Web – Based Tongue Twisters as Scaffold To Overcome Speech Anxiety

Ma.Salome R. Magbanua, Ph. D., Ricky Andresito Naciongayo, MA

Faculty, Teacher Education Program, ISAT U Miagao Campus, Miagao, Iloilo Philippines

Abstract:

This quasi-experimental study attempted to determine the effectiveness of Web – Based Tongue Twisters as scaffold to overcome speech anxiety. Moreover, this would like to find out if web-based tongue twisters would minimize students' speaking anxiety. The participants of this action research were the 47 third year Bachelor of Industrial Technology students, enrolled at Iloilo Science and Technology University. They were taught using the web -based tongue twisters downloaded from the internet as an intervention technique in their difficulty in the speech and oral communication class. A researcher-made instrument was used to obtain the students' pre-intervention and post-intervention speech anxiety level. The questionnaire described the pre- and post-intervention speech anxiety level of the students. Means and standard deviations were computed. The significance of the difference in this investigation was determined using the t-test for dependent samples. Results showed that the respondents had the moderate speech anxiety level prior to and after the intervention; however, t-test results showed that a significant difference was noted between the pre - and post intervention speech anxiety level of the respondents. Results proved that exposure to web-based tongue twisters as instructional technique can help reduce speech anxiety, thus, improving speech and oral communication skills.

Keywords: Web – Based tongue twisters, Scaffold, Speech Anxiety level, Overcome

Introduction

Educators around the world are seeking ways to enhance their speech instruction through activities and experiences made available through technology. Many have integrated a variety of technologies in the teaching of speech and oral communication (Schnackenberg, 2004). Despite the high popularity of social media, a low percentage of students and instructors use them for educational purposes. Social media could be facilitated by instructors and integrated into formal learning environments for enriched discussions, increased engagement, and broad connections

Speaking is perhaps the most fundamental of human skills, and because it is done constantly, the processes do not often stop to be examined. It is so fundamental to who we are as humans – nearly all of us learn to speak (Burnley, .et al., (1993). The complexity comes from the fact that spoken words require the coordinated efforts of numerous 'articulators' in the vocal tract – the lips, tongue, jaw and larynx. Speaking skill involves conversational discourse, accuracy and fluency and the interlocutor effect (Bailey, 2004).

'Speech and language difficulties' covers a wide range of need, from individuals who find it hard to articulate, through problems with syntax and word order, to those who do not speak at all. For some learners with speech and language difficulties ICT is a lifeline, enabling them to communicate with the world around them. For others, it can support their classroom work and therapy. Learners can be encouraged to vocalize, using a sound-activated switch to

send messages to the computer. In the same vein, more sophisticated computer systems can be used in speech therapy to work on particular sounds and speech patterns (Rossi, 1989).

Language is composed of words produced by sounds, thus the difficulties in accurately voicing tongue twisters shows how particular producing sound can be. In order to produce sound, the mouth needs to be in a very specific shape and there has to be a specific moment where sound is being released.

Clear speech, proper pronunciation and strong communication skills have always been highly important in the academic, professional and personal worlds. This fact has never been more true now in this modern age, where it's not only a useful skill, it's a requirement to survive and thrive. It is especially important in occupations in the public eye, such as vocal artists, motivational and public speakers, singers, lawyers, doctors and other occupations. Even individuals such as professors, students, hobbyists and everyone can benefit from good verbal communication skills, especially with the rise of technical and creative fields such as game development, the film and music industry and freelance occupations.

Tongue twisters not only add the challenge of proper pronunciation of difficult words and syllables, but also have been shown to effectively help rhythm and tone, as well as adding fun, interest and humor to an otherwise dull set of drills. They boost confidence and aid with the development of a since of humor in children, and can make sometimes stressful speech therapy more light-hearted and easier on the individual. Because of their very nature, tongue twisters are fun for not only individuals, but also the whole family, and can easily become a game for parents and children, or even a professional practicing their skill (Beatty, M.J., &Friedland, M. H.1990).

By their very nature, tongue twisters are challenging to say. With their repetitive use of similar sounding sounds, words and syllables, they can trip up the tongues of even the most articulate individuals. However, as fun as they are, tongue twisters have a very practical application. As such, tongue twisters can be used to treat speech problems in speech therapy, and help reduce the prominence of a foreign accent. This use of tongue twisters in speech therapy is universal for all ages and users, which include more traditional uses such as treating stutters, lisps or reducing the presence of a foreign accent, to even treating and recovering the use of verbal speech in individuals who have suffered strokes, cerebral palsy and traumatic brain injuries.

People who use tongue twisters in speech therapy exercise the muscles in their mouth, enabling clearer pronunciation, overall clearer speech patterns, and an easier time pronouncing previously difficult syllables. The use of tongue twisters can also make speech therapy drills more of an enjoyable game. Even individuals who have long surpassed their difficulties in speech continue to use tongue twisters as a warm-up exercise, especially individuals in the public realm such as actors, politicians, motivational speakers and other professions such as priests, teachers, scientists, and college students (Alonzo, 2014).

Pair work, group work, role playing and interviews, tongue twisters encourage shy students to participate and discuss their opinions with their classmates instead of only with teachers. Employing various techniques in the classroom also challenges students and caters for diversity in students' learning styles (Anderson, et al.,2011).

In the case of the BIT students, observations dictated that their behaviors led to avoiding certain task or even activities where oral presentations are required. Most are noted never speaking in class, or engaging against certain activities because they would require occasional speaking before a group. Boring and stressful classroom environments do not encourage students to be creative or analytical, and tasks that only require students to listen and imitate

demotivate them. Students have no responsibilities in the classroom and are negative learners. Even if they have the opportunity to participate, they will not take it, because they are afraid to make mistakes.

Students who are very anxious about public speaking in class may sometimes also avoid social events they would like to attend or may not talk to classmates they would like to get to know.   The ability of the students to use this skill in the second language classroom is considered as the predictor of students' speech anxiety.

This study was anchored on the Connectivism Theory by Siemens (2004). This theory states that social learning is integrated with social media technologies. In the world of social media proliferation, learning is not an internal, individualistic activity. Rather, learners gather information from connecting to others' knowledge using web-based inputs,wikipedia, twitter, RSS, and other similar platforms. One of the principles of connectivism is that capacity to learn is more critical than what is currently known (Siemens, 2004). The responsibility of a teacher is not just to define, generate, or assign content, but it is to help learners build learning paths and make connections with existing and new knowledge resources (Anderson &Dron, 2011). Connectivism provides insights on the roles of educators in this social networked environment.

Previous studies have generated varied results on the effect of technology and learning, thus, the purpose of this study is to uncover the significant effect of web-based tongue twisters in reducing students' speech anxiety.

Review of Literature

Public speaking anxiety, often referred to as speech anxiety or stage fright, involves a central fear of being scrutinized or evaluated by others. This fear is often accompanied by a variety of physical and emotional reactions that can significantly interfere with a person's ability to successfully give a speech or presentation, including intense feelings of anxiety, worry, nervousness, trembling or shaking, sweating, and/or dizziness (Burnley, 1993).

Almost everyone is anxious at one time or another. Many students become anxious just before a test that they know will be difficult, and most get nervous when they have to give a prepared speech in front of their peers. Such temporary feelings of anxiety are instances of state anxiety. However, some students are anxious a good part of the time, even when the situation is not especially dangerous or threatening. For example, some students get excessively nervous even before very easy exams, and others may be so anxious about mathematics that they can't concentrate on the simplest math assignment. A learner who shows a pattern of responding with anxiety even in nonthreatening situations has a case of trait anxiety, a chronic condition that often interferes with maximal performance.

A small amount of anxiety often improves performance: It is known as facilitating anxiety. A little anxiety can spur students into action. For instance, it can make them go to class, read the textbook, do assignments, and study for exams. It also leads students to approach their classwork carefully and to reflect before making a response). In contrast, a great deal of anxiety usually interferes with effective performance; it is known as debilitating anxiety. Excessive anxiety distracts learners and interferes with their attention to the task at hand(Sawyer, 2006).

Public speaking anxiety is very common among both college students and the general population. Some estimates are that as many as 20-85% of people experience more or less anxiety when they need to speak in public. Many people who speak for a living, including actors, businesspeople, and politicians, experience public speaking anxiety. In fact, some of these

experienced public speakers feel that a little nervousness before a performance or speaking engagement gives them the ability to perform at their best. However, for some people the anxiety becomes so intense that it interferes with the ability to perform at all. In the case of students, this may lead to avoiding certain courses or even majors where oral presentations are required, never speaking in class, or deciding against certain careers because they would require occasional speaking before a group. Students who are very anxious about public speaking in class may sometimes also avoid social events they would like to attend or may not talk to classmates they would like to get to know.

Willingness to engage in speaking activities is considered important, because unless students have ample opportunities to practice oral fluency and accuracy skills, they will not develop these skills. To measure willingness, a classroom diary was kept in which these students' willingness to participate in speaking tasks was recorded. Research findings provided strong evidence that at the end of the school term these anxious students were significantly more willing to participate in speaking activities. Apart from being willing to participate, these students did not avoid eye contact with the teacher, as they did at the beginning of the school term. Avoiding making eye contact with the teacher is a typical non-verbal reaction of anxious students (Njagi, 2014).

Clear speech skills are essential to survive and thrive. Proper pronunciation of words and syllables, strong tone and having a firm, clean message can mean the difference between strong communication skills and success, and poor skills and subpar results. Without a clear communication, there can be confusion to the message and the meaning of it. If an individual cannot communicate effectively, then they can pave a road to success and understanding. Fortunately, there are many ways to practice with the use of various exercises in speech therapy designed to hone these skills in verbal communication. One of these drills, of course, is the use of tongue twisters(Bailey, 2004).

Globally, there is debate that majority graduates cannot speak English language properly (Alharbi, 2015). Even the bright students who get high scores in written examinations are unable to express themselves orally in English language (Sarwar et al, 2014).

The problem of low communicative and linguistic competence is carried to the university where it has also been observed that some of the first year students are not able to sustain class discussions in English language without code switching or making grammatical mistakes This is a serious problem which could affect the students learning of other subjects and long term professional career development.

Students who are unable to communicate effectively by speech may need additional equipment to make themselves understood. The term 'communication aids' covers a wide range of devices ranging from 'low tech' aids such as symbol charts and books to 'high tech' electronic aids such as the specialist devices that speak out messages at the press of a key. Each level of sophistication will have advantages and disadvantages, and usually a child's total communication system will include a combination of both 'high tech' and 'low tech'.

For most learners who require additional or augmentative communication, the starting point must be the use of 'low tech' aids to develop early communication skills. The basis of communication lies in three things: the desire to communicate, something to say, and a means to say it. If an individual is not aware of his ability to control events (press the key and something happens), or if he is not able to demonstrate choice by demonstrating yes and no in a consistent fashion, it will be difficult to assess the best method of extending his communication skills (http://www.speaking.pitt.edu/).

A research done in Kenya by Mwamba (2005) found out that many students in secondary schools were shy and preferred remaining quiet in class because they were unable to express themselves properly in spoken English. This observation is consistent with that of Richards who found that learners who have no linguistic competence often speak slowly, take too long to compose utterances, do not participate actively in conversation, their spoken English language do not sound natural, have poor grammar and pronunciation. Similar observation was made by Alharbi (2015) in Saudi Arabia where learners have low oral skills.

In addition, a study of Njagi et al., (2014) found out that anxiety, time, planning, amount of support, standard performance, listening ability and feedback during speaking activities are a must in a curriculum. The use of classroom activities such as oral drills, tongue twisters can be strengthened. He recommend that a curriculum should be designed in a manner that it recognizes the classroom activities of learners in order to enhance learning outcomes.

Tuan and Mai (2015), in their study, pinpointed the factors that affect students' speaking performance such as motivation, confidence, anxiety, time, planning, amount of support, standard performance, listening ability and feedback during speaking activities. For students to have a successful conversation, they must have good listening skills in order to understand what is said to them. The Communicative Language Teaching (CLT) approaches require that learners actively participate by sharing ideas, speaking freely, thus every speaker plays the role of listener and speaker.

According to English language scholars, use of learner-centered classroom activities including group discussions, speeches, storytelling, drama, debates, poem recitation, songs, and tongue-twisters could alleviate the problem of low oral skills. These classroom activities improve student's active participation, motivate and expose students to authentic use of English language in context. Many researchers have also proven that students are much more ready to interact with each other with more complex responses than with their teachers. Students feel comfortable working, interacting and making mistakes with their partners rather than with their teachers and corrective feedback from peers are found to be less daunting than the correction by teachers.

Furthermore, problem on frequency of use of classroom activities was that most teachers tended to use less of some of the classroom activities especially oral drills and language games. Language scholars observe that oral drills help students improve by practicing and consequently perfect their skills in speech. The designers of the curriculum assumed that all these interactive classroom activities would be used in equal proportion to promote learner participation and thus enhance acquisition of oral and communicative competence.
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Methodology

Research Design

This quasi-experimental study utilized web-based tongue twisters as scaffold to overcome speech anxiety of the Bachelor of Industrial Technology students. Specifically, a comparison group pre-test/post-test design (O1   X   O2   O1   O2) was used where the level of speech anxiety of the same group, before and after the intervention, was determined and compared.

In this study, web-based tongue twisters was used as an intervention technique in improving the students' speech and oral communication skills , a skill which is a common difficulty among the BIT students.

The Participants

The participants of the study were the 47 students taking up Bachelor of Industrial Technology of Iloilo Science and Technology University Miagao Campus. The participants answered the pre-and post-intervention test on speech anxiety.

Data Gathering Instrument

A validated researcher-made instrument, composed of 24 items, was used in obtaining the pre-intervention and post-intervention speech anxiety level of the students.

Data Gathering Procedures

Series of downloaded web-based tongue twisters were projected among the students during the speech and oral communication class. Forty seven students were given the same instrument in the pretest and posttest to find out their speech anxiety level.

Six-week sessions of lecture and discussion with web-based tongue twisters presented during the class were done. Students met three hours in a week.

The scores of the 47 participants were tallied and subjected to appropriate statistical analysis and interpretation. Mean, SD, and t-test were used.

The Intervention

Series of web-based tongue twisters were projected among the students with the use of power point presentation. Varied web-based tongue twisters wchich were carefully chosen by other language experts were repeatedly given among the students before the class in Speech and Oral Communication starts. Aside from making sure that the video of the web-based tongue twisters is clearly seen, a very good speaker was also utilized to make sure that the web-based tongue twisters could be clearly heard by the participants.

The participants were made to listen and watch the web-based tongue twisters projected. After which, they were made to repeat until mastery in speech mechanics was established.

Three meetings were allotted each week following the schedule of the class. One hour was allotted each meeting which was completed in six consecutive sessions. After the intervention, a post test was given to the participants to compare the results as to how effective the web-based tongue twisters are in reducing the level of speech anxiety of the participants.

It was then proven effective as significant difference resulted between the students' pretest and posttest intervention speech anxiety level.

Findings

1. BIT students had moderate speech anxiety level before and after exposure to web-based tongue twisters.
2. There was a significant difference in the pre and post intervention speech anxiety level of the participants. This means that the intervention employed was an effective strategy in reducing speech anxiety.

Table: 1

Participants' Pre- and Post-Intervention Speech Anxiety Level Using Web-based Tongue twisters

	N	M	SD	Description
Pre- Intervention	47	56.10	5.42	Moderate
Post Intervention	47	53.40	5.97	Moderate

Table 2 revealed that during the pre-intervention, the participants had the moderate speech anxiety level, with the mean score of 56.10 and with the standard deviation of 5.42. After the intervention, the participants maintained a moderate speech anxiety level with the mean score of 53.40 and with the standard deviation of 5.97. The results of the present study showed that after the intervention, a decrease in the mean score can be noted in the anxiety level of the students.

Table 2

t-test Results for the Speech Anxiety Level of the Participants Using Web-Based Tongue Twisters

	N	Mean	SD	t-value	df	P value
Pre-intervention	47	56.10	5.42			
				3.33	46	.002*
Post-intervention	47	53.40	5.97			

*p<.05

The table shows the t-test results for the participants' pre- and post-intervention speech anxiety level using web-based tongue twisters as scaffold to overcome speech anxiety.

The t-test result in Table 2 revealed that a significant difference existed between the pre-intervention (M=56.10) and the post-intervention (M=53.40) on the participants' level of significance. Hence, significant. This can be ascribed to the fact that students were more inclined to be engaged, interested, and enthusiastic if they are exposed to innovative strategy. Tongue twisters not only add the challenge of proper pronunciation of difficult words and syllables, but also have been shown to effectively help rhythm and tone, as well as adding fun, interest and humor to an otherwise dull set of drills. They boost confidence and aid with the development of a since of humor in children, and can make sometimes stressful speech therapy more light-hearted and easier on the individual (Beatty, M.J., &Friedland, M. H.1990).

Conclusions

Fear of speaking or speech anxiety is present among the BIT students.
Web-based tongue twisters used as affective strategies indeed reduced levels of speaking anxiety. The results of the study indicated that the students experienced significantly less anxiety after they had been taught how to manage their distress, by means of effective strategy- which was the web-based tongue twisters.

The significant difference in the posttest performance from the pretest performance supports the fact that the strategy of utilizing the web-based tongue twisters as scaffold to overcome speech anxiety introduces an innovative, effective and more interesting way for speech instruction. According to Wade (n.d.), multimedia can be an effective vehicle for student motivation and learning which has improved attitude-toward-instruction scores. In his meta-

analysis, it was indicated that student learning rate is faster when they retain the information longer (Kulik, et al, 1985 and Wade, n.d.).

The use of multimedia to facilitate student learning can be fun, exciting and rewarding way. The experience of the participants suggests strategies to integrate technologies, not just in formal in-class environments, but, more importantly, to encourage social and active learning that is learner-centered. If social networks are facilitated and agenda-driven, learning can be achieved.

Suggestions and Recommendations

1. Students should be exposed more to multimedia for learning purposes. The use of multimedia in higher education teaching is an emergent area for study, thus, one effective tool in reducing speech anxiety is the use of web-based tongue twisters.

2. Faculty teaching speech communication class may continuously evaluate students' learning outcomes via multi media. Moreover, they may utilize varied optional multimedia tools inside and outside classes and test new tools and technologies for interacting with students in new ways. Faculty should be encouraged to further study and experiment that can facilitate and indeed encourage other faculty members as well, who wish to determine the efficacy of social media tools for teaching.

3. Administration may implement institutional policies on the use of multi- media in the educational environment in light of security/privacy issues, as well as faculty and students support. Moreover, administration may allot sufficient budget and resources for training and for technology acquisition which will include opportunities for controlled experimental researches to test different tools and technologies and their efficacy in teaching and learning.

4. More studies utilizing other interventions which may reduce speech anxiety may be conducted to substantiate the results of the study.

Acknowledgement

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