USING VOICE THREAD TO DEVELOP EFL PRE-SERVICE TEACHERS' SPEAKING SKILLS

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ABSTRACT: The current study investigates the effect of using voice thread on developing EFL pre-service teachers' speaking skills. A total of 30 EFL fourth year students in the Faculty of Education, Menoufia University participated in the study which involved one group experimental design. A pre-post test was administered to assess the participants’ speaking skills. Activities based on the use of Voice Thread were carried out by the study group. The results showed that using voice thread was effective in the development of participants' EFL speaking skills.

KEYWORDS: Voice Thread (VT) - EFL Speaking Skills- Pre-Service Teachers.

INTRODUCTION

Foreign language instructors help learners attain competence in all the skills of the target language including speaking that is paramount in the field of foreign language acquisition (Ohata, 2005; Omaggio Hadley, 2001). Speaking is a crucial part of second/foreign language learning and teaching. Despite its importance, for many years, teaching speaking has been undervalued and English language teachers have continued to teach speaking just as a repetition of drills or memorization of dialogues. Its teaching includes several problems such as non-communicative objectives, abstract grammar content over communicative content, use of restricted methodology, and ineffective use of technology and materials.

Learners are given few opportunities to practice speaking in the target language in a natural, conversational setting, thus, many students fail when attempting to carry on a basic conversation in the target language (Huifen & Yueh-chiu, 2010). According to Sad (2010), teachers are mainly concerned with teaching the formation of the grammatical rules rather than the use of rules in speaking. In the past twenty years, language teachers have been called upon to adopt a whole range of technical devices. Advances in technology require teachers and administrators not only to review their curricula, approaches, and educational tools, but also consider the possibility of incorporating technology into their teaching. Foreign language educators face the growing responsibility of preparing students to be competitive in a global society by being able to communicate in more than one language (Poza, 2005). With the availability of new and engaging technological tools (Ravenscroft, 2009), new approaches to language teaching need further investigation. English curriculum designers are thus challenged to identify strategies to aid foreign language learners in language acquisition and to assist them in providing activities that will improve their speaking skills. Learning management systems, massive open online courses (MOOCs), and mobile apps represent the tools and the language...
of academia in the 21st century. Pufahl & Rhodes, (2011) have emphasized the impact, in academia, of voice authoring tools that combine text, video, and images.

**Context of the Problem**

The current study addresses the question of whether EFL pre-service teachers could benefit from using voice thread technology in developing their speaking skills. The problem of the current study was derived from the following resources:

First, as far as the researchers know, due to their work as members of EFL teaching staff, most English major students' speaking skills performance was poor as most of them could not express themselves efficiently. They have difficulty using English.

Second, a pilot study was conducted by the researchers. They interviewed 25 EFL pre-service teachers. Most of them assured that the emphasis is on explaining the forms and rules and then having students practice them. Students can produce correct forms on exercises and tests, but consistently make mistakes and/or errors when they try to use the language in speaking.

Second, a questionnaire (Appendix A) was distributed to 50 EFL fourth year students to discover their perception and ability to speak English. 79% of students assured that they do not receive any training in using the language. Teachers are mainly concerned with covering the syllabus within the allotted time rather than providing ample opportunities for them to practise speaking.

**Aim of the Study**

The current study aims at developing EFL pre-service teachers' speaking skills in the faculty of Education, Menoufia University by using the technology of Voice Thread.

**Questions of the study**

The current study attempts to answer the following main question:

1. What is the effect of using voice thread on developing EFL pre-service teachers' Speaking skill in the Faculty of Education?

Out of this main question, the following sub questions are stated:

2. What are the speaking skills EFL pre-service teachers should possess?

3. What are the features of voice thread?

4. To what extent does voice thread have an effect on developing the fluency skill of Speaking among fourth year EFL students in the Faculty of Education?

5. To what extent does voice thread have an effect on developing the Accuracy skill of Speaking among fourth year EFL students in the Faculty of Education?

6. To what extent does voice thread have an effect on developing the Comprehension skill of Speaking among fourth year EFL students in the Faculty of Education?

**Delimitations of the study**

The current study is confined to:
1. A sample of fourth year English major students (n=30), Faculty of Education, Menoufia University.

2. The second semester of the 2015-2016 academic year.

3. The EFL speaking skills which the current study is concerned with include: (accuracy, fluency, and comprehension).

**Hypotheses of the study**

To achieve the aim of the study, the following research hypotheses were tested:

1. There would be a statistically significant difference between the mean scores of the pre-test and those of the post test of the study group on the overall speaking skills in favour of the post test.

2. There would be a statistically significant difference between the mean scores of the pre-test and those of the post test of the study group on the fluency skill of speaking in favour of the post test.

3. There would be a statistically significant difference between the mean scores of the pre-test and those of the post test of the study group on the accuracy skill of speaking in favour of the post test.

4. There would be a statistically significant difference between the mean scores of the pre-test and those of the post test of the study group on the comprehension skill of speaking in favour of the post test.

**Significance of the study**

The current study is significant as it might help:

- College students as the current study directs their attention to the importance and ease of technological devices that could be useful in developing language skills in an attractive manner.

- Instructors as the suggested tool offers a new intervention that can help them develop postgraduate students’ speaking skills. In addition, it provides them with some effective devices to assess teachers’ speaking skills.

- Faculty/ staff members as the suggested tool provides a new strategy to be used by the teaching staff in TEFL.

**Terminology**

**EFL speaking skills**

Díaz-Rico & Weed (2010) view EFL speaking skill as the ability to apply linguistic capabilities in a variety of contexts. The push toward practising speaking in a second language requires increased EFL speaking skills. The researchers of the current study adopt the definition of Phipps (2011) which views EFL speaking skill as the ability to verbally communicate in the target language in a functional and accurate way- including the ability to apply knowledge to various contexts.
The main speaking skills which the learner needs to master are:

**Accuracy:**

The term is used in the current study to refer to the ability to acquire knowledge of, and ability to use in situations, forms of expression that are grammatically correct and accurate.

**Fluency:**

The term is used in the current study to refer to the ability to get across communicative intent without too much hesitation and too many pauses to cause barriers or a breakdown in communication.

**Comprehension:**

The term is used in the current study to refer to the ability to express the spoken message with a high degree of understanding.

**Voice Thread**

The current study adopts the definition of Brunvard & Byrd (2011) which views Voice Thread as an interactive, multimedia presentation technology that allows users to hold conversations around images, documents, videos, and audio. It can be used in a large group, small group, or one-on-one. The use of Voice Thread served as the independent variable in the study as the experimental group used this tool to practice speaking.

**REVIEW OF LITERATURE**

**The nature of Speaking**

According to Amin & Marziyeh (2007), the goal of speaking is to improve students' communicative skills. Being competent in speaking enables pupils to express themselves and learn how to follow the social and cultural rules appropriate to each communicative situation.

Coffin (2006) points out that fluency is essential in speaking, but if conversation is full of grammatical errors, ideas will not get across so easily. Using grammar in situations will certainly help pupils speak more accurately. Teachers should create a classroom environment where pupils have real-life communication, authentic activities, and meaningful tasks in a frame of grammatical accuracy. In other words, attention should be paid to both declarative knowledge which indicates a pupil's ability to memorize grammar rules and procedural knowledge which indicates the ability to correctly use grammar in daily life situations.

Rico & Weed (2010) point out that competency in the use of language not only requires correct use of form but also an appropriate use of form in various socio-cultural situations. In reality, accuracy and fluency are closely related. They are both necessary for successful communication. Grammatical competence acts to promote accuracy and fluency in second/foreign language production and increases in importance as the learner advances in proficiency.

In the past twenty years, language teachers have been called upon to adopt a whole range of technical devices. Advances in technology require teachers not only to review their curricula,
approaches, and educational tools, but also consider the possibility of incorporating technology into their teaching. In the field of teaching English and developing its skills (Listening, Speaking, Reading, and Writing), technology can be of great importance as it focuses on the learners’ senses and gives them the opportunity to practice all the language skills.

Challenges in Foreign Language Education

Basista & Hill, (2010); Pufahl & Rhodes, (2011); Sigsbee, (2002) point out that the inconsistent offerings of foreign language education led to poor impacts on language learning achievement for the target language learners. EFL pre-service teachers have challenging schedules which decrease the chance of interacting with students (Basista & Hill, 2010). In addition to course schedules, a lack of teacher training on how to create a communicative classroom and a lack of adequate classroom time to focus on oral production of the language is another challenge (Basista & Hill, 2010).

Fear of negative evaluation is also a serious construct. Students often experience much frustration and lack of self-confidence due to the over-making mistakes in the language. They often feel extremely incompetent due to the recognition that they are not able to communicate as effectively as they can in their native language (Ewald, 2007).

This fear of self-exposure is greatly inhibiting for students and increases communication apprehension. For these reasons, more research is needed to look for strategies that could help foreign language students cope with challenges so they feel more comfortable speaking in the target language. According to Krashen (1982), if strategies to reduce the challenges encountered by EFL students are not implemented, a mental block will form and inhibit language acquisition.

Overcoming the Challenges in Foreign Language Teaching

Kim and Rissel (2008) emphasized that learners need to be pushed to produce comprehensible output. Creating situations where students can practice producing comprehensible output can be a challenge within the walls of the classroom. Teachers discovered that multimedia could provide a more authentic language learning environment and experience where students could explore language, culture, literature, and other topics at the click of a mouse (Egorov et al., 2007).

The online environment is of great help. It has the potential to provide a more relaxed atmosphere in which language learners are willing to take risks and teachers take on more of a facilitator role (Deniz, 2010; Poza, 2005). The online environment, especially Web 2.0 tools, help students create a sense of community so that they feel less anxious, without the fear of being directly negatively evaluated by the teacher (Deniz, 2010).

Sense of community has also been detected to improve oral proficiency and lower the affective filter for learners in the foreign language of study (Basista & Hill, 2010). The online environment can also provide the extra time learners need and want to practice speaking the target language with partners or in small groups (Horwitz, 2001; Von Worde, 2003). Practice time allows learners to develop relationships with each other along with a stronger sense of trust (Mak, 2011; Wu, 2010). Therefore, the online environment provides students with a medium to practice communicating in the target language for the purpose of increasing EFL speaking skills.
Impact of Technology on EFL speaking skills

Research in the use of technology for foreign language learning reveals that sound pedagogy is of the utmost importance. A meta-analysis of technology use in language learning revealed that incorporating technology could have a positive effect on language learners (Zhao, 2001). In a qualitative study of EFL learners, Huifen and Yueh-chiu (2010) reported that the computer-mediated environment provided an environment in which collaboration, problem solving, and scaffolding were supported and encouraged. They assured that technology played an big role in creating this learning environment (p. 717). Technology integration now offers the possibility to practice productive skills such as speaking in the target language. Communication has evolved from simply face-to face to using media that allows people to communicate both synchronously and asynchronously. This helps learners develop their ability to produce language as well as develop confidence without the pressure of performing for an audience (Castleberry & Evers, 2010; Kim & Rissel, 2008).

Web 2.0 and Foreign Language Instruction

Computer technologies, especially Web 2.0 technologies, have the great potential of providing rich resources for language teaching and learning (Egorov et al., 2007; Kim & Rissel, 2008). According to Castleberry and Evers (2010), "The free open-access tools found on the Web can enhance students' learning experience and are invaluable resources for teachers" (p. 203). According to Asselin and Moayeri (2011) "The ease of transforming existing visual, auditory, and textual content into new multimodal content; opportunities to represent ideas and the self to new and wide audiences; and the provision of openly interactive, collaborative and supportive environments in which to build these representations and explorations are afforded by Web 2.0."(p. 46). For EFL speaking skills assessments, the teacher can ask students to record their responses and post them using their personal mobile devices instead of asking them to speak individually with each other. Then, the teacher can assess the speaking samples at his or her convenience. Web 2.0 technologies offer a platform that allows language learners to practice pushing themselves to produce output.

Voice-based conferencing

Since speaking in the target language creates increased levels of challenges encountered by EFL students (Awan et al., 2010; Bailey, Daley, & Onwuegbuzie, 1999; Horwitz et al., 1986; Kim, 2009), it is important to state that Voice-conferencing technologies provide a richer level of communication beyond what text-chat is able to provide based on Media Richness Theory (Daft & Lengel, 1986). According to Media Richness Theory, communication is more effective if the means of communication is more personal (Daft & Lengel, 1986). Another theory that supports the richness of voice over text communication is the Social Presence Theory. It believes that Text-chat decreases social interaction (Tu & McIsaac, 2002), whereas voice-conferencing creates a higher level of social presence. Kern et al. (2008) argue that "image and voice are becoming integral parts of how we interact and represent ourselves online" (p. 288).

Voice-conferencing technologies need further exploration since newer technologies with enhanced capabilities are now available. Although text-based computer-mediated communication is advantageous, it is restricted to written words and may be impedimental in language instruction where oral skills are essential for communicative competency (McIntosh et al., 2003, p. 63).
McIntosh et al. (2003) noted that in a study about the effect of Voice Thread on English language learners at a university in Canada, 56% of the participants reported feeling more confident speaking in class and 57% reported that their speaking skills had improved after participation in the asynchronous discussions. Participants also believed that the less intimidating environment provided by Voice Thread helped them overcome the challenges they felt toward speaking in the classroom (McIntosh et al., 2003, p. 68). However, no empirical data was gathered in this study that actually demonstrated increased oral proficiency levels.

**Voice Thread (VT)**

It is an interactive, multimedia technology that is easily accessible, cost-effective, and applicable to any grade level or subject area (Brunvard & Byrd, 2011). Language learners can create and comment using Voice Thread and then publish the thread via a link. As long as learners have Internet access, they can share the recorded comments. Users can leave audio comments around images, documents, video or sound clips with a microphone or telephone. They can also upload audio or video file, or a text (Millard, 2010). This technology can be used in a large group, small group, or one to one. Voice Thread can also be downloaded as an application on mobile devices. Lorensen (2010) assured that VT is “useful for homework assignments, practicing listening and reading skills and using virtual realia” (p. 203).

Applications like VT can be used to meet the demands of 21st century teaching objectives that aim “to devise deliberate techniques for assuring interaction among course participants, to promote purposeful peer dialogue, and to establish a sense of belonging where all participants [learners and faculty] perceive themselves as stakeholders” (LeBaron & McFadden, 2008, p.145). At a time where online instructional formats continue to trend up, establishing and maintaining a sense of community is instrumental to the viability of this academic alternative. The teacher is transformed from a knowledge giver to a facilitator by providing in-depth dialogue to a learner prompting reflective thought on issues relating to application of the content (pp. 115-116).

**Advantages of Voice Thread**

According to McIntosh et al., (2003), Voice Thread achieves the following:

1. Increased distributed student participation.
2. More time to develop and refine comments-possibly leading to greater precision and sophistication of expression.
3. Encouragement of a collaborative spirit among students.
5. Greater involvement of students who rarely participate in oral discussions.
6. Reduction of the challenges encountered by EFL students related to oral communication in a foreign language (p. 282).
7. Positive effects on students' productive skills.
8. Opportunities are given to students to literally share their voice and express their opinion in a collaborative attempt to construct knowledge and meaning.

Since Voice Thread is a relatively new technology; minimal studies exist in the literature that provides empirical findings on how it has been used in the educational setting (Millard, 2010). Graduate level English language learners in Japan used Voice Thread® to help increase student confidence in oral presentation skills. They were asked to practice their oral presentations using Voice Thread before talking in front of their peers (Pallos, 2011). Overall, Voice Thread improved student self-confidence in this study.

Bush (2009) presented uses of Voice Thread for the elementary classroom showing that it extends the language classroom beyond the physical walls of a building to teach students about culture. Pop, Tomuletiu, and David (2011) found that communication through asynchronous voice-conferencing increased the motivation of adult English language learners. However, none of the literature searches have rendered studies that have been conducted using Voice Thread as a language learning technology.

**Voice thread and EFL speaking skills**

Ross (2003) points out that "Voice-based computer mediated communication can help create a powerful educational environment for many different subject areas, especially subject areas that have a significant amount of verbal exchange in the traditional face-to-face classroom setting" (p. 71). Founders of Media Richness Theory (MRT) support the addition of voice in online communication as voice provides a richer level of communication beyond what text alone is able to provide (Daft & Lengel, 1986).

Voice-based communication can also affect social presence for online learners.

Social Presence Theory suggests that communication is most effective if the medium of communication has the appropriate social presence required for the level of involvement for task completion (Sallnas, Rasmus-Grohn, & Sjostrom, 2000).

Voice-based computer mediated communication can provide students the opportunity to work collaboratively and constructively to negotiate meaning and solve problems using the target language as a vehicle for communication.

In the current study, the researchers attempt to fill a gap in the literature by examining the use of asynchronous voice-conferencing for language learning, and its effect on EFL speaking skills in the university foreign language classroom.

**METHODOLOGY**

**Design of the study**

The present study is a pre-post-test quasi experimental study. The study group was tested before conducting the treatment. During experimentation, the study group carried out speaking activities based on Voice Thread technology. At the end of treatment, participants were post-tested.
Variables of the study

The independent variable of this study is the voice thread tool while the dependent variable is represented in EFL university students’ speaking skills.

Participants of the study

The participants of the current study are 30 fourth year English major students, Faculty of Education, Menoufia University.

Instruments of the Study

A Pre-Post Speaking Test (Appendix B)

Test Description:

The Speaking skill test is designed, by the researchers, to determine each participant’s level of speaking skills across a variety of test items. It is used as a pre-post-test to find out the effect of using voice thread. The test consists of questions that measured the participants’ skills of fluency, accuracy and comprehension. It consists of six questions; the first one tests the participants’ fluency of using the grammatical structures in speaking situations. Students were given pictures that include some events and they were asked to describe them using the correct tense. The second question asks participants to give a speech about what they want to be in the future. The third one is to look at two pictures and describe what was understood. The fourth question tests the participants' accuracy of using grammar. It is in the form of a multiple choice question. The fifth question asks participants to tell a story bearing in mind the order of the events of the story. The last question asks students to describe the place where a cat and a dog exist.

Test Validity

The test was validated by presenting it to a panel of judges (5 jurors) in the field of teaching English as a foreign language whose comments and remarks were considered in the final version of the test.

Test Reliability

The split-half method was used to determine the reliability of the test. The correlation coefficient was 75% which is highly reliable.

A Speaking Rubric

A speaking rubric, (Appendix C), was designed by the researchers to judge the performance of the participants of the study groups. The rubric was presented to a panel of jury in the field of teaching English as a foreign language to test its validity. The researchers used the rubric to grade the participants' answers. The percentage of agreement between the two raters was 80%.

Students were given guided phrases suggesting how they should describe the images. They were also reminded to say five to ten sentences about the images as a minimum. Students were reminded to answer part two with a minimum of five to ten sentences. The correct words are highlighted and the words that are incorrect are circled. The number of correct words is counted out and percentage is calculated.
Materials of the study

The voice thread Tool and Speaking activities

Speaking practice activities for the study group were held via Voice Thread which is an asynchronous voice-conferencing technology that allows learners to communicate by posting voice recordings to a web page using cell phones or microphones to record their voices from a computer. The speaking activities created for this study covered topics from the book studied in the second semester "Teaching Methods".

Implementation of the Tool

The Orientation Sessions

Participants were trained to use Voice Thread. They were introduced to Voice Thread and were shown how to make an initial post and how to reply to a classmate. They watched sample Voice Threads to see how the forum looked after several posts had been made, along with samples of how their forums should look. They practiced calling in using their cell phones to post audio comments. They were also trained to post comments using headsets with microphones. Participants were asked to go home and practice until they felt comfortable using the tool. Students then participated in the study over an eight week period.

Experimentation

Students created their own accounts and were required to have a username and a password to access the account. With Voice Thread, the teacher emailed a link of a previously created Voice Thread and had students record their comments to the question or image. Alternatively, the teacher asked students to start their own conversation and publish the link to the rest of the class. Once a link had been sent, students opened the link and began posting their comments to add to the conversation.

Participants had the option of calling in using their cell phones or using headsets with microphones in the school computer laboratory, or at home. They had the opportunity to think through their response before they post comments due to the asynchronous communication via Voice Thread. Then, participants were required to post a minimum of two responses to classmates, which occurred throughout the week outside of class in the online environment.

Videos, pictures, and songs for student commentary were uploaded to Voice Thread. Participants received a copy of the weekly activity instruction sheet. This sheet contained the questions and any resources students used for speaking practice. They were able to finish posting their comments on the weekly speaking activities from their home computers, cell phones, i-pads, school computers, or any device with Internet access. Resource materials used for the speaking activities were covered under fair use copyright laws for educators and include reference citations.

Participants explicitly practiced speaking skills through various activities including pronunciation practice that promotes fluency and practising speaking through open ended responses based on pictures, images, and video clips.

Post-testing

After experimentation, participants were post tested to verify the use of Voice Thread.
RESULTS

SPSS (Statistical Package for the Social Sciences, version16) was used to analyze participants’ scores on the pre and post-tests. Results are shown in the light of the study hypotheses and questions.

Results Related to the First Hypothesis of the Study

Hypothesis One: There would be a statistically significant difference between the mean scores of the pre-test and those of the post test of the study group on the overall speaking skills in favour of the post test. In order to investigate this hypothesis, t-test was used. Table 1 shows the t-value of the difference between the pre and post-test.

Table 1. The significance of difference between the mean score of the study group on the pre-post-test regarding the overall speaking skills

<table>
<thead>
<tr>
<th>Skill</th>
<th>Type of test</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>t-value</th>
<th>df</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall speaking skills</td>
<td>Pre</td>
<td>30</td>
<td>21.60</td>
<td>1.734</td>
<td>46.33</td>
<td>29</td>
<td>Significant</td>
</tr>
<tr>
<td></td>
<td>Post</td>
<td>30</td>
<td>46.33</td>
<td>1.900</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

As Table 1 shows, there existed a significant difference between the mean score of the pre – post test of the study group regarding the overall speaking skills in favour of the post-test (t=46.33, p>0.01).

Thus, the first hypothesis is accepted. This table is represented graphically in the following figure:

Figure 1. Results of the overall speaking skills
Results Related to the Second Hypothesis of the Study

Hypothesis Two: There would be a statistically significant difference between the mean scores of the pre-test and those of the post test of the study group on the skill of accuracy in favour of the post test. In order to investigate this hypothesis, t-test was used. Table 2 shows the t-values of the difference between the pre and post-test.

Table 2. The Significance of Differences between the Mean Scores of the Study Group on the Pre-Post-Test Regarding EFL Accuracy Skill of Speaking

<table>
<thead>
<tr>
<th>Skills</th>
<th>Type of test</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>t-value</th>
<th>df</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accuracy skills</td>
<td>Pre</td>
<td>30</td>
<td>5.83</td>
<td>.791</td>
<td>32.319</td>
<td>29</td>
<td>Significant</td>
</tr>
<tr>
<td></td>
<td>Post</td>
<td>30</td>
<td>14.80</td>
<td>1.375</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grammar</td>
<td>Pre</td>
<td>30</td>
<td>3.00</td>
<td>.743</td>
<td>17.940</td>
<td>29</td>
<td>Significant</td>
</tr>
<tr>
<td></td>
<td>Post</td>
<td>30</td>
<td>7.60</td>
<td>1.133</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pronunciation</td>
<td>Pre</td>
<td>30</td>
<td>2.83</td>
<td>.747</td>
<td>15.739</td>
<td>29</td>
<td>Significant</td>
</tr>
<tr>
<td></td>
<td>Post</td>
<td>30</td>
<td>7.20</td>
<td>1.157</td>
<td></td>
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</tr>
</tbody>
</table>

As Table 2 shows, there existed a significant difference between the mean score of the pre – post-test in favour of the latter (t=32.319, p >0.01). Thus, the second hypothesis is accepted. To determine whether the voice thread is educationally and practically effective in developing participants' accuracy skills, the effect size was calculated using $\eta^2$. $\eta^2 = t^2 / (t^2 + df)$ where (t) is the (t) value of the overall sum and (df) is the degrees of freedom. The effect size was (71%) which is higher than the large effect size value (15%). This reflects that the Voice Thread is effective in developing participants' EFL accuracy skills. The previous table is represented graphically in the following figure:

![Graph showing the results of the accuracy skills test](image)

**Figure 2. Results of the Accuracy Skills Test**
Results Related to the Third Hypothesis of the Study

Hypothesis Three: There would be a statistically significant difference between the mean scores of the pre-test and those of the post test of the study group on the Fluency skills of Speaking in favour of the post test. In order to investigate this hypothesis, the t-test was used to compare the mean score of the study group on both the pre- post-test in Fluency skills. Table 3 shows the t-values of the difference between the pre–post tests.

Table 3. The Significance of Differences between the Mean Scores of the Study Group on the Pre-post-Test Regarding EFL Fluency Skills

<table>
<thead>
<tr>
<th>Skills</th>
<th>Type of test</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>t-value</th>
<th>df</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fluency skills</td>
<td>Pre</td>
<td>30</td>
<td>7.87</td>
<td>1.479</td>
<td>21.452</td>
<td>29</td>
<td>Significant</td>
</tr>
<tr>
<td></td>
<td>Post</td>
<td>30</td>
<td>15.47</td>
<td>1.196</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Language use</td>
<td>Pre</td>
<td>30</td>
<td>4.50</td>
<td>1.796</td>
<td>3.923</td>
<td>29</td>
<td>Significant</td>
</tr>
<tr>
<td></td>
<td>Post</td>
<td>30</td>
<td>7.73</td>
<td>1.112</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Knowledge</td>
<td>Pre</td>
<td>30</td>
<td>3.37</td>
<td>1.520</td>
<td>12.818</td>
<td>29</td>
<td>Significant</td>
</tr>
<tr>
<td></td>
<td>Post</td>
<td>30</td>
<td>7.73</td>
<td>.980</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

As Table 3 shows, there existed a significant difference between the mean score of the pre-post-tests in favour of the latter (t=12.36, p>0.01). Thus, the third hypothesis is accepted. To determine whether the Voice Thread is educationally and practically effective in developing EFL pre-service teachers’ fluency skills, the effect size was calculated using $\eta^2$. $\eta^2 = \frac{t^2}{(t^2 + df)}$ where (t) is the (t) value of the overall sum and (df) is the degrees of freedom. The effect size was (%84) which is higher than the large effect size value (%15). This reflects that the Voice Thread is effective in developing the fourth year English major students' fluency skills as shown in Table 3. It is represented graphically in the following figure:
Results Related to the Third Hypothesis of the Study

Hypothesis Three: There would be a statistically significant difference between the mean scores of the pre-test and those of the post test of the study group on the comprehension skills test in favour of the post test. In order to investigate this hypothesis, the t-test was used. Table 4 shows the t-values of the difference between the pre–post tests.

Table 4. The Significance of Differences between the Mean Scores of the Study Group on the Pre-Post-Test Regarding EFL Comprehension Skills

<table>
<thead>
<tr>
<th>Skills</th>
<th>Type of test</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>t-value</th>
<th>df</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Comprehension skills</td>
<td>Pre</td>
<td>30</td>
<td>7.90</td>
<td>.885</td>
<td>33.857</td>
<td>29</td>
<td>Significant</td>
</tr>
<tr>
<td></td>
<td>Post</td>
<td>30</td>
<td>16.50</td>
<td>1.020</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Performing communicative functions</td>
<td>Pre</td>
<td>30</td>
<td>3.30</td>
<td>.466</td>
<td>32.680</td>
<td>29</td>
<td>Significant</td>
</tr>
<tr>
<td></td>
<td>Post</td>
<td>30</td>
<td>8.43</td>
<td>.774</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Starting, continuing and ending</td>
<td>Pre</td>
<td>30</td>
<td>4.60</td>
<td>.894</td>
<td>15.099</td>
<td>29</td>
<td>Significant</td>
</tr>
<tr>
<td>conversation</td>
<td>Post</td>
<td>30</td>
<td>7.73</td>
<td>.944</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

As Table 4 shows, there existed a significant difference between the mean score of the pre-post-test in favour of the latter (t=33.857, p > 0.01). Thus, the fourth hypothesis is accepted. To determine whether the Voice Thread is educationally and practically effective in developing
participants' comprehension skills, the effect size was calculated using $\eta^2$. $\eta^2 = \frac{t^2}{(t^2 + df)}$ where ($t$) is the ($t$) value of the overall sum and (df) is the degrees of freedom. The effect size was (%97) which is higher than the large effect size value (%15). This reflects that the Voice Thread is effective in developing the participants' comprehension skills. It is represented graphically in the following figure:

![Figure 4. Results of the comprehension skills](image)

**DISCUSSION**

Consistent with other research findings involving EFL learners, results of this study demonstrated that the Voice Thread is an effective means of developing some of the key foundational skills of EFL speaking. With respect to accuracy (i.e., Grammar, and pronunciation), Voice Thread appears to have a significant impact. On measures of Fluency, there is strong empirical evidence suggesting that Voice Thread contributes to the development of participants' knowledge and language skills. Participants who received Voice Thread significantly and consistently performed on measures of comprehension skills regarding performing communicative functions and starting, continuing and ending conversation. These results indicate that Voice Thread is an effective means of teaching learners how to speak accurately and fluently during their teaching and learning experience. A main goal is to give students the time and space they need to efficiently practice speaking (Bahrani, 2011). Language learners may be more willing to take risks in the online environment (Deniz, 2010; Poza, 2005) as it provides an atmosphere that is more relaxed. In education, it is important for stakeholders to see the effectiveness of the integration of certain technological applications (Pufahl & Rhodes, 2011). This study provides some empirical evidence that shows that the integration of the Voice Thread can increase students' speaking skills in a foreign language.

These findings might be due to the following:

1) The nature of the Voice Thread. It focuses on the communicative competence originated from the desire to increase language learners' ability to communicate and negotiate meaning in real life contexts, rather than the memorization of language forms and dialogues.
2) The Voice Thread provides participants with a less threatening environment needed for practising speaking in the target language. Voice Thread provides students with additional support in a way that builds up the student’s self-confidence.

3) In the present study, participants had the freedom to participate and practice their speaking skills in an environment without the fear of negative evaluation from the teacher. Language learners in the current study have the opportunity to post comments asynchronously not only at school, but also at their leisure, and at home where they might feel even more comfortable and less pressured than being in a computer lab surrounded by their peers.

4) Students discussed topics relevant to their future career during the eight weeks of the study and grew increasingly comfortable in their learning environments. In addition, the speaking activities focused on meaning and communication which also supports communicative competence.

5) The current study also supported the importance of the social environment. In the study, social interaction was a key in the study group as students were asked to express their opinions with their peers in the exchange of ideas. Over the eight week period of the study, the speaking activities required students to first reflect on the provided questions individually and then students responded and discussed additional questions with their classmates. This exchange of ideas and information supported the importance of peer interaction as a vital element to the present study.

6) The attractive nature of the suggested program as it trains the participants through interesting activities.

7) The cooperative work created an enthusiastic environment that encouraged participants to be active and help each other with the new learning experiences of Voice Thread.

CONCLUSION

The purpose of the current study is to investigate the degree to which learners benefit from Voice Thread in developing EFL speaking skills. The experiment was applied to a sample of 30 fourth year EFL pre-service teachers in the faculty of Education, Menoufia University. Findings showed that the Voice Thread was effective in developing the participants’ EFL speaking skills. This study confirms what has been demonstrated by others Hennessy (2009); Persson, Fyrenius, and Bergdahl (2010); and Stoltenkamp and Mapuva (2010) that using Voice thread created an authentic environment that motivated learners to practice the target language easily and smoothly. The results of this study provided foreign language educators with empirical data on the effectiveness of asynchronous voice-conferencing on EFL speaking skills. It also helped foreign language educators realize that asynchronous voice-conferencing in an online environment really does foster collaboration and increase EFL speaking skills. This focus helps prepare students for lifelong learning in the information age and continue to guide the way by promoting both independent and collaborative learning (Deniz, 2010; Wong, Li, Choi, & Lee, 2008).
RECOMMENDATIONS FOR FURTHER RESEARCH

Based on the results of the current study, the following recommendations are stated:

1) Future research should include qualitative inquiry regarding students’ perceptions of the use of voice-conferencing for language learning. Student perceptions of the use of voice-conferencing could provide teachers with a more holistic view of integrating Voice Thread in the foreign language classroom from the student’s perspective.

2) Future research is needed to determine if other tools are as effective as the Voice Thread in helping EFL pre-service teachers acquire some of the key foundation skills necessary for their academic success.

3) Voice Threads are also needed to be used with preparatory and secondary stage teachers. Voice Thread is an engaging and developmentally appropriate tool that is relevant at all stages.

4) Foreign language educators could also benefit from more research on gender differences and the integration of technological tools in order to examine their effect on affective variables and EFL speaking skills.

5) A quantitative study to compare the effect of Voice Thread related assignments on student learning outcomes.

REFERENCES


Castleberry, G. T., & Evers, R. B. (2010). Incorporate technology into the modern language classroom. *Intervention in School and Clinic*(45), 201-205.


