

Full Length Research Paper

Teaching English sounds using prezi presentation at King Abdullah II school for excellence and its effect on students achievement

*Amaal Al Masri, Atika M. Ismael, Fatima Z. Qudah

Al Balqa Applied University

Accepted 23 March, 2015

Abstract

The purpose of this study was to investigate the effect of using prezi presentation for teaching English sounds for basic stage students and whether this new technology could facilitate learners' skills in English language. It also aims at investigating the effect of students' gender and class on their performance. To achieve the purpose of the study, pre/post T test were constructed to measure students' level in English pronunciation. The sample of the study comprised of (86) students from the basic stage in the first semester 2014/2015 and was distributed into four sections, which were selected purposefully two female sections and two male sections from King Abdullah II school for excellence in Al Tafila Directorate of Education. The findings of the study indicated that there were statistically significant differences in the post- test of English language pronunciation between the control and the experimental groups in favor of the experimental group which were instructed using Prezi presentation, and there was no statistically significant difference in the students' achievement in English language pronunciation due to class, results also indicated no statistically significant difference in the students' achievement in English language pronunciation due to gender or to the interaction between gender and group.

Keywords: English sounds, prezi presentation

INTRODUCTION

The easiest way to explain Prezi is that it is a presentation tool. Essentially, it allows users to present information to a group, similar to Microsoft PowerPoint. However, there are two features, in particular, which differentiate Prezi from PowerPoint. Firstly, the program needs the internet to work. Users create an online account with Prezi where they both make and store their Prezi presentations. If they want to deliver their presentations, the internet is required. Secondly, Prezi presentations do not follow a traditional slide format. Rather, a Prezi presentation is much more free-flowing. Users position their information, images and videos on a large, white background, called the „Prezi Canvas“, and develop a path for the presentation to follow.

While it may take some practice, Prezi is fairly simple to use. The background of a Prezi presentation, the „Prezi

Canvas“, allows users to position content anywhere on the screen. To make the presentation more visually engaging, the program also allows users to zoom in and out of the canvas. This function is useful because it enables the construction of a smooth presentation where the user can highlight clear connections between ideas. It is explained in *Prezi: Trading Linear Presentations for Conceptual Learning Experiences* that “instruction presented in a linear fashion does not align with how students think and may unconsciously discourage hierarchical thinking as it forces viewers to progress from one concept to another without relation or integration with the foundational concept” (Rockinson-Szapkiw, Knight & Tucker, 2011) . With Prezi, users are able to create non-linear presentations which encourage students to “identify patterns, comparisons, relationships, and differences

between information” (Rockinson-Szapkiw, Knight & Tucker, 2011). The program lends itself well to the presentation of diagrams, concept maps and the highlighting of links between ideas.

Educational Uses

Prezi has a range of features which are particularly useful for the classroom. Firstly, Prezi enables teachers and students to present non-linear concepts in a visually engaging presentation. Because Prezi allows users to move freely around the canvas, and to zoom in and out of the canvas, non-linear concepts can be presented more easily and the relationships between ideas can be made clearer. An additional feature of Prezi is that users are able to invite up to ten others to edit their Prezi. Relating this feature to a classroom setting, up to ten students are able to access the same Prezi at the same time. This feature allows students to work on group presentations in class, or from their own homes. For example, if a group of students is creating a Prezi presentation for an assessment task, these students can „meet” online to work on the presentation from their own homes, thus removing the need to save and resend files continually.

Significance of the Study

While PowerPoint is the „go-to” option for the vast majority of users in present times, it is still important to consider alternative modes of presentation which are useful for the classroom. A need in many schools today is the creation of learning experiences which are authentic and meaningful for the Millennial Generation. Kleiman writes: unfortunately, over the past 20 years, there has been a significant decline in the percentage of high school students who find school to be meaningful and interesting... many find that schools do not provide the real-world connections and uses of technology to learn, communicate, and create what they have at home (2004, p.251).

Prezi encourages collaboration, non-linear thinking and allows for the presentation to authentic online audiences. As Groundwater-Smith, Ewing and Le Cornu state:

...classrooms of the future will need to explore strategies that emphasize lateral creative thinking, problem solving and design... curricula will need to find ways that encourage students to develop their creative and problem-solving abilities so that they are sufficiently confident to take risks in exploring ideas, issues and concepts (2007, pp.145-146).

However, while Prezi is continuing to develop and improve, and certainly engages students, PowerPoint remains a leading choice for presenters and offers a feeling of familiarity and comfort which Prezi cannot. Teachers need to use a range of resources and tools in the classroom to suit the diverse needs of their students. Prezi will not work as a replacement for PowerPoint, but

rather as an alternative - something which will help to complement teaching pedagogy and resources, and hopefully something which will increase student engagement and interest.

Questions of the Study

The researcher tried to answer the following question:

1. Are there any statistically significant differences in students' performance in English pronunciation due to the teaching strategy they are exposed to (using Prezi presentation, traditional way)?
2. Are there any statistically significant differences in students' performance in English pronunciation due to their class (ninth grade, tenth grade)?
3. Are there any statistically significant differences in students' performance in English pronunciation due to their gender (male, female)?
4. Are there any statistically significant differences in students' performance in English pronunciation due to the interaction between group and gender?

Limitations of the Study

This study is limited to all male and female students at King Abdullah II School for excellence at Al Tafila Directorate of education in the academic year 2014/2015.

LITERATURE REVIEW

According to Bernhardt (2006) “The knowledge conveyed to the listeners increases when there is audience participation and the presenter’s style is dynamic and engaging,” (p. 317). Prezi provides a distinct presentation experience that presents information in a non-linear fashion. This allows the presenter more flexibility and creates a way to show relationships among different items in the presentation. In doing so, the audience may get a better idea of the big picture. At the same time the zooming feature in Prezi could potentially capture and hold an audience’s attention. PowerPoint offers a vast array of background patterns, design templates plus transition and animation effects that engage the audience.

In addition to movement and color schemes, each tool allows for easy incorporation of multimedia such as audio, video and images.

While each tool has its benefits, both have come under criticism at one time or another.

According to Harris (2004) “More often, clear-thinking, articulate people who use PowerPoint are transformed into muddled, monotonous speakers who shoehorn their thoughts into bullet points and anesthetize audiences with their slideshows,” (p. 50). Prezi has faced some less than gleaming reviews for its unfamiliar interface and dizzying zooming capabilities. “All the whizzing might be

distracting for someone who wants to get a message across," (Adria, 2009).

Comparing the same presentation created separately using each presentation tool will provide insight about which tool is more appropriate for achieving the goals of the presentation.

In learning more about what each tool has to offer better information design can ultimately be achieved.

Microsoft PowerPoint is a tool that has long been used for instruction. Whether teaching a class or giving a talk in front of colleagues, this slide-based technology has been the standard "go to" for presenting your information in an organized fashion. "In 2002, it was estimated that more than 400 million copies of PowerPoint were in circulation..." (Craig, 2006).

In addition to its popularity, PowerPoint has also been the subject of much criticism. "Although PowerPoint promises much in terms of delivering content efficiently and offering attractive and dynamic presentations, some critics allege that a frequent outcome is a vacuous monotony" (Craig, 2006). In determining how PowerPoint stands up to other presentation tools it is important to examine its strengths, weaknesses and effectiveness.

Daniels (1999) takes a look at the advantages that PowerPoint offers to both the student and the teacher while giving a fresh perspective of the tool's attributes. "The most obvious benefit for students is the visual differentiation" (Daniels, 1999)

PowerPoint offers seemingly endless possibilities when it comes to slide design. "Multiple colors are used for the text, graphics and backgrounds of the slides..." (Daniels, 1999). Besides color, other visually stimulating features are offered using "builds" and "transitions" as well as animation effects. "These techniques add to the explanatory power of the presentation in addition to enhancing visual appeal" (Daniels, 1999). Other than visual stimulation, PowerPoint gives the user the ability to insert hyperlinks onto a slide. Also, when used in conjunction with tools like Slide Share, an entire PowerPoint presentation can be uploaded to the web to be shared with others or accessed from any location with internet access. "Students can have access to the slides outside of the class. This also allows the slides to be used as part of distance learning courses that are web-based" (Daniels, 1999).

Prezi is a newer flash-based application that allows the user to create a presentation using a large, blank page instead of traditional slides. In a general comparison as presentation tools, PowerPoint and Prezi are like smooth vs. crunchy peanut butter. They're different, some prefer one over the other, but they both serve pretty much the same purpose. So what's the buzz about Prezi? According to Lorang (2010) "Prezi is a radical departure from the traditional slide show paradigm in that it is not linear,"

Even before PowerPoint, presentation tools were simple slides projected onto a wall or screen, which is

why they were referred to as "slideshows." PowerPoint and its other slide-based counterparts are mere electronic versions of the original slide. Prezi takes us back even farther in time, mirroring lessons taught by scrawling notes in chalk on a blackboard. "Think of the presentation area as a big blackboard or giant sheet of paper where you have been scribbling your thoughts and ideas as if you were just jotting notes down on a sheet of paper at your kitchen table," (Lorang, 2010, para. 2). In addition to its seemingly infinite canvas of opportunity, Prezi has a unique zooming feature. "With a Prezi it is possible for the presenter to simply click the background with the mouse and the presentation zooms out to an overview, then the presenter can zoom into the area they want," (Lorang, 2010).

Stone (2001) discusses the principles of Human Centered Design (HCD) as set forth by guidelines of international standard ISO 13407; Ensure the active involvement of users, appropriate allocation of function to system and user, iteration of design solutions and ensuring the design is the result of multidisciplinary input. (p. 2) As part of the guidelines for HCD the standard also included a separate listing of principles specifically for HCD Activities. "Understand and specify the context of use, specify user and organizational requirements produce more than one candidate design solution, evaluate designs against requirements,"

Stone, (2001); Cooley (2000) provides a more palpable list of necessary characteristics for system design if those systems tools are to be successful in the scope of HCD. They are coherence, inclusiveness, malleability, engagement, ownership, responsiveness, purpose, panoramic and transcendence.

DESIGN AND METHODOLOGY

Population of the Study

The population of the study consisted of all ninth and tenth grade students at Al Tafila Directorate of Education which they form about 830 male and female students distributed in (17) schools during the academic year 2013/2014.

Sample of the Study

The sample of the study was selected randomly. It consisted of (74) students, (35) male and (39) female students at King Abdullah II school for excellence at Al Tafila Directorate of Education. This sample was used to measure the impact of using prezi presentation for teaching English language pronunciation and was distributed into two sections in the same school. Two control groups and two experimental groups who were instructed by using social networks from eleventh and twelfth grades in each school.

Design of the Study

The participants of the study were divided into two groups, experimental and control. The participants of the

Table 1: Means and Standard Deviations of the Achievement of Groups on the Pretest.

	GROUP	N	Mean	Std. Deviation	t	df	Sig. (2-tailed)
Pre	Experimental	37	61.49	9.693	.944	92	.348
	Control	37	59.89	6.349			

experimental group were instructed using prezi presentation to learn English pronunciation for (8) weeks, While the participants of the control group were instructed by using traditional way of teaching for the same period. A pre-test was given before teaching the ninth and tenth grades students using prezi to both groups to make sure they are equivalent and the same test was administered as a post-test after instructed students using prezi presentation to see whether new technology such as prezi had any influence on the students' performance in English pronunciation.

Instrument of the Study

The researchers measured the effectiveness of using Prezi for teaching English language sounds and its effect on the students' performance, and then the researcher designed a test based on the instructional material of ninth and tenth English book. Validity and reliability were ensured. Both groups; the experimental group as well the control group, were taught by their teachers. The students in both groups took a pre-test to determine their actual level before starting the experiment, then the researchers administered a post-test at the end of the experiment to assess students' performance in English pronunciation.

Reliability of the Instrument

To ensure the test reliability, the researcher followed test/retest technique. The researcher applied it to a pilot sample of (15) students who were excluded from the study with a two-week period between the test and the re-test. The reliability of the test was calculated using correlation coefficient and it was 0.91 which is appropriate for conducting such a study.

Validity of the Instrument

The researcher designed an English pronunciation test taking into consideration the instructional material of ninth and tenth grades. The researcher validated the instrument by submitting it to a jury of two supervisors of English working at Al Tafila Directorate of Education, and two teachers of English. The researcher followed the recommendations of the referees and made amendments accordingly.

Instructional Material

The instructional material was ninth and tenth grade English book, which includes several topics, but the

researcher covered just pronunciation during the application period.

Procedures of the Study

The participants of the study were divided into two groups, experimental and control: The participants of the experimental group were instructed using Prezi presentation while learning English language pronunciation, they were trained on how to pronounce English sounds using prezi for (8) weeks, While the participants of the control group were taught English pronunciation by their teachers using traditional way of teaching for the same period. The traditional instruction in this study was exercises and drills given by a teacher, use of textbooks and other materials, and reading the sounds of English by the teacher.

Statistical Analyses

To answer the study questions, descriptive methods (means and standard deviation) were used for pre and post tests for English pronunciation test for both the experimental and control groups.

Differences statistical method (T-test) was used to make a comparison between the control and the experimental groups.

FINDINGS OF THE STUDY

The purpose of this study is to investigate the effect of using Prezi presentation for teaching English sounds on ninth and tenth grades students' performance at Al Tafila Directorate of Education in Jordan, and also to know the effect of students' gender and class on their performance. Two control groups and two experimental groups.

The researcher followed the equivalent pre /post test two group designs. Therefore, the means, standard deviations and Two-Way ANOVA analysis of variance were used to analyze data. The results are displayed based on the questions of the research.

To determine if there is a statistically significant difference between the groups, a t-test for independent samples was conducted. Table 1 shows the results.

Table 1 indicates that the difference between the experimental group who were taught English sounds using Prezi presentation and control groups who were taught English sounds using the traditional way is not statistically significant at $\alpha=0.05$, the mean of the experimental group was (61.49) while the mean of the control group was (59.89) which

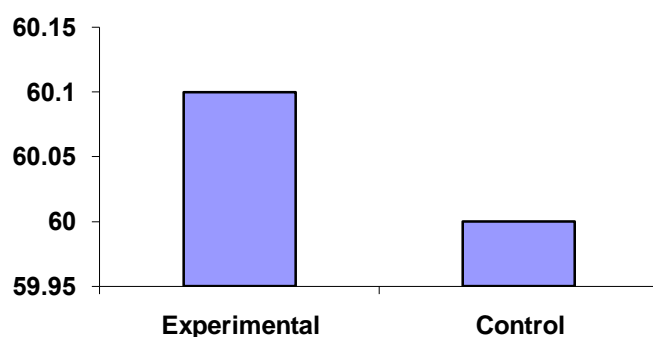


Diagram 1: Mean and Standard Deviations of the performance of the Control and Experimental Groups on the Pretest

Table 2: Mean and Standard Deviations of the performance of the Control and Experimental Groups on the Posttest

	GROUP	N	Mean	Std. Deviation	t	df	Sig. (2-tailed)
Post	Experimental	37	80.09	7.235	3.428	92	.001
	Control	37	72.66	12.970			

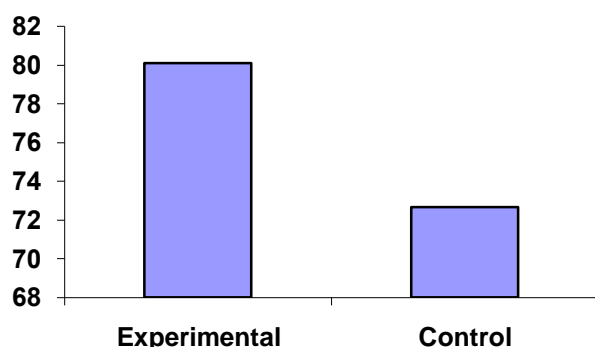


Diagram 2: Mean and Standard Deviations of the performance of the Control and Experimental Groups on the Posttest according to group variable

are nearly the same. Thus, since the difference was not significant, the two groups were assumed equivalent and the sample was divided into two groups, an experimental and a control group. The experimental group which was taught by using Prezi presentation consisted of (37) students while the control group consisted of (37) students also.

To answer the first question about the effect of teaching strategy on performance: Are there any statistically significant differences in students' performance in English pronunciation due to the teaching strategy they are exposed to (using Prezi presentation, traditional way) a post test was conducted and Table 2 shows the results.

Table 2 shows that there is a statistically significant difference at $\alpha=0.05$ between the achievement of the experimental group and that of the control group on the

Table 3: Mean and Standard Deviations of the performance of the Control and Experimental Groups on the Posttest according to class variable

	GRADE	N	Mean	Std. Deviation	t	df	Sig. (2-tailed)
Post	9 th grade	36	73.02	11.983	3.058	92	.003
	10 th grade	38	79.72	9.067			

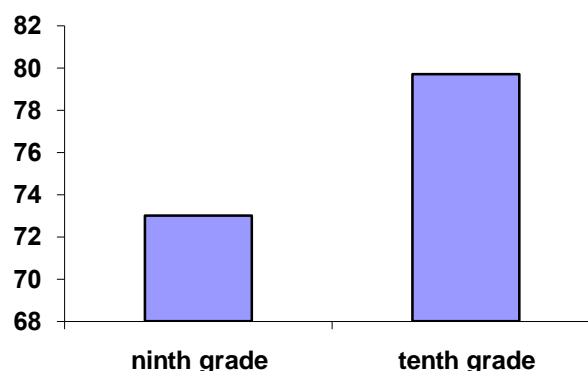


Diagram 3: Mean and Standard Deviations of the performance of Groups on the Posttest according to class variable

posttest in favor of the experimental group who were taught English sounds using Prezi pronunciation. This difference indicates that using the modern and best strategies for teaching English sounds had a positive effect on students' achievement in the pronunciation exam. The mean score for the experimental group on the posttest was (80.09) while that of the control group was (72.66).

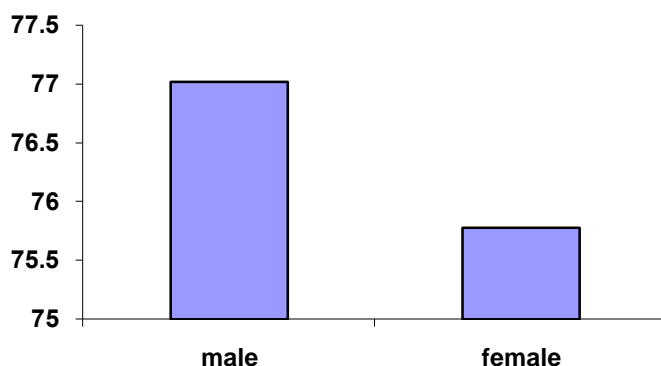
Standard deviation for the experimental group was 7.235 which was lower than the control group whose standard deviation was 12.970.

To answer the second question about the effect of class on performance: Are there any statistically significant differences in students' performance in English pronunciation due to their class (ninth grade, tenth grade)? a post test was conducted and Table 3 shows the results

Table 3 shows that there is a statistically significant difference at $\alpha=0.05$ between the achievement of the experimental group and that of the control group on the posttest of English pronunciation in favor of tenth grade group who were taught English sounds using Prezi. This difference indicates that using the modern and best strategies for teaching pronunciation had a positive effect on students' achievement in the pronunciation exam. The mean score for the ninth grade group on the posttest was (73.02) while that of the tenth grade group was (79.72). Standard deviation for the 9th grade students was 11.983 which was higher than the 10th grade students whose standard deviation was 9.067.

Table 4: Mean and Standard Deviations of the performance of Groups on the Posttest according to gender variable

	SEX	N	Mean	Std. Deviation	t	df	Sig. (2-tailed)
Post	Male	35	77.02	10.137	.542	92	.589
	Female	39	75.78	11.976	.546	91.413	.586

**Diagram 4:** Mean and Standard Deviations of the performance of Groups on the Posttest according to gender variable

To answer the third question about the effect of gender on performance: Are there any statistically significant differences in students' performance in English pronunciation due to their gender (male, female)? a post test was conducted and Table 4 shows the results.

Table 4 shows that there is a statistically significant difference at $\alpha=0.05$ between the achievement of the experimental group and that of the control group on the posttest of pronunciation in favor of male group who were taught English sounds using Prezi. This difference indicates that using the modern and best strategies for teaching English sounds had a positive effect on students' achievement in the pronunciation exam. The mean score for the male group on the posttest was (77.02) while that of the female group was (75.78).

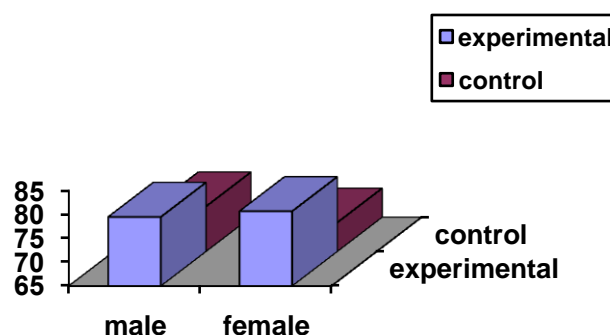
Standard deviation for the male students was 10.137 which is lower than female students whose standard deviation was 11.976.

To answer the fourth question: Are there any statistically significant differences in students' performance in English pronunciation due to the interaction between group and gender? The researcher also conducted a two-way analysis of variance to analyze the posttest achievement scores of the two groups. Table 5 shows the results.

Table 5 shows that there is a statistically significant difference between the experimental group and the control group on the post test of English pronunciation, the experimental group means were significantly better than that of the control group. However, it is clear that there was no significant difference attributed to the interaction between the treatment and gender.

Table 5: Summary of the Two-way Analysis of Variance of the Achievement of the control and the Experimental Groups

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
GROUP	1251.254	1	1251.254	11.265	.001
GENDER	28.014	1	28.014	.252	.617
GROUP * GENDER	122.043	1	122.043	1.099	.297
Error	9996.367	90	111.071		
Corrected Total	11441.968	93			

**Diagram 5:** Two-way Analysis of Variance of the Achievement of the control and the Experimental Groups

To sum up, the researcher believes that the difference in the students' performance in English language pronunciation was attributed to the using of Prezi presentation. The experimental group subjects managed to significantly improve their skills in pronouncing English sounds well in a period of 8 weeks. The improvement achieved by the control group subjects, however, was statistically significant. By comparing the results achieved by the two groups, the researcher reached the conclusion that the improvement achieved by the experimental group may have been attributed to training the ninth and tenth grade students got using Prezi presentation to learn English sounds.

As a result of this experience, the researcher concluded that students were more engaged in learning when they were taught by modern methods conducted by their teachers who are well trained.

CONCLUSION

In conclusion, as a treatment designed to improve the performance of students in schools, students' instruction for learning how to pronounce English sounds in public schools in Al Tafila appears completely effective. While it is possible that the services offered to teachers in public

schools may have other positive outcomes that are not captured in students test scores, such as improved working relations among school staff, administrators would be well advised to rethink the current strategy. More generally, educators and school administrators should carefully examine the nature of teachers' professional development in Jordan. prezi proves to have a strong effect on students learning in general and in training to learn English sounds in particular.

REFERENCES

- Adria O (2009). Prezi Review: More than Buzz? [Web Log comment]Retrieved from
- Bernhardt B (2006). Presentations that Keep Your Audience Interested and Awake. The Haworth Information Press, 50, 315-318.
- Cooley M (2000). Human Centered Design. In R. Jacobson (Eds.), Information Design (59-81). Cambridge, MA: The MIT Press.
- Craig RJ & Amernic JH (2006). PowerPoint Presentation Technology and the Dynamics of Teaching. *Innovative Higher Education*, 31, 147-160. Doi: 10.1007/s10755-006-9017-5
- Daniels L (1999). Introducing Technology in the Classroom: PowerPoint as a First Step, *Journal of Computing in Higher Education*, 10 (2), 42-56.
- Harris S (2004). The Point of Thought? *Government Executive*, Sept. 50-56.
- Lorang T (2010). Prezi versus PowerPoint. [web log comment]. Retrieved from
- Rockinson-Szapkiw A, Knight A & Tucker J (2011). „Prezi: Trading Linear Presentations for Conceptual Learning Experiences in Counselor Education“, *Counsel for Higher Education Pedagogy*, Blacksburg.
- Stone RJ (2001). Virtual Reality in the Real World: A personal reflection on 12 years of human-centered endeavor. ICAT, December 5-7. <http://www.berks.psu.edu/Documents/Academics/PreziCreatingPresentations.pdf>
- <http://www.rethinkpresentations.com/prezi-review-more-than-buzz/>
- <http://imagemediapartners.blogspot.com/2014/03/prezi-versus-powerpoint.html>