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THE EFFECT OF SMART BOARD ON STUDENTS' ENGAGEMENT IN ENGLISH

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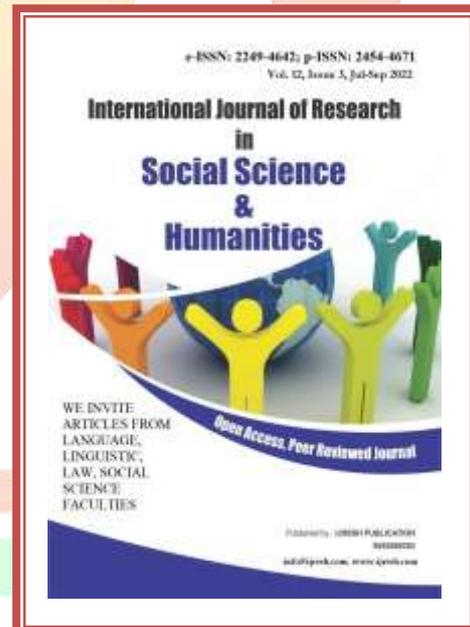
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PROBLEM OF STUDY

When it comes to knowledge and information technology, the role of school and university teachers has shifted. The emphasis is now on giving the student the opportunity to participate in the learning process (Guckel and Ziemer, 2002: 54). Furthermore, the emphasis is on empowering students to become self-directed students by providing them with the knowledge and skills to use and apply multimedia and communication technology in the learning process. Furthermore, information technology teaches students the necessary self-search skills required to successfully obtain information on the internet (Al Rewadia, 2011:66).

As a result, it has become necessary to employ modern teaching methods in order to achieve the educational goal of improving and enhancing traditional educational techniques used in the preparatory year. This should be the primary goal, rather than academic achievements. Furthermore, using cutting-edge multimedia and modern teaching techniques should assist the teacher in improving the natural teaching-learning process.

That is, improving educational quality through the use of multimedia and modern teaching techniques such as smart boards

(Al Rasheed, 2007:89). Students studying English as a foreign language, on the other hand, face challenges when attempting to use multimedia in the process of language learning, such as a smart board. That is, they lack the ability and skills to use and implement a smart board to teach English as a second language. The main issues with English students are those related to their inability to effectively use and implement smart boards when attempting to interact with the lessons or the teacher.

AIMS

The purpose of this study is to look into the efficacy of using smart board technology to teach English as a foreign language to students in schools and universities.

BENEFITS OF THE STUDY

The research topic is a rich one, with a large body of research literature that takes the researcher to many areas of knowledge and diverse and interesting issues. Another advantage is the emphasis on schools and universities from the same city, of different ages, and of the same religious background. This relative homogeneity allowed for a more accurate assessment of students' satisfaction with the change brought about by the introduction of smart boards, without being muddled by additional interfering variables.

This study may have a significant impact on key figures in the school system in general, as well as teachers who use smart boards to teach in particular, because it presents the various areas in which students feel an improvement as well as those in which the improvement is less noticeable. The findings may aid in the change that leads to greater improvement in all areas investigated in our study.

Further research is suggested, including a sample of high school students who previously studied with a regular whiteboard and now use a smart board, in order to compare the various board-based study methods. Unlike our study, which only provides an evaluation, such a study will allow key figures in the school system in general, and teachers in particular, to see the cost and benefit of the change that occurred with the introduction of smart boards.

To summarize, we learned a lot about the changes that occurred with the introduction of technology and smart boards into the school system. We were given the opportunity to visit schools that use smart boards, see the work that is being done up close, and thus raise awareness of the change that is occurring.

RESEARCH QUESTIONS

This study addresses the following research questions in order to achieve the research objectives:

Q1: What effect does using a smart board have on teaching English as a foreign language to students in the preparatory year?

Q2: Does the use of interactive whiteboards in the classroom affect students' attitudes and perceptions of learning English as a foreign language?

LIMITS

This study is limited to EFL students at various levels and stages in the governorate of Baghdad during the academic year 2020/2021.

DEFINITION OF BASIC TERMS

Smart Board

It is a specific type of interactive whiteboard. An interactive whiteboard, in its most basic form, allows you to project an image and 'interact' with it by writing on it or moving it around. The SMART Board is linked to a computer and works in conjunction with a projector. The projector displays what is open on the computer, and the SMART Board is a touch screen that allows you to manipulate anything on the screen with your fingers rather than a

mouse or keyboard (though these can also be used). It's similar to using a tablet or an iPad. A SMART Board comes with special pens that make writing in different colors quick and easy.

Engagement

Student engagement in education refers to the level of attention, curiosity, interest, optimism, and passion that students demonstrate when learning or being taught, as well as the level of motivation they have to learn and progress in their education.

Achievement

Student achievement is defined as the amount of academic content learned by a student in a given amount of time. Each grade level has learning objectives or instructional standards that educators must teach. Standards function similarly to a "to-do" list that teachers can use to guide instruction. When quality instruction is used to teach instructional standards, student achievement improves.

THEORETICAL BACKGROUND

Technological Changes in the School System

With the expansion of computerized use on the planet in general and in the educational system in particular, numerous types of shifted advancements were

presented in schools. The most well-known educational apparatuses are the class projector, the school site, and the class intuitive whiteboard. These help students understand the material and increase their enthusiasm for the exercise (Dror and Gershon, 2012:65).

An investigation that compared the written appreciation of understudies while internet perusing on the PC versus paper perusing discovered that web perusing was more effective and even produced higher evaluations (Huang, 2014:5).

Shan (2013:43) investigated the use of tablets in the educational system and their impact on students of various abilities, discovering that the tablet enables more vulnerable students to hear the writings at their own pace without feeling uncertain or humiliated about requesting that the educator survey the material.

Furthermore, the findings show that the tablet enables every understudy to hear the exact way to express the words, which increases their confidence in speaking accurately in front of the class. Another study conducted in the United States, in schools that provided workstations in the study halls, discovered that the combination of PCs in class positively affects understudies' learning and interest in class. Overall, the study suggests that instructors should expand and improve

their innovative knowledge in order to improve classroom instruction (Keengwe, Schnellert, and Mills, 2012).

The Smart Board

A Smart Board is an electronic whiteboard that is interactive. This board is linked to a computer and a projector, which displays a computer screen image. The SMART Board is controlled by a piece of software that allows users to use the SMART Board for a variety of purposes. It was first used in education in the late 1990s. It has, however, been given a variety of names, including Interactive White Board, Electronic White Board, and Smart Board technical terms, it is "a touch-sensitive screen that works in conjunction with a computer and a projector" (Beeland, 2002:43).

Four models demonstrating the improvement of innovation use in the school framework were presented in a fun project by the "Kadima-Mada" (Forward-Science) association, in which eager study halls were initiated in schools. The transition began with the development of the educator's station in class, which included the foundation for the use of a projector and a PC connected to the internet. Following that, an intuitive whiteboard was included, as well as a PC for each group of understudies. Finally, aside from the smart board, each

understudy received a PC (Blau, 2012:51). A significant change occurred in the educational system during the 2010/11 school year

The use of brilliant sheets incorporates the potential outcomes offered by the standard whiteboard, as well as other means that enable intelligent instructing and learning, such as connecting to understudies' PCs from home (Hadad and Gazit, 2012:31).

According to Blau (2011:63), three characteristics transform the smart board into an effective pedagogical tool:

A. Divergent learning is the ability to navigate from screen pages to the internet in a structured and fluid manner. This ability simulates the student's brain's associative organization and contributes to the organization and clarity of the lesson as perceived by the student.

B. Smart boards are cognitive tools that help students expand their minds and facilitate supported joint thinking. Because some of the students' mental load is transferred to the board, they are free to engage in higher-order thinking processes.

C. *Smart boards enable interactions between study materials and students themselves, both face-to-face and online.*

Notably, all teachers who use a smart board receive specialized training in which

they learn how to use it and how to teach with it, such as matching text to visual presentation or avoiding over-explaining.

Advantages and Disadvantages of the Smart Board

According to the theoretical foundation, smart boards play an important role in the learning process, especially when it comes to learning foreign languages. The following are some of the benefits of using a smart board:

Advantages:

1. *The Impact of Smart Boards on Instructional Excellence*
2. *SB technology is critical in making whole-class teaching more effective, productive, and creative (Elaziz, 2008; Lan & Hsiao, 2011:87). Furthermore, SBs allow teachers to plan their lessons more effectively (Levy, 2002:43). Teachers can also use SBS to conduct lessons in a more organized and planned manner, as well as to facilitate reflective practices (Schuck & Kearney, 2007:51).*
3. *The Impact of SBs on Learning*
4. *Smart boards indirectly support students' learning in terms of their direct contribution to instructional*

excellence, particularly through multimedia capability and a variety of sources (Beeland, 2002:10). Furthermore, it promotes learning by increasing motivation, student engagement and active participation in lessons, hands-on applications, interaction, attention, and taking into account individual differences.

On the other hand, studies have shown that smart boards enable EFL teachers and students to engage in a variety of activities while teaching and learning English. Here are a few examples of such activities:

5. *Activities with the SMART Board in Foreign Language Classes*

The impact of smart boards on foreign language classes is examined from two perspectives: those of teachers and those of students.

6. *Activities that Aid in Teaching SMART Board assists in the teaching of foreign languages in three ways:*

- 1) *It aids in the presentation of new linguistic and cultural elements*
- 2) *it encourages interaction with the class.*
- 3) *it promotes the teacher's organizational skills.*

Activities Supporting Interaction with Students

The Smart Board facilitates teachers' roles in developing strong rapport with students. It enables the teacher to navigate from the board; he or she does not need to go to his computer, turn his back on the class, and be more focused on technology than on the students' learning process. This point is critical when teaching with a SMART Board and is especially important in foreign language classes.

Every foreign language teacher understands how difficult it is to engage students in a relaxed conversation in the target language. Because it allows a group to watch a document at the same time and focus on the same point of the classroom, the projection makes it easier to start a conversation on a topic. The advantage of using a SMART Board is that it improves conversation:

Activities Supporting Teacher Organization When the teacher navigates the document from the board, he faces and interacts with the class. It allows the instructor to concentrate on the students' language production and conversations rather than technical issues.

In terms of classroom organization, smart boards assist teachers in effectively organizing EFL classes. Keeping track of vocabulary introduced in class, for example, is a major organizational issue in foreign language teaching, particularly in more advanced classes. The SMART

Board feature that allows the teacher to save the notes written on the board during class greatly aids this process. It aids teachers in remembering those words and encourages their reinforcement: the teacher is aware of the new elements he has introduced and is better able to work on reinforcing each of them.

7. *Activities that aid in the learning process* 1) *Oral Skills Supporting Activities*

8. Pennigton (1996:10) claims that "computers can sometimes encourage a type of anti-social behavior that amounts to working in isolation from others." This is a common criticism leveled at computer use, and it is especially pertinent in the context of foreign language classes, where we are expected to interact as much as possible in the target language.

9. Teachers who use smart boards in class report an increase in teaching quality. This rise is facilitated by the ability to conduct multimedia-rich lessons that capture students' attention and imagination in novel ways. The interactive whiteboard has the advantage of tailoring the study material to the students' individual learning styles (Becker & Lee, 2009:76).

10. The primary contribution of smart boards is that they provide options on various topics, contribute to understanding the material, developing knowledge, organizing information, self-efficacy in carrying out assignments in a friendly environment, increasing the efficiency of learning at any location and contributing to it, as well as the representation of products that generate a sense of success, pleasure, and contribute to a more creative and higher standard learning process (Dori & Kurtz, 2015:32).

11. The "Smart Project" study, which integrates smart boards in teaching and learning, looked at six schools to see what effect combining technology in pedagogy had on teachers and students.

10. According to Clark (2012:43), the benefit of smart boards is that teachers can save comments and explanations on the smart board, thereby recording lessons for future use by students who missed class due to absence or illness.

Disadvantages

1. Despite the fact that many studies show that using smart boards improves learning and makes teaching more meaningful, a study that compared the

ability to solve problems and thinking skills among students in smart classrooms and students in classrooms with regular boards discovered that students in classrooms with regular boards performed better.

2. Students who studied in smart classrooms complained that there were frequently technical issues and that the teachers were insufficiently skilled. Nonetheless, students in smart classrooms claimed in a questionnaire on attitudes toward learning that the smart board encourages motivation to learn, increases concentration, and has a strong effect on behavior (Shuck & Kearney, 2007).

Finally, the disadvantages and benefits appear to be rooted in the use of the smart board by the teacher and students. The effectiveness of smart boards is dependent on the teacher's careful use of them with the goal of making the material accessible to the students. Teachers must teach students how to use smart boards, prepare thoroughly for each lesson, and make use of all available aides (Hadad & Gazit, 2012:61).

Good Teaching Model

According to Avni and Rotem (2013:19), learning becomes significant when it has

value and significance for students, matches their subjective capacities, and shapes understudies' world, character, aptitudes, advancement, and future.

Hative (2015:77) assessed the territories that reflect the concept of good education. Her survey reveals that great instruction is divided into two perspectives: subjective reasoning and full of feelings. The intellectual reasoning component of good teaching includes the exercise's request and association, as well as its clarity and premium. The point at which the understudy follows the instructor, tunes in to the course of the exercise, comprehends what has been learned thus far and what will be discovered in the following stage is known as exercise association.

The concept of clarity alludes to introducing clarifications that are clear and comprehended by the understudies, allowing them to comprehend and apply the subject material.

Our primary goal is to investigate the effectiveness of using a smart board as a tool for progress, to investigate students' perceptions of it and its impact on them, and to investigate how keen sheets differ from other board work. Furthermore, we want to investigate whether the use of a smart board makes learning more interesting, as well as whether it encourages the study hall learning process.

Based on the theoretical foundation, our current hypotheses are:

- 1.The use of smart boards improves elementary school students' order and organization.
- 2.The use of smart boards improves the clarity of elementary school students.
- 3.The use of smart boards increases student interest in elementary school.
- 4.The use of smart boards increases overall satisfaction among elementary school students

METHODOLOGY

Sample

In the academic year 2020/2021, the sample included 20 EFL students of various levels, ages, and gender in the governorate of Baghdad.

Research Tools

In order to evaluate the students' overall satisfaction with smart boards and the level of order and organization, clarity, and interest, the Students' Attitudes to Meaningful Learning in an Innovative Environment questionnaire (Dori & Kurtz, 2015:44) was administered.

The original questionnaire was used online, and the current study used a printed version.

The number of questions was adjusted in accordance with the current hypotheses. The questionnaire contains ten items, and students were asked to rate the statements' accuracy on a scale of 1—"strongly agree" to 5—"strongly disagree." The four criteria examined in our research hypotheses were used to categorize the questions.

Procedure

The questionnaire was distributed to a large number of schools and universities. The students were given instructions on how to complete the questionnaire before being asked to do so voluntarily. The responses of the students were statistically analyzed.

Research Design

Independent variable:

1. Gender;
2. School;
3. Grade level.

Dependent variable:

1. Order and organization;
2. Clarity;
3. Interest;

4. Overall satisfaction.

Statistical Analysis

We ran a Pearson correlation on the questionnaire data to look at the relationship between the variables in the research hypothesis: order and organization, clarity, interest, and overall satisfaction. Gender differences, student stage differences, and differences between schools and universities were also investigated. We used an analysis of variance to determine which variable had the greatest impact on the change that occurred after switching to smart boards. Hativa (2015):229

RESULTS

A questionnaire was administered to check Pearson correlations between the variables in order to investigate the relationship between the use of smart boards and students' engagement and achievement in relation to dimensions of outstanding teaching.

The results of the analysis are summarized in the table below:

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Table 1 shows the results of a questionnaire designed to elicit information about the relationship between the SMART board and student engagement and achievement.

	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
1-The Smart board allowed for more student participation than traditional teaching tools (i.e. whiteboard, overhead projector, etc.)	55%	25%	15%	0%	0%
2-SMART board can be used to create and deliver interactive lessons and activities that engage students' interest and promote their higher order thinking.	45%	45%	5%	0%	0%
3- I think it is difficult to use and deal with SMART board technology in the classroom.	5%	5%	40%	45%	5%
4- I feel that I am more attentive to the lecture presented on the SMART board than I would have been with more traditional teaching tools (i.e. whiteboard, overhead projector, etc.)	35%	50%	5%	0%	5%
5- I am not interested in using SMART board as a means of achieving teaching purposes.	0%	5%	5%	55%	30%
6-SMART board technology training should be required in all teacher education programs.	35%	45%	10%	15%	0%
7- I feel confident, I can start using SMART board technology in my classroom teaching as being English language teacher in future.	35%	50%	15%	5%	0%
8-SMART board is insufficient technical support for enhancing students' writing and listening skills.	10%	30%	30%	15%	10%
9-The SMART Board made it easier for the instructor to transition between different points in the lecture.	25%	55%	15%	0%	0%
10-SMART board should be served as being created, maintained, and contributed for online learning communities.	30%	35%	25%	5%	0%

Analysis of the results reveals a significant difference between grades in level of clarity, with university graders having a higher level of clarity than school graders. This difference may be attributed to the natural maturation that occurs between university and school grades.

According to the findings, the level of clarity increases with order and organization. One possible explanation is that the more organized and focused the

student is on the lesson, the clearer the study material will be for him or her.

There is also a positive relationship between interest and clarity, with the higher the level of interest, i.e., when the student is concentrated and interested in the study material, the higher the level of clarity.

The greater the student's order and organization, clarity, and interest, the greater his or her overall satisfaction.

DISCUSSION AND CONCLUSION

When attempting to investigate the effect of introducing smart boards as a mechanism of change in the school system, we focused on the cognitive-thinking aspect of good teaching methods presented by Hativa (2015:33).

This aspect inspired our hypotheses about how using smart boards improves order and organization, level of clarity, interest, and overall satisfaction among elementary school students.

The second of our four hypotheses was significantly confirmed. Although the analysis of variance revealed a significant difference in the level of improvement as a result of using smart boards, the post hoc analysis revealed that a significantly meaningful improvement was only evident in the area of clarity, confirming the second hypothesis. The first, third, and fourth hypotheses, on the other hand, were proven false, as the greatest improvement was seen in overall satisfaction.

Gender, grade (age), and school (religiosity) differences were investigated in order to refute alternative explanations. There appears to be a gender difference in the areas affected by smart boards, with girls showing significantly more interest than boys. A study that looked at gender differences discovered that girls

outperform boys in terms of personal, social, and emotional development. They are more diligent in problem solving, have better concentration, and understand what is correct and what is incorrect (Fisher, 2013:80).

When the differences between grades (age) are examined, the results show a significant difference in level of clarity between grades, with university graders having a higher level of clarity than school graders. This difference may be attributed to the natural maturation that occurs between fifth and sixth grades.

Pearson correlations examining school differences show that all variables have a mutual effect. The greater the order and organization, the greater the clarity and interest, and the greater the interest, the greater the order and organization, clarity, and interest, so that the greater the order and organization, clarity, and interest, the greater the students' overall satisfaction. This indicates that students' levels of interest will be higher when they follow the teacher and are attentive to the course of the lesson, clearly understand what has been taught thus far and what will be taught in the next stage.

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