on the cognitive side than the skilled side.
- 6) Its inability to deal with certain languages, for example: manually converting writing into text that a computer can handle.
- 7) You may threaten the safety ratio in the classroom in terms of electrical connections unless you provide well.
- 8) You need regular maintenance in addition to the high maintenance costs.
- 9) There are few, but few, few centers available for maintenance.
- 10) The difficulty of the language used in the blackboard program where it has not yet been localized.

# 2.1.5 Strengths in Using Interactive Blackboard

For the student, there are strengths in the use of interactive blackboard in educational situations, mentioned as follows (Saraya, 2009):

- 1) Communicating scientific content in a clear and interesting way.
- 2) It helps to attract the attention of the student by employing different methods of sound and image, once connected it turns in seconds into a giant computer screen, in addition to it is equipped with speakers and microphone for the transmission of sound and high-definition image.
- 3) It draws the attention of students, when using clear expressive colors, focusing attention in a certain light space and in a certain direction, and making the drawings realistic and enjoyable, which helps to better understand the lesson.
- 4) Help to expand the experiences of the learner by building concepts and arousing his interest and satisfying his need to learn because it is presenting the subject in interesting and attractive ways, thus achieving the pleasure and diversity required in the learning positions for the student.



- 5) He was able to interact with all learners during the presentation, by allowing some learners to participate in the use of the method, which would result in the survival of the learning effect, thereby improving the quality of learning and raising the performance of students or trainees.
- 6) Easy to save and retrieve the content of the lesson for students it is equipped with the property of sending the content of the lesson by e-mail to the student, which makes it easier for the student and the teacher to retrieve it when needed.
- 7) Increase students' participation in what they learn and satisfy their desire to share more with teachers and other students, and increase students' participation in group discussions, enhancing students' self-confidence.
- 8) It helps students understand difficult and complex concepts that require a lot of time and educational means from the teacher, and helps to raise the level of attention and focus of students.
- 9) Reduces laziness and boredom from students and forces them to participate in class events.

Based on the foregoing, it is clear the importance of using smart interactive blackboards as a modern means of education and communication between the components of the educational process, as it possesses many advantages and advantages, and no matter how much we talk about it, we will not be able to convey the full picture of the importance of its use compared to the number of defects addressed. Indeed, the educational process needs such modern educational means to keep pace with scientific development and contribute to the building of a conscious and productive generation that will be the building block of a rising living nation.

2.1.6 The Impact of the Use of Interactive Blackboard on Education and Student Trends

Many studies have indicated the effectiveness of the use and teaching through the interactive blackboard and its impact on students' learning because of its advantages that make it an innovation that affects the learning process (Kenwell, 2007).

Hennessy (2007) said that teaching strategies for using interactive blackboard work to enhance students' participation in scientific courses, and thus their orientation to use interactive blackboard in education.

In addition to many studies that have shown positive results from the use of interactive blackboard education, its impact on the interaction between teacher and student in reading and writing and calculation strategies, creative learning, and the use of smart blackboard as a tool for collaborative learning and knowledge building Students, learning the language, increasing their self-motivation to learn, promoting student participation, and education for scientific culture through interactive blackboard have clearly proven their impact, promoting students' learning orientations, and devoting technology to preparing future scientists for students (Turf, 2009; Morgan, 2008; Hennessy, 2007; Wichita, 2006).

Al-Rasheed (2014) concluded that students' attitudes towards the use of interactive blackboard came high, after teaching them through the interactive blackboard, and the



researcher believes that its use has strengthened the learning process of students.

The Al-Hamidan Study (2013) noted the impact of the use of interactive smart blackboard in education on student trends and achievement. Mirazano and Haystead (2009) noted the impact of interactive blackboard on student education trends and achievement by teaching a range of lessons.

The Study (Ishtaiwa & Shana, 2011) also confirmed that few student teachers suffered from a lack of knowledge and skills in using smart interactive blackboard and time constraints, and that they focused on using them as a presentation tool for educational materials rather than as an integrated educational tool leading to radical changes in the teaching and learning process.

This indicates that the educational process is no longer in this era as it was in the old era just teaching a lesson or listening to a book; And their inclinations. As educational resources and aids have become diverse, and the options in this area have become very wide, it is good to select the most modern means, which serve a variety of objectives in the educational process. The interactive blackboard comes on the pyramid of these renewable sources and the latest educational tools used in education technology (Al-Hamidan, 2013; McNamara, 2012).

Al-Zoubi (2011) pointed out that Kuwait is one of the countries that are interested in the field of modern technology and technology, and is one of the advanced Arab countries that keep pace with the modern-day ambitions that are part of the development plan and the overall strategic vision of the education system, and this is evident in its interest in interactive blackboard, which is a big part and an important focus in education, its expected role in the educational process, and within a vision of the future in the dissemination of the future schools project through the use of the interactive blackboard and its generalization in education in general. And that's the beginning of closing the gap. Digital between the reality of the current general education and the requirements of dealing with advanced technological means in various fields of scientific, practical, public and private life.

However, according to the researcher's knowledge, Kuwaiti universities suffer from a lack of use of interactive blackboards in the educational process, in other words, a lack of interest in introducing this technology into university education and it is almost only found in some future public and private education schools.

Many researchers and studies have emphasized the impact of the interactive blackboard on education and the attitudes of students towards it, and recommended the need to employ interactive blackboard technology in education, because of its importance and the skills and technological characteristics of learning for university students, and in education. In general.

# 2.2 The Problem of Study and Its Questions

Technological developments in the current era have been an effective turning point towards restructuring educational and learning strategies, as technology with its technologies has become more available to the student than expected, and this acceleration has posed a major challenge for educators, and this challenge seemed to be the teacher's ability to Competition of knowledge tools, technological entertainment outside the educational institution, and how



to convince students that traditional educational methods make sense, which has led to specialists in the fields of education, including education technology, creating modern tools capable of competing with this acceleration Technological in the student environment, and simulate that environment, and in order for the university to form a convincing educational environment for him, and the most appropriate option was the interactive blackboard, which would support the university's competition with the student's external environment, offering a fun interactive atmosphere that encourages the student to participate and interact, And so his direction improved. From the researcher's observation, there is a real challenge in employing interactive blackboard technology in university education, and the problem is that the technology does not actually exist in Kuwaiti universities, and that university students who may have a tendency towards interactive blackboard or knowledge, through their experiences of some of the future public and private schools in Kuwait that have implemented the interactive blackboard recruitment project.

Thus, the problem of studying was to know the trends of university students in College of Basic Education towards the use of interactive blackboard technology in education in Kuwait. The current study attempted to answer the following questions:

- 1) What are the trends of university students in College of Basic Education towards the use of interactive blackboard technology in education in Kuwait?
- 2) Are there statistically significant  $\alpha$  differences at the level of  $\leq 0.05$  in the trends of university students in College of Basic Education towards the use of interactive blackboard technology in education attributable to the gender variable (male, female)?

# 2.3 Study Objectives

The study aimed to measure and identify the trends of university students in College of Basic Education towards the use of interactive blackboard technology in education in Kuwait.

## 2.4 The Importance of Study

The importance of the study lies in the following:

- 1) To learn about the trends of university students towards the use of interactive blackboard technology in education in Kuwait for lack of studies in this subject.
- 2) Because of the importance and great impact of the topic in improving the educational process, the importance of trends and their study in enhancing motivation among the learner, and the need to keep up with the times and its changes, the researcher sees the investigation of the trend of students to employ interactive blackboard in education.
- 3) To highlight the trends of university students in College of Basic Education in the General Authority for Applied Education and Training in Kuwait towards the use of interactive blackboard in a scientific and objective manner.
- 4) As part of the results of the study, it may contribute to providing the competent authorities and decision makers in the employment of the interactive blackboard seriously and on scientific grounds, in order to achieve the desired goals.

108



5) The current study may benefit the researcher in conducting more research and studies on the subject, highlighting it and adding variables useful in the employment of the interactive blackboard and its use in education.

## 2.5 Study Limits

- 1) The study was limited to investigating and identifying the trends of university students towards the use of interactive blackboard technology in education.
- 2) The study was limited to the Faculty of Basic Education in the General Authority for Applied Education and Training in Kuwait, the first semester of 2020//2021.

# 2.6 Procedural Definitions

1) **Direction:** Readiness and inclination towards a particular topic and response to this topic relate swaying that can be accepted or rejected (Abu Ward, 2006, p. 26).

It is defined procedurally as "a state of emotional, preparedness or mental preparation that has a direct impact on university students' responses to the use of the interactive blackboard and the attitudes associated with it negatively or positively."

**2) Interactive** blackboard: "A white flat electronic display that works by connecting to a computer, or a special base, or without it, helps facilitate the learning process" (Al-Hamidan, 2013, p. 8).

It is defined procedurally as "a sensitive interactive whiteboard or blackboard that is handled using a sense of touch, computer-connected to display the various applications on the computer screen, the computer is controlled by it, and the new generation of interactive blackboard does not need an LCD device where the viewer is available in the interactive blackboard screen."

#### 2.7 Previous Studies

This aspect deals with previous Arab and foreign studies related to the relationship in the trends of university students towards the use of interactive blackboard technology in education, the most recent of which is ranked from the oldest to the most recent.

Smith, Hardman and Higgins Study (2006) aimed to identify the impact of the interactive blackboard on increasing the interaction between teacher and student in reading, writing and numeracy classes the interaction between the teacher and the student is not that important.

Afifi (2007) conducted a study aimed at developing the skills of faculty members of teachers and education faculties in the use of smart blackboard in teaching, and their attitudes towards its use, and towards the integration of technology in teaching, through a training program prepared for this purpose, and the number of faculty samples (25) members, The study tools consisted of a training bag, a trend gauge, a cognitive test and a note card. The study found that there are statistically significant differences between the average grades of the tribal and dimensional application of the study sample individuals in the cognitive aspect of the skill of using the smart blackboard, in favor of the dimensional application, and there are differences



in the scale of the trend towards the use of smart blackboard, in favor of the dimensional application.

The Marzano and Haystead Study (2009) aimed to find out how smart blackboard affects students' academic achievement. The study sample consisted of (85) teachers and (170) classrooms that teachers used smart blackboard to teach a range of lessons, which were later taught to a different group of students without the use of technology. Interactive.

The Campbell and Mechling (2009) study, aimed to examine the effectiveness of teaching in arranging a small computer-aided group with education technology and smart blackboard, during a fixed period of time for (3) students with learning disabilities, where a frequent screening tool was designed through message sound groups and replicated across students, to assess the effectiveness of the program and to acquire other students' voice by learning by observing, in addition to evaluating students in obtaining the prose information provided in the statements, and monitoring observations. Useful for correct responses to targeted and non-targeted stimuli, the results indicated that the program was effective in teaching the voice of letters to three students, in addition to the fact that one student received some votes during the message addressed to the students, and other information accidentally and unplanned during the message that provided useful feedback to members of their own group.

Study of Ishtiwa and Shana (2011) aimed to describe how the interactive blackboard was used by teacher students to teach Arabic, as well as to reveal their views on the impact of interactive blackboard on the teaching and learning of Arabic in practical education program classes in UAE schools. They used the interactive blackboard to teach them Arabic because of obstacles such as the lack of interactive blackboard in schools, lack of knowledge and skills in its use, and time constraints. The study also emphasized that the use of interactive blackboard by teacher students was modest, focusing on using it as a presentation tool for educational materials rather than as an integrated educational tool that would lead to radical changes in the process of teaching and learning Arabic.

Abu Rizk Study (2012) aimed to investigate the impact of the use of interactive blackboard technology in developing the planning skill sought to teach Arabic language to student's teachers enrolled in the Professional Diploma in Teaching department at Al Ain University of Science and Technology, in addition to identifying their attitudes towards it. And the problems they encountered while using it as an educational tool. The study was applied to (32) student teachers, who were randomly distributed to two experimental and female groups. To achieve the objectives of the study, a performance test and evaluation criteria were prepared to measure the improvement in the planning skills of the sample members, as well as a trend gauge to identify the trends of student teachers towards the interactive blackboard and its use problems. The results showed that there were statistically significant differences in the performance of the study sample members in the daily planning, and in the sum of the signs of daily and annual planning together and in favor of the performance of the students of the experimental group, the study also showed the absence of statistically significant differences in the performance of the study sample members in the planning Annual among the students of the experimental group and the students of the control group. The study also



showed that student teachers have a positive attitude towards using the interactive blackboard as an educational tool, with a number of problems and obstacles they encountered during its use.

Al-Abdali Study (2012) aimed to reveal the effectiveness of the use of smart blackboard in the achievement of fifth-grade students in mathematics and their attitudes towards it in al-Qaryat governorate. To achieve the objectives of the study, the method of teaching with smart blackboard versus teaching in the usual way was used, an educational test was used, and the use of trend resolution towards the use of a smart blackboard was used. The sample of the study consisted of (43) fifth-graders divided into two groups (officer, experimental). The results of the study showed the effectiveness of the use of smart blackboard in the teaching of mathematics in students, as the results showed that the directions of students, towards the use of smart blackboard in the teaching of mathematics material was positive on the tool as a whole, and on all paragraphs, except for two paragraphs the trend towards negative.

Al-Rasheed (2014) conducted a study aimed at investigating the impact of the use of interactive blackboard in the achievement of 11th graders in biology and their attitudes towards them as an educational tool in Kuwait. To achieve the objectives of the study, the descriptive and semi-experimental curriculum was used, a pre- and after-school learning test was prepared and applied to two groups (experimental and controlled), and a questionnaire was prepared to measure students' attitudes towards the use of the interactive blackboard. The sample of the study consisted of (60) students from the eleventh grade divided into two groups (experimental and female). The results showed no differences in the results of the tribal test between the two groups, while the results showed statistically significant differences in the distance attainment test, and the differences came in favor of the experimental group that used the interactive blackboard and came as a result of measuring the directions of students (group) The pilot towards the use of the interactive blackboard is high, and the most prominent problems and obstacles encountered by the students of the experimental group during their use of the interactive blackboard were identified through the application of the resolution tool.

Dahlan Study (2014) aimed to find out the impact of the use of interactive blackboards in educational achievement and the survival of the learning effect of the basic seventh-grade students in the subject of Arabic language and their attitudes towards it, and to achieve the objectives of the study the researcher used the semi-experimental method, and the teaching tools were in An educational test, and a trend scale applied to a sample of (70) students from the seventh grade, were distributed equally in two groups: female and experimental. The study results showed statistically significant differences between the average grades of students of the experimental and control groups in the distance, deferred and trend-measuring test, with a value of 22.3, (20.45) and (10.66), respectively, for the students of the experimental group at the indicative level (0.01), The impact was significant, reaching 0.87, and the study recommended that interactive blackboard technology should be provided with various accessories in all schools, and that teachers be trained to use it effectively in teaching.



Abdel Moneim Study (2015) aimed to identify the reality and obstacles of the use of teachers of schools of the International Relief Agency for interactive blackboard and the impact of both specialization and years of experience in the responses of teachers, and to verify this was designed a questionnaire consisting of three axes and the study community included all teachers of the agency schools Relief area west of Gaza (616) where they have an interactive blackboard, and a random sample of (282) individuals was selected. The results of the study showed that the degree of teachers' use of the interactive blackboard was weak, the degree of importance of use was great, and the degree of the presence of disabilities was great, as the results showed the existence of statistical differences between teachers attributable to specialization on all points of questionnaire in favor of scientific disciplines, and lack of the existence of differences attributable to years of experience for the rest of the axes.

#### 2.8 General Comment on Previous Studies

Previous studies show a clear interest in interactive blackboard, as one of the most important technological innovations in education, and that it dealt with the effectiveness of the blackboard and its impact and the development of educational attainment, and knowledge of students' attitudes towards it, and varied objectives and samples, the researcher noted that most of the studies on General education, and that there is a dearth of studies that dealt with university students, and the study obtained which was obtained and which partly agreed with the current study (Abu Rizk, 2012) where they agreed with it in terms of sample and use of the gender (male and female) and the tool in measuring the trend, and differed with it in terms of The user's semi-experimental approach and some other tools.

The current study will benefit from previous studies in the theoretical framework and design of the study tool, and the interpretation and confirmation of the results.

The current study from previous studies was characterized by the fact that it is one of the first studies of its kind in Kuwait in relation to the subject, where the current study investigated the trends of university students in College of Basic Education towards the use of interactive blackboard technology in education in Kuwait.

#### 3. Method and Procedures

#### 3.1 Research Methodology

The research adopted the descriptive survey method, which is concerned with presenting the measured phenomenon as it is, as this method is suitable for the objectives and purposes of the current research and its variables.

# 3.2 The Study Community and Its Appointed

The entire study community (17,455) students from College of Basic Education in the General Authority for Applied Education and Training in the first semester of the academic year 2020/2021, and the number of male students (5324) students and females (12,131) students.

The researcher selected a sample of the research of (393) students randomly from the



undergraduate students in the first academic year 2020/2021, and the sample included (153) students and (240) students in College of Basic Education in the General Authority for Applied Education and Training.

Table 1. Iterations and percentages by gender variable

	Categories	Iteration	Percentage
Gender	male	153	38.9
	Female	240	61.1
	Total	393	100.0

#### 3.3 Search Tool

The researcher prepared a questionnaire to measure the directions of the faculty towards the use of education technology in College of Basic Education after reviewing previous research and studies including (Rasheed, 2014), and the scale is paragraphs that measure the trends of university students towards the use of interactive blackboard technology in Education, honesty and fortitude will be measured to apply the tool.

# 3.4 Believe the Building

To extract the evidence of the construction sincerity of the scale, the coefficients of correlation of the paragraphs of the scale with the total grade were extracted in a survey sample from outside the study sample consisted of (40) students, as the correlation coefficient here is a sign of sincerity for each paragraph in the form of a coefficient of correlation between each paragraph and the total grade, and the coefficients of the correlation of paragraphs with the instrument as a whole ranged from (0.37–0.84), and the following table shows this.

Table 2. Correlations between paragraphs and overall grade

Paragraph No.	Link coefficient With the tool.	Paragraph No.	Link coefficient With the tool.	Paragraph No.	Link coefficient With the tool.
1	68**	12	.40**	23	82**
2	69**	13	68**	24	56**
3	78**	14	83**	25	75**
4	73**	15	77**	26	75**
5	78**	16	74**	27	78**
6	71**	17	54**	28	39**
7	59**	18	62**	29	66**
8	60**	19	79**	30	51**
9	56**	20	74**	31	80**
10	74**	21	70**	32	37*
11	84**	22	52**		

Note. \*Function statistically at the indication level (0.05); \*\*Function statistically at the indication level (0.01).



It should be noted that all correlation suppositions were statistically acceptable and functioning, and therefore none of these paragraphs were deleted.

# 3.5 The Stability of the Tool

To ensure the stability of the study tool, the test-retest method was verified by applying the scale, and reapplied two weeks later to a group outside the study sample consisting of (40), and then the Pearson correlation coefficient was calculated between their estimates twice as high as 0.91.

The stability factor was also calculated in the internal consistency manner by the Kronbach Alpha equation, reaching 0.93 and these values were considered appropriate for the purposes of this study.

#### 4. Statistical Standard

The Five-Year Likert ladder was adopted to correct the study tools, giving each of its five paragraphs one score (very large, large, medium, weak, very weak) and represents digitally (5, 4, 3, 2, 1) respectively, and the following measure has been adopted for the purposes of analyzing the results:

From 1.00–2.33 weak

From 2.34– 3.67 Medium

From 3.68–5.00 Large

And so,

The scale was calculated by using the following equation:

Upper scale (5) - minimum scale (1)

Number of categories required (3)

$$\frac{5-1}{3} = 1.33$$

Then add the answer (1.33) to the end of each category.

#### 4.1 Search Execution Procedures

To achieve the objectives of the research, the following steps and procedures were followed:

- Prepare the search tool and present it to the arbitrators to take advantage of their observations and take them.
- The researcher distributed the questionnaire to a random sample of students from College of Basic Education in the General Authority for Applied Education and Training, and then after extracting honesty and stability the questionnaire was distributed to the sample.
- The researcher unloaded the surveys and performed statistical analysis using appropriate statistical treatments to present and discuss the results and make recommendations.



#### 4.2 Statistical Treatment

In the light of the study's questions, the researcher used the appropriate statistical treatments through analysis on the SPSS program, the researcher has used mathematical averages and standard deviations, the coefficient of internal consistency Kronbach alpha and the stability of replays and repetitions, in addition to analyzing the four-way contrast to show the variables of the study, and the use of the Chevy method of dimensional comparisons of the effect of variables.

#### 5. View and Discuss the Results

# First: View the results of the first question

It states that "what are the trends of university students in College of Basic Education towards the use of interactive blackboard technology in education in Kuwait?"

To answer this question, the arithmetic averages and standard deviations of the trends of university students in College of Basic Education have been extracted towards the use of interactive blackboard technology in education in Kuwait, and the table below shows this.

Table 3. Arithmetic averages and standard deviations of the trends of university students in College of Basic Education towards the use of interactive blackboard technology in education in Kuwait ranked downwardly according to the calculation averages

Rank	Number	Paragraphs	Average	Standard	Level
			arithmetic	deviation	
1	2	Education through the use of interactive blackboard	4.17	.907	Large
		technology is more effective than traditional education.			
2	20	Improving the attitude of students towards the educational	4.16	.827	Large
		material given.			
3	3	Education through the use of interactive blackboard	4.12	.908	Large
		technology stimulates students' interest and stimulates them to			
		learn.			
4	22	Students gain self-learning.	4.11	.805	Large
5	8	The use of interactive blackboard technology with the help of	4.05	1.094	Large
		computers and the Internet in the student's educational process			
		is eager to acquire new information.			
6	4	The use of interactive blackboard technology enriches the	4.03	.883	Large
		diversification of learning strategies and activities.			
7	6	Learning through interactive blackboard technology makes the	3.99	.892	Large
		lesson fun.			
8	1	Interactive blackboard technology helps you understand and	3.97	.906	Large
		understand the educational content required.			
9	11	Provides the effort to learn the vocabulary of the educational	3.96	.922	Large
		material.			



Rank Number		Paragraphs	Average arithmetic	Standard deviation	Level
10	9	Contribute to improving and developing teaching methods.	3.94	.902	Large
11	18	Takes into account individual differences between students.	3.94	.941	Large
12	7	The use of interactive blackboard technology in education	3.93	.899	Large
		helps students interact during the lecture.			
13 12		It facilitates interactive blackboard technology and accelerates	3.92	.954	Large
		the learning process.			
14	17	He was able to increase students' learning performance.	3.90	.931	Large
15	5	Helps you acquire the skills needed to use computer-based	3.89	.903	Large
		tools and devices.			
15	14	Helps develop problem-solving skills and thinking in students.	3.89	.907	Large
15	15	Helps develop creativity and memory skills.	3.89	.941	Large
18	10	The teacher is given the ability to use interactive blackboard	3.86	.831	Large
		technology with all its teaching tools as a mentor and mentor.			
19	16	Increases the interaction between students and educational	3.84	.989	Large
		content.			
20	21	The use of interactive blackboard technology is more effective	3.83	.922	Large
		because it is more visible and motivating learning.			
21	23	Givestudents ample opportunity to think and conclude.	3.81	.917	Large
21	25	Diversification of calendar and feedback methods is granted.	3.81	.932	Large
21	27	The use of interactive blackboard technology, computers and	3.81	.960	Large
		online educational software enhances the strength of the			
		lecture.			
21	31	The educational material can be stored and used later.	3.81	.924	Large
25	13	Saves time for teaching and learning.	3.79	.922	Large
25	24	Encourages collaborative action.	3.79	1.088	Large
25	26	Strengthens the relationship between the student and the	3.79	.957	Large
		teacher.			
28	28	Increases the interaction process between the students	3.78	.969	Large
		themselves.			
29	30	Interactive blackboard technology takes information into the	3.77	.924	Large
		minds of students and understands most of the complex			
		aspects of the course.			
30	19	Contribute to students' understanding and more effectiveness	3.73	.958	Large
		in the lecture.			
30	29	Interactive blackboard technology enriches the educational	3.73	.953	Large
		process with diverse educational materials and resources.			
32	32	It doesn't take time to learn how to use an interactive	2.95	1.243	Medi
		blackboard.			um
		College degree	3.87	.561	Large



Table 3 shows that the arithmetic averages ranged from (2.95–4.17), with paragraph 2, which states that "education through the use of interactive blackboard technology is more effective than traditional education" in first place and with a high mathematical average of (4.17) and paragraph No. 32) It reads "Don't provide time to learn how to use the interactive blackboard" in the last place with an average calculation of (2.95) with an average score of (2.95). The use of interactive blackboard technology was positive, with the average overall score of 3.87.

The results of the current question showed that the trends of university students towards the use of interactive blackboard technology are positive, with the overall score as a whole (3.87) high. The researcher attributes the finding to the fact that university students are fully aware of the importance and usefulness of using interactive blackboard in education even though the university does not have the use of interactive blackboard technology in education at the moment. Students seem to know what the interactive blackboard has to offer in education and its importance for learning through its use in public education, as there are public and private schools in Kuwait that use interactive blackboard technology in the educational process. It may be the result of students' culture of educational means and technology innovations in education, including interactive blackboard, and what they offer for the learning process if they are employed and used in education.

The arithmetic averages ranged from (2.95–4.17) too high to medium, paragraphs 1–31 came in high, and paragraph 2, which states that "education through the use of interactive blackboard technology is more effective than traditional education", which came first and average. My account is 4.17.

The result is due to the university students' view of the interactive blackboard and its ability to employ the different senses of the student during the learning science, and the multiple advantages that the use of interactive blackboard technology brings to the educational process in terms of displaying educational content in an interesting, engaging and fun way through Different sound, image, movement and color effects, thus attracting students and increasing their participation and interaction with their teachers and colleagues on the one hand and with the material presented on the other. Interactive blackboard technology seems to be in line with modern trends in education, such as focusing on the student's pivotal role by providing the opportunity for knowledge and its own survey, which leads to its absorption in a series and sequence, and helps it to remember and retain it for a longer period of time, and use it It leads to a diversification of the strategies and methods of teaching, educational activities and methods of evaluation, resulting in an active and enjoyable learning environment, work commensurate with the levels of all students and free of boredom and monotony that dominates the atmosphere of the traditional teaching method. This finding was in agreement with a study (Afifi, 2007), a study (Abu Rizk, 2012), a study (Abdali, 2012), a study (Al-Rasheed, 2014), and a study (Dahlan, 2014).

Paragraph 32, which reads "Does not provide time to learn how to use an interactive blackboard", ranked last with an average calculation average of (2.95). This result may be due to the lack of qualified faculty members to use interactive blackboard in education, which



negatively affects students' sense of importance, and the benefit that may be involved in the learning of university students, and there seems to be reluctance and resistance on the part of university students to use blackboard technology. The interactive has led to obstacles, and may be due to overcrowding of lectures, limited time to use the interactive blackboard and acquire the necessary skills to help them use, and may be due to the lack of interactive blackboard at the university and the lack of knowledge and skills to use it.

This finding was agreed with a study (Hardman & Higgins, 2006, mithS), a study (Abu Rizk, 2012), and a study (Shana & Ishtaiwa, 2011).

# Second: View the results of the second question

It states: "Are there statistically significant differences at  $\alpha$  the level of ( $\leq$  0.05) in the trends of university students in College of Basic Education towards the use of interactive blackboard technology in education attributable to the gender variable (male, female)? "

To answer this question, mathematical averages and standard deviations of the trends of university students in College of Basic Education were extracted towards the use of interactive blackboard technology in education by gender variable (male, female), and to show statistical differences between mathematical averages have been Use the "T" test, and the tables below illustrate this.

Table 4. Computational averages, standard deviations and a "T" test of the overall gender effect

	Number	Average	Standard	Value	Degrees of	Statistical
		arithmetic	deviation	"T"	freedom	significance
male	153	3.89	.551	.504	391	.615
Female	240	3.86	.568			

Table 4 shows that there are no  $\alpha$  statistically significant differences (= 0.05) attributable to the effect of gender. This finding is due to the fact that male and female students are aware of the importance of interactive blackboard technology and are equally interested in using interactive blackboard technology because of its advantages and benefits for the learning process. This result was agreed with the study (Abu Rizk, 2012) in terms of the lack of statistical differences due to the impact of gender, and this result differed with the study (Shana & Ishtaiwa, 2011) where the study confirmed that the weakness of the use of the interactive blackboard was on the part of male students than females.

#### 6. Recommendations

In light of the results, the study recommended:

1) Providing interactive blackboard technology in the university's classrooms in a way that



allows teachers and students to use it in education.

- 2) Develop a lecture schedule tailored to the student's time to provide the opportunity to use interactive blackboard technology, learn its tools, how to use it, acquire different cognitive and technological skills, and learn.
- 3) Providing training programs and workshops to acquire the skills of students and teachers and raise their skills in the use of the interactive blackboard and employ it in an effective way in the learning process.
- 4) Investing students' positive attitudes towards interactive blackboard technology to encourage them to employ them in their future learning and work because of the requirements of the labor market.
- 5) Conducting other studies similar to this study, which will deal with various educational stages and other variables for students and university professors,
- 6) Study the trends of university faculty members towards the use of interactive blackboard and the reality of use to ensure the effectiveness of its use and its ability to teach in different environments and contexts.

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