Using an interactive whiteboard to improve second year preparatory stage students' English-speaking skills

Fatma Al-Zahraa R. Mohamed

1 Faculty of Education. English Department, Assiut University (Egypt)

fatmaragab945@yahoo.com

Abstract:

The present study aimed at investigating the effectiveness of using an interactive whiteboard to improve second year preparatory stage students' English-speaking skills. The participants were 60 students from among second year preparatory stage at Assiut governorate- Manfalout city who were randomly chosen and divided into two groups: a control group (n=30) and an experimental group (n=30). The students of the experimental group were taught through using the interactive whiteboard whereas those of the control group studied the same content through the traditional method. The study employed the quasi-experimental design of two groups which were tested before and after the treatment to verify the effectiveness of the interactive whiteboard. The instrument of the study was a speaking test. A speaking skills test and a rubric was designed to score the test and validated by the jury members. The results showed that the students of the experimental group performed much better on the post testing. The program was thus proved to be effective in improving their speaking skills (asking short questions, using appropriate words in a conversation, using tenses appropriately, using pauses correctly, and producing simple sentences fluently).

Keywords: An Interactive Whiteboard; Speaking Skills; Preparatory Stage Students.
استخدام السبورة التفاعلية في تحسين مهارات التحدث باللغة الإنجليزية لدى طلاب الصف الثاني الإعدادي

فاطمة الزهراء رجب محمد

كلية التربية - قسم اللغة الإنجليزية، جامعة أسيوط (مصر)

fatmaragab945@yahoo.com

ملخص:

هدفت الدراسة الحالية إلى تحديد فعالية استخدام السبورة التفاعلية لتنمية مهارات التحدث باللغة الإنجليزية لدى متعلم اللغة الإنجليزية كلغة أجنبية. وقد تكوّنت مجموعة الدراسة من (60) طالبًا وطالبة من محافظة أسيوط - مدينة منفلوط، تم اختيارهم بطريقة عشوائية، وتقسيمهم إلى مجموعتين، إحداهما ضابطة قوامها (30) طالبًا، ومجموعة أخرى تجريبية قوامها (30) طالبًا. وتم التدريس للمجموعة التجريبية باستخدام السبورة التفاعلية، بينما تم تدريس المحتوى نفسه للمجموعة الضابطة باستخدام الطريقة المتрадدة في التدريس، وتحقيق هدف الدراسة تم استخدام المناهج التجريبي، بالتصميم شبه التجريبي ذي المجموعتين، وذلك بتطبيق أداة الدراسة اختيار مهارات التحدث قبلًا وبعديًا. وأظهرت نتائج الدراسة فوائد المجموعة التجريبية على المجموعة الضابطة في الاختبار البعدي، مما دل على فاعلية البرنامج القائم على السبورة التفاعلية في تنمية مهارات التحدث وهي (طرح أسلحة قصيرة، استخدام الكلمات المناسبة في المحادثة والحوار، استخدام الأزمة بشكل مناسب، استخدام التوقفات بشكل صحيح، إنتاج جمل بسيطة بطلاقة).

الكلمات المفتاحية: السبورة التفاعلية، مهارات التحدث، طلاب المرحلة الإعدادية.
1. Introduction

English language occupies a unique and a momentous role in everyday life since it is a means of communication, expressing feelings, sharing ideas and conveying thoughts. It is an international language that is spoken all over the world. It serves the purpose of talk. Also, communication plays a vital role in different fields such as: social purpose, travel, business and education. For example, individuals speak with many people in varied situations to convey a message, interact with others and maintain relations. Therefore, English language is a valuable means through which human beings in the society communicate and exchange information. This significant part shows how important learning English is in everyday life.

Learning English language necessitates mastery of the four main language skills, namely, listening, speaking, reading and writing. Those skills are classified into: receptive (listening and reading) and productive (speaking and writing). One of those fundamental skills is speaking. It is the means through which students can contact with others to make presentations, describe things, transmit information or express their opinions. It is an interactive process of constructing meaning that includes receiving, processing information, producing sounds and words. According to Anil (2016) speaking is one of the most difficult skills students may possess because it needs a lot of practice and exposure to the target language because it is influenced by many factors such as: the speaker, the amount of the information that are processed, the environment, and lack of vocabulary or structure. Consequently, speaking is not only the ability to form correct grammatical utterances, intonation, stress or pronunciation, but to apply the appropriate spoken features and communicate effectively as well.

Improving speaking skills is very important, because success in learning a language is measured in terms of the ability to speak and carry out a conversation in the target language. According to Ali (2011) speaking instruction is a crucial part of the language learning process. Furthermore, if the right speaking activities are taught in the classroom, they can make the English classroom fun and dynamic place. In this context, Sanaa (2013) states that speaking and listening have a strong relationship. She states that a good speaker should be a good listener as well. A proficient speaker should have the ability to listen to spoken language and understand what is said to answer accurately. In addition, the listener and the speaker should take part in interaction. Therefore, achieving a high level in speaking is considered as the main target in English language. Therefore, speaking is probably a priority for most EFL learners of English.

Speaking skills are varied. It includes several sub-skills that help students to use vocabulary and grammatical rules communicatively such as: phonological, lexical, functional, grammar and fluency skills. According to El-Feki and Khamis (2014), phonological skills mean to produce sounds appropriately and use intonation. While lexical skills mean to use vocabulary appropriately. Furthermore, functional skills mean to perform communicative functions effectively like: greetings, invitations, asking questions, giving advice…etc. Grammatical skills mean to use grammatical correct sentence but fluency skills mean to produce simple sentences at a normal rate, use pause appropriately. In this context, Lackman (2010, P3) added a number of sub-skills underlying speaking like: fluency, accuracy, relevant length to practice speaking at an appropriate length, range of words, use discourse markers. The researcher divided the sub-skills into: asking short questions, using appropriate words in a conversation, using tenses appropriately, and producing simple sentences fluently. Consequently, speaking is a complicated process in which fluency is identified as the most required ability when talking smoothly in the target language.
Many studies indicated that speaking skills have largely been neglected inside and outside the classroom such as: Al-Mohanna (2011), Afana (2012), Ashour (2014) and Tolba (2016), Hughes (2017), El-Beltagy et al. (2019). Many students study English for many years, but they cannot apply the skills in different situations in real life effectively. Most EFL learners are afraid of speaking in the target language and most of the time they show a passive attitude in the classroom because they do not have opportunity to express themselves naturally and spontaneously (Ho & Long, 2014). Students cannot communicate verbally because of shyness, fear of making mistakes in front of others, inadequate vocabulary, speaking slowly or lacking the necessary knowledge. Therefore, there is always a need to examine the different methods through continuous research to make the process of teaching speaking a practical and an enjoyable activity.

In the era of globalization, technology has considerable role in the field of education. The rapid development of technology has opened new opportunities for changing the way of teaching. In this context, Amiri and Shirifi (2014) state that modern technology becomes an important component of teaching language. Using technology has become indispensable tool in English teaching classroom. The use of modern technology applications e.g. electronic libraries, websites, podcasts and e-mails affect the methods of teaching. Furthermore, digital technology has played an important role in facilitating the way of teaching through which information can be delivered and shared, not only from a teacher to a learner, but also among learners themselves. Among the recent technological devices that appeared is the interactive whiteboard.

An interactive whiteboard is an example of the technological tools that brings revolutionary changes in education. It refers to a large touch-sensitive board which is connected to a computer and a digital projector. Zezulkova (2017) stated that IWB is a powerful instructional tool that allows computer images to be displayed on a board using an electronic pen and a digital projector. IWB is a technology which combines the benefits of the teaching aids like chalkboard, video, overhead projector, CD player and computer in one. It is a flexible tool in the classroom supporting interactivity and collaboration, allowing the integration of multimedia content and resources.

An interactive whiteboard is the most beneficial to students in the preparatory stage because it helps them to be accustomed to new technologies that are incorporated into the curriculum. According to Mursy (2023) IWB is interesting when it is integrated into one's learning. It engages students and serves as motivation for interaction, participation, and understanding. The students can participate actively in the classroom. IWB enhances communication. For example, when two students come to the front of IWB, they can communicate with each other. Also, when a student touches the word with his finger, he can receive an oral feedback. The students are very curious and active because children have a limited attention, require interaction in learning; they are very imaginative and prefer physical activities. To sum up, the students learn by manipulating things they mostly rely on speaking when requiring praise.

Using the interactive whiteboard in teaching is also an effective way for teachers to enhance their students' opportunities to practice English language with fluency and accuracy, improve their vocabulary, enhance cooperation and interaction among students, provide more effective, dynamic and attractive presentation. It helps teachers to create comfortable classroom atmosphere which is conducive for oral communication and help students to feel relax. Using IWB provides teachers with many opportunities to use multimedia resources such as: video clips, sound tracks and diagrams. Also, using technological resources help teachers in explaining complex idea and provide their students with opportunities to master the necessary speaking skills. Hamouda (2016) mentions that learning a language flourishes most when students are in a stress-free environment to
communicate effectively in real life situations. So, interactive white board may be a key that increase the students' motivation to learn to speak.

Based on the above, it can be concluded that an IWB had an effect on improving the whole language skills especially speaking skills. A significant number of studies had been implemented to prove the effectiveness of using IWB in teaching and learning in different stages. Few studies addressed the effectiveness of using IWB to improve speaking skills. To the best knowledge of the researcher, there is no study that investigated the effectiveness of using the interactive white board to improve EFL learners' speaking skills.

1.1 Context of the study
Based on the researcher’s observation as a teacher of English at Manfalout preparatory school for five years, she noticed that most of the second-year students lack the ability to speak English well. In an informal meeting with ten teachers of English at the preparatory stage, the teachers mentioned that most teachers use traditional methods in teaching speaking skills so, the students are poor. Therefore, the students do not participate actively in the classroom because they do not practice English inside or outside the classroom. In addition, they feel shy or afraid of making mistakes in front of others. Many studies that were conducted in Egypt and the Arab world indicated that preparatory stage students suffered from the poor performance in mastering speaking skills such as: Afana (2012), Ashour (2014), Tolba (2016). This showed that the results of the related literature supported that there is a real need to use a new method to improve speaking skills. Even though the previous studies recommended improving the speaking skills in various stages, complaints still exist. To validate the existence of the problem, the researcher conducted a pilot study through applying a diagnostic test on a group of 20 second year preparatory stage students and the pilot study demonstrated that the students in the second year are very weak in speaking skills such as: producing sounds appropriately and using intonation, using vocabulary appropriately, performing communicative functions effectively like: greetings, invitations, asking questions, giving advice …etc, using grammatical correct sentence and producing simple sentence at a normal rate, use pause appropriately. Therefore, the researcher used an interactive whiteboard to improve second year preparatory stage students’ English-speaking skills.

1.3 Statement of the problem
The problem of the study was identified in the second-year preparatory stage students’ weakness in performing speaking skills. They had difficulties in asking short questions, using appropriate words in a conversation, using tenses appropriately, and producing simple sentences fluently. Therefore, the researcher used an interactive whiteboard to improve their English-speaking skills.

1.4 Aim of the study
The present study aimed at determining the effectiveness of using an interactive whiteboard to improve second year preparatory stage students' English-speaking skills. Those skills are (asking short questions, using appropriate words in a conversation, using tenses appropriately, using pauses correctly, and producing simple sentences fluently).

1.5 Question of the study
The present study attempted to answer the following question: What is the effectiveness of using an interactive whiteboard to improve second year preparatory stage students' English-speaking skills (asking short questions, using appropriate words in a conversation, using tenses appropriately, using pauses correctly, and producing simple sentences fluently)?
1.6 Hypothesis of the study
There would be a statistically significant difference at 0.05 level between the mean scores of the experimental group and the control group in the speaking post-test in favor of the experimental group.

1.7 Significance of the study
The significance of the present study can be summarized as follows:

(A) For EFL students
1. The study is important for EFL students because it is expected to improve their speaking skills.
2. The program may allow EFL students to become more active and confident.
3. The use of an interactive whiteboard provides EFL students with opportunities to cooperate, share ideas, negotiate problems and discuss solutions.
4. The study promotes the genuine use of the target language inside and outside the classroom.

(B) For EFL teachers who teach in the preparatory stage
The study is important for EFL teachers in the preparatory stage as they can get more benefit from the teacher's guide and students’ activity book that are parts of the interactive whiteboard program.

(c) For course designers
The course designers may be directed to the momentous of the interactive whiteboard to course design and the activities concomitant with this promising device especially with young learners.

1.8 Delimitations of the study
This study was delimitated to the following points:
− A group of 60 students in second year preparatory stage from Assuit governorate at Manfalout preparatory school who were randomly chosen to represent both: the experimental and the control groups. They are from one public school and they have the same linguistic background.
− Speaking sub-skills (asking short questions, using appropriate words in a conversation, using tenses appropriately, using pauses correctly, and producing simple sentences fluently)
− The experiment lasted for four weeks during the first semester 2022\2023.

1.9 Definitions of terms
Speaking skills
Laksana (2016, P5) defined speaking skills as "an individual's skill to produce sounds in order to be understood by other people and communicate effectively".

For the present study, speaking skills are the ability of the second-year preparatory stage students to express about themselves orally, coherently, fluently and appropriately in a given meaningful context using correct pronunciation, vocabulary and grammar through using interactive whiteboard activities.

An interactive white board
Wang et al. (2019, P170) defined interactive white board as "a large, touch sensitive board which is connected to a digital projector and a computer. The projector displays the image from the computer screen onto the board. The computer can then be controlled by touching the board, either directly or with a special pen".

For the present study, an interactive white board is a technological device that helps the second-year preparatory stage students to improve their speaking skills (asking short questions, using appropriate words in a conversation, using tenses appropriately, using pauses correctly, and producing simple sentences fluently).
2. Literature Review

In social learning, many studies want to reinforce their beliefs and understandings through making learning an inherently social activity. Al-Saleem (2012) mentioned that current educational theories are based on the notion of social learning and student engagement as a key component of knowledge construction. First, interactive teaching brings the entire class together, focuses their attention and provides the group interaction. Second, Constructivism relies on the learner who selects and transforms information, builds hypotheses in order to make decisions and ultimately construct meaning. Third, in interactive learning the students actively engage in the learning process through reading, writing, discussion, analysis, synthesis and evaluation, rather than passively absorbing instruction (e.g., lecture-based instruction).

A common thread between those three learning theories is the understanding that student engagement is crucial to learning and researches such as (Allen, 2010; Bacon, 2011) proves that IWB promotes students’ engagement so educators can use digital resources while maintaining dynamic interaction with the entire class, provide computer-based learning without isolating students and encourage a higher level of student interaction in both teacher-directed and group-based exchanges. This means that technological tools increase interaction among the students. A teacher and a student can interact with the IWB in front of the class and the rest of the students remain involved so they encourage greater focus, participation and interaction, and improving student learning outcome.

2.1 Studies related to speaking skills

Speaking is not an easy skill. According to Anil (2016), speaking is one of the most difficult skills students may possess because it needs a lot of practice and exposure to the target language. It is a complicated skill because it is influenced by many factors such as: the speaker, the amount of the information that are processed, the environment, and lack of vocabulary or structure. It is more than utterance of words. Also, the students mix between Arabic and English. Furthermore, there are some English alphabets that are not found in Arabic. A number of studies that were conducted in Egypt and the Arab world indicated that the preparatory stage students suffer from weakness in speaking skills such as: Afana (2012), Ashour (2014), Tolba (2016), Hughes (2017), Al-Qassas (2019), El-Beltagy et al. (2019), Tawfik (2021), Abdel-Fatah (2022), Qoura (2022).

Afana (2012) investigated the effectiveness of using educational drama interventions to develop ninth grade female students' speaking skills. The participants were 60 female students from among the ninth-grade students in Palestine who were randomly divided into two groups: a control group (n=30) and an experimental group (n=30). The study was a quasi-experimental design. The students of the experimental groups taught the suggested program whereas those of the control group studied the same content through the traditional method. The instruments of the study were: an observation card and speaking skills test. The results showed that the students of the experimental group performed much better on the post test. The program was effective in improving their speaking skills and significant at .05 level in favor of the experimental group.

Ashour (2014) investigated the effectiveness of using video-conferencing based strategy to develop ninth grade students' speaking skills. The participants were 60 female students from among the ninth-grade students in Palestine who were randomly divided into two groups: a control group (n=30) and an experimental group (n=30). The study was a quasi-experimental design. The students of the experimental groups taught the suggested program whereas those of the control group studied the same content through the traditional method. The instruments of the study were:
an observation card and speaking skills test. The results showed that the students of the experimental group performed much better on the post test. The program was effective in improving their speaking skills and significant at .05 level in favor of the experimental group.

Tolba (2016) investigated the effectiveness of using digital storytelling to develop preparatory stage students' speaking skills and their motivation towards learning English language. The participants were 64 students from among the ninth-grade students in Palestine who were randomly divided into two groups: a control group (n=32) and an experimental group (n=32). The study was a quasi-experimental design. The students of the experimental groups taught the suggested program whereas those of the control group studied the same content through the traditional method. The instruments of the study were: speaking skills test and a motivation scale. The results showed that the students of the experimental group performed much better on the post test. The program was effective in improving their speaking skills and motivation towards learning English language and the program was significant at .05 level in favor of the experimental group.

Al-Qassas (2019) investigated the effectiveness of a suggested program based on collaborative learning for improving preparatory stage students' overall speaking skills and sub-skills (pronunciation, vocabulary, grammar, and fluency). The participants were 41 students from among the first year preparatory stage students in Egypt. The study was a quasi-experimental design of one group. The students of the treatment group taught the suggested program. The instrument of the study was a speaking pre-posttest. The results showed that the students of the treatment group performed much better on the post test. The program was effective in improving their speaking skills the program was significant at .05 level.

El-Beltagy et al. (2019) investigated the effectiveness of using eclectic teaching strategies namely (PAVES - Mind Mapping - Think-Pair-Share) for developing EFL preparatory stage students' speaking skills. The participants were 33 students from among the second year preparatory stage students in Egypt who were randomly divided into three groups: The study was a quasi-experimental design of one group. The students of the treatment groups taught the suggested program. The instruments of the study were: a questionnaire and speaking skills test. The results showed that the students of the treatment groups performed much better on the post test. The program was effective in improving their speaking skills and the program was significant at .05 level.

Tawfiq (2021) investigated the effectiveness of using computer mediated communication program for developing EFL preparatory stage students' speaking skills. The participants were 60 students from among the first-year preparatory stage students in Egypt who were randomly divided into two groups: a control group (n=30) and an experimental group (n=30). The study was a quasi-experimental design. The students of the experimental groups taught the suggested program whereas those of the control group studied the same content through the traditional method. The instruments of the study were: an observation card and speaking skills test. The results showed that the students of the experimental group performed much better on the post test. The program was effective in improving their speaking skills and the program was significant at .05 level in favor of the experimental group.

Abdel-Fatah (2022) investigated the effectiveness of using computer edutainment activities for developing EFL preparatory stage students' speaking skills. The participants were 60 students from among the first year preparatory stage students in Egypt who were randomly divided into two groups: a control group (n=30) and an experimental group (n=30). The study was a quasi-experimental design. The students of the experimental groups taught the suggested program
whereas those of the control group studied the same content through the traditional method. The instruments of the study were: an observation card and speaking skills test. The results showed that the students of the experimental group performed much better on the post test. The program was effective in improving their speaking skills and the program was significant at .05 level in favor of the experimental group.

Qoura (2022) investigated the effectiveness of using pragmatic-based activities for developing EFL preparatory stage students' speaking skills. The participants were 60 students from among the first year preparatory stage students in Egypt who were randomly divided into two groups: a control group (n=30) and an experimental group (n=30). The study was a quasi-experimental design. The students of the experimental groups taught the suggested program whereas those of the control group studied the same content through the traditional method. The instrument of the study was speaking skills test. The results showed that the students of the experimental group performed much better on the post test. The program was effective in improving their speaking skills and the program was significant at .05 level in favor of the experimental group.

2.2 Studies related to the interactive whiteboard

An extensive review of the available literature about Interactive Whiteboard (IWB) revealed that there was a scarcity of research in the field of using interactive whiteboard (IWB) in improving EFL preparatory stage students' speaking skills such as Hendley (2012), Lin & Chu (2018). There were only two studies that were conducted in Egypt in the preparatory stage such as: Abdel-Mageed (2019), Abu-Deif (2022) as follows:

Hendley (2012) investigated the effectiveness of using the interactive whiteboard activities for improving secondary stage students' speaking skills. The participants were 60 students from among the first-year secondary stage students in Spain who were randomly divided into two groups: a control group (n=30) and an experimental group (n=30). The study was a quasi-experimental design. The students of the experimental groups taught the suggested program whereas those of the control group studied the same content through the traditional method. The instrument of the study was speaking test. The results showed that the students of the experimental group performed much better on the post test. The program was effective in improving their speaking skills and the program was significant at .05 level in favor of the experimental group.

Lin & Chu (2018) investigated the effectiveness of using the interactive whiteboard activities for improving EFL preparatory stage students' language proficiency. The participants were 42 students from among the first-year preparatory stage students in Taiwan who were randomly divided into two groups: a control group (n=21) and an experimental group (n=21). The study was a quasi-experimental design. The students of the experimental groups taught the suggested program whereas those of the control group studied the same content through the traditional method. The instrument of the study was language proficiency test and a questionnaire. The results showed that the students of the experimental group performed much better on the post test. The program was effective in improving their speaking skills and the program was significant at .05 level in favor of the experimental group.

Abdel-Mageed (2019) investigated the effectiveness of using the interactive whiteboard activities for developing EFL preparatory stage students' speaking skills. The participants were 60 students from among the first year preparatory stage students in Egypt who were randomly divided into two groups: a control group (n=30) and an experimental group (n=30). The study was a quasi-
experimental design. The students of the experimental groups taught the suggested program whereas those of the control group studied the same content through the traditional method. The instrument of the study was speaking skills test. The results showed that the students of the experimental group performed much better on the post test. The program was effective in improving their speaking skills and the program was significant at .05 level in favor of the experimental group.

Abu-Deif (2022) investigated the effectiveness of using the interactive whiteboard activities for developing oral communication skills of the fifth year primary school pupils. The participants were 30 students from among the fifth year primary stage students in Egypt. The study used a quasi-experimental design of one group. The treatment group taught the suggested program. The instruments of the study were: an observation card and speaking skills test. The results showed that the students performed much better on the post test. The program was effective in improving their speaking skills and the program was significant at .05 level.

In light of the pre-mentioned studies, it is noticed that the present study benefited from the related studies in the variables that those studies adopted to enhance and improve speaking skills. Literature review provided the quasi-experimental design, instruments, and programs that guided the researcher in writing her study. Also, they used different number of the participants so the researcher got benefited from those studies.

3. Research Methodology

3.1 Participants
A group of 60 students in second year preparatory stage at Manfalout preparatory school who were randomly chosen to represent both: the experimental and the control groups. The experimental and the control groups were homogenous at the beginning of the experiment because they were the same age and had the same linguistic background; they were from one public school. There was no statistically significant difference at .05 level between the two mean scores of the two groups in the pre-test as follows (72, 75), (72,23).

3.2 Design of the study
The study used a quasi-experimental design of two groups to achieve the aim of the study.

3.3 Variables of the study
The present study had two variables:
The independent variable: an interactive whiteboard
The dependent variable: speaking skills

3.4 Materials and instruments of the study
(A) Materials
- An interactive whiteboard program included the following:
  - A Teacher’s guide that consisted of 8 lessons entitled "let's talk". One unit was specified for learning vocabulary. The other unit was specified for learning grammar.
  - Students’ workbook
(B) The instrument
- A speaking pre-posttest for second year preparatory stage students.

3.5 Procedures of the study
For developing students’ speaking skills, the teacher creates an activity called "describing a story". Firstly, the teacher talks about the topic and presented an image on the board and then told the students to tell a story. The first student would initiate the story and stop in the middle of a sentence. Then, the second student continued the story. Like the first student, the second student...
also stopped in the middle of a sentence. And the rest of the student followed the same pattern until
the teacher told them to finish it. This makes a kind of conversation and interaction among students.

For vocabulary learning, the teacher created an activity called “one body” in which the
teacher presented an image and icon (speakers) on the interactive whiteboard. By clicking on the
icons, the students can listen to the words about body parts. The students can come to the
whiteboard and drag the body parts to the right place on the board. Grammar learning is not
infrequently unpopular with students. Interactive whiteboards can make grammar learning more
interesting. In the research, the teacher used the “word order” activity to teach grammar, in which a
few sentences were divided into single words and can be dragged on the screen. The students were
invited to come to the whiteboard to put the words in the right order.

**The teacher's role in the interactive whiteboard program**

There are several roles that the teacher plays during the program. The teacher's role in the program
is changed according to the aim of the lesson. These roles are varied as follows: a) the teacher is an
observer, b) a facilitator, c) a supporter, d) a participant, e) a designer of tasks.

**The students' roles in the interactive whiteboard program**

The students have an important role in the program. They are active participants, zealous,
autonomous to speak, work cooperatively, plan, accept challenges, and perform the dialogues.

**The speaking skills Test**

**Objective of the test**

The test aimed at measuring the students' performance in speaking skills as follows:

- Asking short questions
- Using appropriate words in a conversation
- Using tenses appropriately
- Using pauses correctly
- Producing simple sentences fluently

**Test description**

The test was designed for assessing the students' speaking skills. The test included the instructions

**3.9.3. Scoring technique of the test**

The researcher designed a scoring rubric for short answer questions. The indicators separated into
five criteria. The true value of every item that is written in the question paper was computed
according to the following:

<table>
<thead>
<tr>
<th>No</th>
<th>Indicators</th>
<th>Criteria</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Mechanics</td>
<td>The meaning and the structure are correct and free of errors</td>
<td>5</td>
</tr>
<tr>
<td>2</td>
<td>Mechanics</td>
<td>The meaning is correct and few errors in the structure</td>
<td>4</td>
</tr>
<tr>
<td>3</td>
<td>Mechanics</td>
<td>The meaning is incorrect and sometimes errors in the structure</td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>Mechanics</td>
<td>The meaning is correct and a lot of errors in the structure</td>
<td>2</td>
</tr>
<tr>
<td>5</td>
<td>Mechanics</td>
<td>The meaning and structure are incorrect</td>
<td>1</td>
</tr>
</tbody>
</table>

**Test Validity**

The validity of the test was calculated through using two ways:

- Logical validity through introducing the test to a number of jury members to evaluate the test in
terms of:

a) The appropriateness of the test items to the aim of the study.
b) The clarity of the instructions given.
c) The suitability of the language to the students' linguistic background.

The internal validity of the test was calculated by using SPSS. 016 through finding the correlation between the mark of every sentence and the total mark of the test.

Table 2: Test validity

<table>
<thead>
<tr>
<th>Question No.</th>
<th>Correlation coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>**0.84</td>
</tr>
<tr>
<td>2</td>
<td>**0.77</td>
</tr>
<tr>
<td>3</td>
<td>**0.87</td>
</tr>
<tr>
<td>4</td>
<td>**0.73</td>
</tr>
<tr>
<td>5</td>
<td>**0.74</td>
</tr>
<tr>
<td>6</td>
<td>**0.81</td>
</tr>
<tr>
<td>7</td>
<td>*0.85</td>
</tr>
<tr>
<td>8</td>
<td>**0.79</td>
</tr>
<tr>
<td>9</td>
<td>**0.79</td>
</tr>
<tr>
<td>10</td>
<td>**0.85</td>
</tr>
</tbody>
</table>

*At level (0.05) **At level (0.01)

Test reliability

The test reliability was calculated through using two ways: Cronbach's Alpha as follows:

Table 3: Test Reliability

<table>
<thead>
<tr>
<th>Skill</th>
<th>Cronbach's Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asking short questions</td>
<td>*0.71</td>
</tr>
<tr>
<td>Using appropriate words in a conversation</td>
<td>*0.75</td>
</tr>
<tr>
<td>Using appropriate tense</td>
<td>*0.71</td>
</tr>
<tr>
<td>Using pauses correctly</td>
<td>*0.76</td>
</tr>
<tr>
<td>Producing simple sentences fluently</td>
<td>*0.73</td>
</tr>
<tr>
<td>Total</td>
<td>*0.73</td>
</tr>
</tbody>
</table>

In light of table 2, it was indicated that by using Alpha-Cronbach, the result showed the consistency was *0.73. This value was considered high and made the test reliable and applicable.

Test duration

The test time allowed through using the following equation:

Test time allowance = the time that was taken by the fastest student who finished the test + the time that was taken by the slowest and final student ÷2

M = 120 + 60 = 180

180 ÷ 2 = 40

4. Results of the study

To verify the hypothesis "There would be a statistically significant difference at 0.05 level between the mean scores of the experimental group and the control group in the post-test". The T-test of two independent groups was used to compare the mean scores of the experimental and control group in the post-test. It was indicated that the experimental group got a higher mean (14.53) than the control group who got (10.37). This confirms the hypothesis and answer the question what is the effectiveness of using an interactive whiteboard to improve second year preparatory stage students' English speaking skills?
Table 4: Comparison between the experimental and the control group performance in the post-test

<table>
<thead>
<tr>
<th>Skills</th>
<th>Groups</th>
<th>Means</th>
<th>SD</th>
<th>T-Value</th>
<th>DF</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asking short questions</td>
<td>Experimental</td>
<td>3.43</td>
<td>.59</td>
<td>5.13</td>
<td>58</td>
<td>**</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>2.53</td>
<td>.53</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Using appropriate words in a</td>
<td>Experimental</td>
<td>3.73</td>
<td>.45</td>
<td>7.44</td>
<td>58</td>
<td>**</td>
</tr>
<tr>
<td>conversation</td>
<td>Control</td>
<td>1.73</td>
<td>.50</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Using tenses correctly</td>
<td>Experimental</td>
<td>3.03</td>
<td>.62</td>
<td>4.30</td>
<td>58</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>2.35</td>
<td>.70</td>
<td></td>
<td></td>
<td>**</td>
</tr>
<tr>
<td>Using pauses appropriately</td>
<td>Experimental</td>
<td>2.90</td>
<td>.61</td>
<td>4.12</td>
<td>58</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>2.27</td>
<td>.52</td>
<td></td>
<td></td>
<td>**</td>
</tr>
<tr>
<td>Producing simple sentences fluently</td>
<td>Experimental</td>
<td>2.43</td>
<td>.50</td>
<td>6.12</td>
<td>58</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>1.53</td>
<td>.63</td>
<td></td>
<td></td>
<td>**</td>
</tr>
<tr>
<td>Total score</td>
<td>Experimental</td>
<td>14.53</td>
<td>2.19</td>
<td>6.64</td>
<td>58</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>10.37</td>
<td>2.65</td>
<td></td>
<td></td>
<td>**</td>
</tr>
</tbody>
</table>

5. Discussion

The results of the study were remarkably positive and encouraging. Through examining students' answers in the speaking skills test, the results indicated that there was a statistically significant difference between the experimental group and the control group at 0.05 level in favor of the experimental group. The experimental group performed much better and got higher mean scores in the speaking post-test (14.53) than the control group (10.37). They achieved more progress in the intended speaking skills (asking short questions, using appropriate words in a conversation, using tenses appropriately, using pauses correctly, and producing simple sentences fluently) after administering the interactive whiteboard activities, but before implementing the program, the results were unsatisfactory. There was no statistically significant difference at the .05 level between the two mean scores of the experimental group and the control group. The mean was (9.77), (10.01) respectively.

But before administering the program, the results were unsatisfactory. The teacher used one way of teaching which is teacher-centered. The teacher was the source of information. The students were lazy. They were afraid of making mistakes in front of others and did not want to participate actively in the classroom. Some students did not convince with the program at the beginning, because teachers did not use enough teaching aids that help students to participate in the activities. But after implementing the program, the students become more active and they did not afraid of making mistakes.

Also, this progress may be attributed to the teacher's role as a facilitator, the effective activities that the teacher used, the comfortable atmosphere that she created, the teacher's encouragement, the teacher's feedback because students received explicit and implicit feedback from the teacher and their peers. Additionally, this could be due to the feedback. It allowed students to move away from the mechanical memorization of new words, provided them with opportunities to interact, negotiate, discuss and communicate effectively. Perhaps, this progress could be due to the students' participation in the classroom and cooperation with their peers in groups that helped them to use the language communicatively. The students were active participants, zealous, worked cooperatively.
Based on the above mentioned, it can be concluded that an interactive whiteboard has a great effect on improving preparatory stage students English speaking skills. These results go in line with the results of Abdel-Mageed (2019) and Abu-Deif (2022) who used the interactive white board to improve the students speaking skills and different from Afana (2012), Ashour (2014), Tolba (2016), Al-Qassas (2019), El-Beltagy et al. (2019), Tawfik(2021), Abdel-Fatah (2022), Qoura (2022) who used different strategies to improve speaking skills.

6. Conclusion
Speaking skills via IWB could be emphasized in teaching speaking to help students in the preparatory stage acquire and practice the speaking skills as early as possible. It emphasizes that speaking is a process, concentrate on students' attitudes towards speaking. Also, teachers need to work collaboratively with colleagues and experts and exchange experiences, ideas, activities, materials, lesson plans and resources in order to save treasured time which can be dedicated to teaching speaking skills. Teachers should be selective, innovative and creative in choosing adequate meaningful communicative materials and topics that make speaking experience and activities more realistic and relevant.

To sum up, IWB should be used attentively and teachers should keep in mind a back-up plan if something wrong happened. Thus, depending on one resource, specifically a technology-based may lead to challenging and difficult situations for teachers. The Ministry of education could identify an efficient team of teachers to give ongoing support and help their colleagues through conducting small demo sessions during the summer holiday, and establish a database of subjects, instructional materials and resources in order to ease the load on teachers in adapting interactive lessons.

7. Recommendations
− Based on the results, the researcher recommended the following recommendations:
− EFL learners should be given more time to practise English inside the classroom.
− EFL learners should be taught vocabulary in a context.
− Teachers should be trained to use modern technology and how to use interactive whiteboard.
− Investigating the effectiveness of using an interactive whiteboard to improve secondary stage students' vocabulary learning.

References
Abdel-Fatah, M. (2022). Using computer edutainment activities on developing the EFL speaking skills for preparatory stage pupils. (MA. Thesis), Faculty of Education: Mansoura University.
Abu-Deif, M. (2022). The effectiveness of a program based on some strategies for active learning using an interactive whiteboard for the development of oral communication skills of the fifth grade. (MA. Thesis), Faculty of Education: Sohag University.


Hendley, Z. (2012). Investigating the Use of Interactive Whiteboards during the Pre-task Phase of Speaking Tasks in the Secondary English Classroom. UK: University of Gutherburg.


Laksana, A. (2016). *Speaking Definitions*: chapter II. 5-18


Mursy, A. (2023). Using an interactive whiteboard activities based program to develop first year secondary stage students' reading comprehension skills and motivation. (MA Thesis), Educational research studies; Cairo University.


Tolba, S.H., (2016). *Utilizing storytelling to improve preparatory stage pupils’ speaking skills and motivation*. (MA. Thesis), Faculty of Education: Mansoura University, Egypt.

Tawfik, W. (2021). A program based on synchronous computer mediated communication (SCMC) to enhance speaking and writing skills of EFL preparatory stage students and their motivation. (PhD Dissertation), Faculty of Education: Mansoura University.
