THE IMPACT OF WEB 2.0 TECHNOLOGY AS A TECHNIQUE TO IMPROVE ESL SPEAKING SKILL IN THE 21ST CENTURY

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Abstract

The aim of this study was to examine the level of communication apprehension among first year engineering students in Polytechnic Malaysia. Moreover, this study investigated the effect of the Web 2.0 technology using Voki as techniques to improve ESL speaking skills among Polytechnic students. Web 2.0 technology can be used as an instructional tools in teaching and learning. It provide a tool that has a great potential to change the existing teaching methods. To this end, data were collected from the first semester engineering Polytechnic students in Selangor. The study design was quasi-experimental between traditional (control) and Voki technique (experimental) groups. The findings indicated that the students perform better in the post-test compared to the pre-test after the inclusion of Voki technique in the ESL speaking skills classes. The outcomes from this study presented that the positive effects of the web 2.0 using Voki technique. This study revealed that learners can benefit from web 2.0 technology activities provided that they are related to their needs and interests. The findings of this paper represented that web 2.0 technology allows the lecturers to be more creative and more effective in their teaching and it motivates learners to be engaged in the 21st century classroom activities. The impact of this studies can be beneficial for both lecturers and students. The results of this study showed that students considerably improved their ESL speaking skill and reduced their communication apprehension.

Keywords: Web 2.0 technology, Voki, technique, ESL speaking skills, 21st century

INTRODUCTION

Students must learn to practice using new technology tools and it is essential to everyday life and workplace productivity in this digital age. One of the ultimate goal for the 21st century is using technology for effective, creative and permanent learning. Web 2.0 technology offers a lot of advantages as making education fascinating and more fruitful in terms of innovations. The use of web 2.0 technology helps learners to be more creative and learn based on their interests. It has been broadly acknowledged for teaching English in the 21st century classroom (Solanki & Shyamlee1, 2012). Pourhosein Gilakjani and Lai-Mei (2012) clarified that the unique chances of technologies provided have brought about new tools, approaches, and strategies in the teaching and learning of language skills effectively.

Lecturers can produce a 21st century context for education by creating opportunities for students to collaboratively interact with each other, taking students out into the world and by bringing the world into the classroom. Many researchers stated that technology can be used as an instructional tool in teaching and learning skills. Pourhosein Gilakjani (2013) expressed that technology can be useful in classroom by helping communication, making teaching products, and assisting learners’ self-expression. According to Pourhosein Gilakjani (2013), when we talk about instruction, education, or training issues we have to consider the important role of technology. Web 2.0 technology helps teachers improve their teaching methods and learners increase their knowledge (Pourhosein Gilakjani & Sabouri, 2014). When using technology, learners not only control their own learning process, but also have access to further information over which their teachers cannot control (Pourhosein Gilakjani & Sabouri, 2014). The new web 2.0 technologies develop and disseminate and we cannot ignore their impact on teaching and learning (Solanki & Shyamlee1, 2012).
According to Oliver, Osa, and Walker (2012), web 2.0 technology helps learners become more creative users of technology tools, communicators, and collaborators. In addition, web 2.0 technology has a positive effect on learners’ learning. It gives learners more opportunities to cooperate with their peers leading to learning from each other (Costley, 2014). According to Costley (2014), web 2.0 technology is a great provider to to deepen learners’ engagement in meaningful learning. Kurt (2010) stated that web 2.0 technology can be used as an instrument to accomplish meaningful projects to engage learners in problem solving and critical thinking. Moreover, web 2.0 technologies permit learners to identify their interests and capabilities. According to the learning pace, learners get update information and knowledge and communicate with their society (Zamani Farahani, Bahamiriyan, & Sadeghi, 2015).

The benefits of technology integration in language learning have been reported in numerous studies. One of the benefits of integrating technology is the increase of learners’ motivation (Riasati, Allahyar, & Tan, 2012). The use of web 2.0 technology can improve learners’ academic ability. This has been supported by Riasati, Allahyar, and Tan (2012) who expressed that the application of web 2.0 technology increases learners’ language proficiency and their academic skills. Teachers should be facilitators and support and guide their learners’ learning (Riasati, Allahyar, & Tan, 2012).

Web 2.0 technology facilitates learners’ learning and serves as the real educational structure permitting learning to happen (Rodinadze & Zarbazoia, 2012). Moreover, multimedia software allows teachers to design audio-visual narrative themes including the learner’s actual participation. Teachers also can use websites to assign requirements and samples for learners (Rodinadze & Zarbazoia, 2012). Moreover, learners can get the opportunity to increase their exposure to language in a meaningful context and make their own individual knowledge using web 2.0 technology into the classes (Parvin & Salam, 2015). The other study was carried out by Baytak, Tarman, and Ayas (2011) towards the impact of using technology on learning.

**PROBLEM STATEMENT**

One of the difficulties which prevent learners from learning to speak in English is due to apprehension (Fung & Min, 2016). Speaking skills are considered to be one of the critical skills that undergraduate students need to develop. Azrizal conducted a study on the level of oral communication apprehension of first-year engineering undergraduate students at Universiti Malaysia Perlis (UMP). Results showed that 24.2% of the students experienced high communicative apprehension with 81.6% experiencing apprehension in public speaking. He stated that many undergraduate students studying engineering in Malaysian education institutions experience a high level of communication apprehension and an even higher level of apprehension in public speaking (Azrizal, 2014).

Communication apprehension can pose to be a serious problem for many people. The acquisition of English as Second Language especially speaking skills still remains critical despite numerous actions taken to improve the use of English (Yunus & Kaur, 2014; Fung & Min, 2016). They are anxious and lack of confidence when it comes to speak in English for fear of making mistakes (Fung & Min, 2016). Lack of communication skills is often due to fear, anxiety feelings and weak confidence that exist in situations when people communicate with each other. There is a need to find a means that would overcome this fear and develop learners’ confidence to use the language in a fun and motivating ways (Toledo & Hoit, 2016). Anxiety and fear affect a person’s ability to communicate well in social and work situations such as in meetings, in public speaking, and in interpersonal and group discussions. These feelings affect a person’s intention and attitude towards involvement in communication situations. It is hoped that this research could help address the gap in understanding the problem of communicative apprehension, specifically in the domain of engineering education, and thus eventually provide instructors
teaching English with guidelines and activities that could assist ESL students in improving their confidence to communicate in the English language and to further improve their ESL speaking skills.

Apprehension and lack of self-confidence are some of the causes which hinder the learners from speaking in the target language (Fung & Min, 2016). There are several reasons which cause learners to become apprehensive and less motivated to speak in English. Firstly, both lecturers and students in Malaysia are exam-oriented due to the education system which emphasizes on examination (Lee, 2016; Christopher, 2016). According to Lee (2016), Malaysian education system lacks creativity which causes students to feel bored and dreadful.

Baniabdelrahman (2013) examined the learning of oral skills in an online course for Spanish learners. Learners were asked to utilize audio e-mails to record two speaking activities—one before the beginning of the course and the other at the end. These were compared to get a better picture of the improvement in learners’ speaking performance. The results of this study showed that learners considerably improved their oral proficiency. Maggie and Deniz (2011) investigated the impact of podcasts on the Spanish speaking skills. After six months, the research indicated that the frequency and variety of designed weekly podcasting assignments helped learners improve their speaking skills. Lack of ESL speaking skills is often due to fear, anxiety feelings and weak confidence that exist in situations when people communicate with each other (Rahman & Maarof, 2016).

The overall purpose of this study is to examine the effect of communication apprehension among engineering students at Polytechnics. In particular, the study investigates the effects of the web 2.0 technology using Voki technique on the students’ communication apprehension.

**RESEARCH OBJECTIVES**

1. To identify the level of communication apprehension among the first-year students in Polytechnic.
2. To investigate the effect of the Web 2.0 technology using Voki as techniques to improve ESL speaking skills among Polytechnic students.

**RESEARCH QUESTIONS**

1. What is the level of communication apprehension among the first year engineering students of Polytechnic?
2. What is the effect of the Web 2.0 technology using Voki as techniques to improve ESL speaking skills among Polytechnic students?

**SIGNIFICANCE OF THE STUDY**

The study is important in identifying the Voki technique which can help to reduce communication apprehension among students. It is hoped that the findings of the study could contribute to a better understanding of the implementation of effective web 2.0 technology using Voki to enhance students’ speaking skills.

The new technologies such as the Web 2.0 tools using Voki technique is used in the speaking skill class because it will make easier and interesting to learn new language acquisition, besides these tools will help them to solve some difficulties to speak English correctly intonation, pronunciation and fluency.
The use of Voki will help both students and lecturers to speak in English and they will understand them without any problem and the same time students will understand the lecturers’ instructions. In conclusion, the use of the new technologies in the learning process is the best option to obtain a quality education.

In addition, the use of technological tools such as the web 2.0 such as Voki have been of great help to motivate students to practice and gain confidence in speaking. Therefore, the objective in this study was to find the best way to encourage students to have speaking practice as much as possible.

In summary, polytechnic students have a big problem to develop the speaking skill because they have no confidence to speak in English, a little knowledge of vocabulary and low level of interest and motivation to improve ESL speaking skills.

**LITERATURE REVIEW**

As defined by McCroskey (1985), communication apprehension is cognitive-based anxiety which is exhibited when one encounters real or anticipated communication with another person or persons. Communication apprehension (CA) is defined as "an individual's level of fear or anxiety related with either actual or expected communication with another individuals or persons" (McCroskey, 1985). Lucas (2009) and McCroskey (1970) contend that some level of fear (nervousness) that we experience in speeches is a normal one that could be experienced by everyone, yet it may harm or help the communicator.

In order to develop and improve the speaking production, it was necessary to find a Web 2.0 tool that could be used in education/classroom. It is an educational tool that allows users to create their very own talking character, which can then be incorporated into a variety of topics and activities (assessments) in the classroom. In simple words, it is a fun, free and interactive way to learn.

Belloch (2012) clarified that the Web 1.0 is created on passive consumption media (traditional media, radio, TV, email), the information society and also entertainment. These can be considered as the first resources that were offered online while Web 2.0 are more recent and provide more interaction. According to Motteram and Sharma (2009), they concluded that this can be carried out with tools like “blogs and wikis.

It can be seen how there are benefits with the use of Web 2.0 tools to teach a language. One of the benefit is it will motivate the students to learn English language especially in speaking skill. In fact, Villalba (2008) stated that the students are highly motivated to learn languages if they do it by using tools on the web. For teaching speaking skill, there are more specific Web 2.0 tools that can be used such as Voki. In addition, Ramírez (2009) explained that students can make use of online resources to improve speaking skill.

A previous study on the use of VOKI conducted by Eggleton (2012) shows that students’ lack of motivation when delivering speeches changed when they were given opportunities to create their speeches using this kind of digital tools. In his research, the best participant summed up the success of this intervention and stated, “I enjoyed doing a speech with VOKI. It practically brainwashes you to like doing speeches”. The result shows that using VOKI in language learning especially in speaking improving students’ speaking skill better than before.
METHODOLOGY

Research design

The quantitative research method has employed in this study which involved data collection via a questionnaire, experimental pre-test and post-test method. The main objective of this study is to investigate the effect of web 2.0 tool using Voki technique in teaching ESL speaking skills. A CA test in the form of a questionnaire has used in order to identify the effect of the activities on communication apprehension. The instrument is called the Personal Report on Communication Apprehension (PRCA-24) developed by McCroskey (1985). The sample in the study comprise the first year, semester one engineering students in Selangor Polytechnic, enrolled in the compulsory core course Communicative English 1 (DUE 1012) for the experimental study. The respondents’ ages are between 18 to 21 years old. The numbers of respondents are 100 students which are 50 students in Voki technique group and 50 students in the traditional activities group.

The experimental pre-test and post-test study was conducted in Selangor Polytechnic. The number of study sample amounted to (100) male and female students distributed into two sections studying the engineering department who were chosen in an intentional manner. The researcher used the random allocation where used to allocate the experimental and control groups: an experimental section was subjected to Voki technique and a control section was taught by using the traditional method.

This quasi experimental study followed a pre-test post-test nonequivalent group design with a treatment phase lasting 14 weeks. Prior to the experiment the two classes were tested for their level of communication anxiety using communication apprehension. The experimental group was taught by using Voki technique and the control group taught using the existing method of teaching. Immediately after the completion of the treatment for 14 weeks the two classes were measured for their Communication Apprehension using the same tool. The pre-test and post-test scores were compared to see the difference in the level of communication apprehension of the sample.

To achieve the prospective objectives from the study, the researcher prepared the study material for the social studies course in a suitable method for the communicative activities. Next, the researcher verified the validity and reliability of the oral communication apprehension scale (PRCA-24), by the suitable methods. Two sections were allocated randomly into two groups: an (experimental) group which taught by the cooperative learning method, and a (control) group which taught by the traditional method.

Instrument

The questionnaire has used to measure students’ oral communication apprehension comprised 24 items measuring oral communication apprehension. This instrument is the latest version for assessing Personal Report of Communication Apprehension (McCroskey, 1985). The items are statements aiming to assess a person's reactions to communicating in four different settings (dyad, group, meeting and public speaking).

Data collection methods

The data has been collected using a closed ended questionnaire which students have to complete individually. The purpose of the questionnaire is to reveal the level of apprehension students have ranging from low to moderately low, moderate to moderately high and high. This was measured using 24 items. The items were marked using a 5 point Likert-scale of (1) Strongly Agree (2) Agree (3) Undecided (4) Disagree (5) Strongly Disagree. Lowest attainable score is 24 and highest is 120 on the PRCA (P’Rayan & Shetty, 2008).
Data analysis

Data analysis will be conducted once all respondents have completed the questionnaire. The Likert scale item has calculated for the overall score PRCA and collected as pre and post test scores. These analyses were to examine the level of communication apprehension among first year engineering students in Polytechnic Malaysia. Moreover, this study investigated the effect of the Web 2.0 technology using Voki as techniques to improve ESL speaking skills among Polytechnic students.

Findings

Table 1 indicated that the overall communication apprehension (CA) of the 100 students who completed the PRCA-24 in pre-test and post-test which are 50 students in Voki technique group and 50 students in the traditional activities group. The highest was 93 and the lowest was 30.

Several factors may contribute to the large number of students with high CA. For example, many students disliked participating in public speaking. They described that they have apprehensive and nervous feeling when engaging with new people in conversations. For the pre-test, the level of CA among the first year engineering students before the treatment was very high. The control group showed that 48% of students obtained scores above 80, representing those with high levels of apprehensive. Secondly, the findings indicate that eighteen students (30%) have medium level of communication apprehension and six students (18%) experienced very low CA. Those obtaining scores below 51 were comfortable when communicating in English.

However, in traditional activities group, half of the group has high communication apprehension and the same total with the experimental group which is twenty-four students (48%) and they will attempt to avoid as much communication as possible, to the extent that they will avoid meeting with peers or teachers to talk about the subject matter (McCroskey, 1985). Nineteen students (37%) have medium level of communication apprehension and seven (15%) have low communication apprehension.

<table>
<thead>
<tr>
<th>GROUP</th>
<th>PRE-TEST</th>
<th>POST-TEST</th>
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<tr>
<td><strong>GROUP</strong></td>
<td><strong>PRE-TEST</strong></td>
<td><strong>POST-TEST</strong></td>
</tr>
<tr>
<td><strong>VOKI</strong></td>
<td>High: 48%</td>
<td>High: 14%</td>
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<tr>
<td><strong>TECHNIQUE</strong> (Experimental Group)</td>
<td>Average: 30%</td>
<td>Average: 30%</td>
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<td></td>
<td>Low: 18%</td>
<td>Low: 56%</td>
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<tr>
<td><strong>Traditional</strong></td>
<td>High: 48%</td>
<td>High: 45%</td>
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<td><strong>activities</strong> (Traditional Group)</td>
<td>Average: 37%</td>
<td>Average: 35%</td>
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<td></td>
<td>Low: 15%</td>
<td>Low: 20%</td>
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For the post-test, the group that has the treatment for Voki technique showed the differences compared the result from the traditional activities group. In Voki technique group, it showed that only seven out of fifty students (14%) have high communication apprehension. Fifteen students (30%) have medium level of communication apprehension and twenty-eight (56%) have low communication apprehension. Apart from these findings, the study also suggests that students with very low CA are not afraid to express themselves in meetings, even when conversing in English with new acquaintances.
Nevertheless, in traditional activities group, almost half of the group still has high communication apprehension which is twenty two students (45%) and they will attempt to avoid as much communication as possible (McCroskey). Eighteen students (35%) have medium level of communication apprehension and ten students (20%) have low communication apprehension.

The outcomes from this study presented that the positive effects of the web 2.0 using Voki technique. This study revealed that learners can benefit from web 2.0 technology activities provided that they are related to their needs and interests. In addition, the findings of this paper represented that web 2.0 technology allows the lecturers to be more creative and more effective in their teaching and it motivates learners to be engaged in the 21st century classroom activities. The impact of this studies can be beneficial for both lecturers and students. The results of this study showed that students considerably improved their ESL speaking skill and reduced their communication apprehension.

**CONCLUSION**

This paper has discussed about the effect of VOKI technique, as a web 2.0 tool is an interesting educational tools useful for both lecturers and students in teaching and learning speaking. It offers audio and visual aid that fun to be utilized. To achieve this objective, the lecturers and students can employ the use of the Internet to connect Web 2.0 technology and 21st century skills.

Furthermore, “Voki is an educational tool for all educators and students. It allows users to create their very own talking character.” (Voki, 2015). In Voki, we can record our voices by using microphone, typing text, or uploading an audio file (Voki, 2015). It is important for lecturers in giving an idea to develop the teaching learning process in an effective way while for students, VOKI becomes a new interesting way to improve their ESL speaking skills. They can practice their speaking confidently and it improves their motivation.

This study revealed that learners can benefit from web 2.0 technology activities provided that they are related to their needs and interests. The findings of this paper represented that web 2.0 technology allows the lecturers to be more creative and more effective in their teaching and it motivates learners to be engaged in the 21st century classroom activities. The impact of this studies can be beneficial for both lecturers and students. The results of this study showed that students considerably improved their ESL speaking skill.

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