

The Impact of Rosetta Stone on Students' Pronunciation for English Subject

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ABSTRACT

The Objective of the study was to ascertain how Rosetta Stone in English class affected students' ability to pronounce English. This methodology employed a quasi-experimental pretest-posttest design with 30 samples split into two groups. The technique used was non-probability sampling. Pronunciation test technique was employed for data collecting. To compare Pronunciation abilities before and after using Rosetta Stone, data analysis used a t-test. The findings demonstrated that the t-Stat statements derived from the material discussed had value. A key element of Pronunciation is the students' capacity to pronounce the words and sentences that are practiced by imitating the application. The findings of this study have significance for students' knowledge of how to pronounce the words and sentences correctly and influence their level of pronunciation. The findings demonstrated that the t-test-table value was (1,699 < 9,950 > 1,331), indicating that Rosetta Stone gave a significant effect on treatment class on students' pronunciation. This result finding recommend other researcher to use the Rosetta Stone as an alternative media used for future.

Keywords: Rosetta Stone, pronunciation, English subject.

INTRODUCTION

The ability to communicate in English is a must for success in many different academic purposes. Today's students have access to a wide variety of varied tools for improving their English. Many applications apply in some schools of learning in the twenty-first century that combine online resources and software applications. The utilization of applications is one of the most important ideas that have come out for the purpose of academic achievement. The applications have many uses in improving English skills and is adaptable, and it may be useful for learning foreign languages. In fact, many media used for foreign language learning was still far what the ideally expected. Referring to the evidences and from the literature review, first, by allowing students to access learning fast, the device's ease of use, familiarity, and promise of effective learning (Karim et al, 2019). It permits self-paced learning (Weibert et al, 2019), would improve the amount of personally meaningful discipline, self-efficacy, commitment, and learning.

Second, The first prerequisite for learning foreign language is attention (Stone, 2017). There are various factors that may affect the observer's attention, and if a person is to learn more from a model, he or she must pay attention to it and the activities it shows. Consequently, observational learning's most important component becomes motivation.

This theory provides a logical justification for how kids learn by looking at and studying various images and methods offered by the mobile application with the help of the teacher. To have a better oral context, the technique adopted here provides precise ways to pronounce the words.

Since the efficient use of spoken language has long been a priority in educational aims around the world, some literature

has demonstrated that teaching pronunciation is becoming more and more important (Borg, 2015). This led to discussions about ideas, goals, and most significantly the methodology and strategy used to teach pronunciation (Bakha, 2015). English as a foreign language deemed these shifts and the ambiguity of the conversation to be major factors, therefore a study to clarify some of the debate's arguments would be a valuable contribution to the field (Gilakjani, 2019). The advancement of technology, according to Drolia (2020) has offered students a way to bring a lot of comfort to their academic lives. Students can learn how to adapt to a wide range of different things with the help of applications. In the face-to-face English as a Foreign Language (EFL) classroom, there are several challenges and impediments to be overcome, including a lack of language learning resources, specialized instruction, reviews, and partnerships.

Third, technology has been utilized to teach pronunciation for a long time. Two terms that are widely used in this field are automatic speech recognition and computer assisted pronunciation teaching. A broad category of computer programs or software that aid in teaching language learners

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pronunciation falls under the term CAPT. This term has been used to describe a range of technological instruments, from the most simple audio recorder to the much more complex software that may automatically and immediately provide feedback on a speaker's employment of a foreign language (Liu, 2016; Yulian, 2021).

There are several software tools available to assist teachers and students with the teaching of pronunciation. The scope of this post would be exceeded if we were to describe every piece of software (Pamela, 2021; Marashi, 2019). When choosing the right software, it is important to take into account the demands of the students, the classroom, technological know-how, and, of course, financial resources. While some applications are straightforward and easy to use, others provide feedback that is difficult to interpret.

Computers can provide individualized instruction, frequent practice, and automatic visual augmentation that demonstrates how well a student's own pronunciation mimics model utterances through listening discrimination and focused repetition exercises. It appears that there is limited time in class for focused practice on pronunciation due to the focus on other language skills and the fact that few foreign language teachers obtain proper training in pronunciation instruction (Fouz, 2020). In this situation, CAPT appears to be the ideal solution to close a big deficit. Effective commercial CAPT systems are not as innovative in their use of computers or pedagogy as one might anticipate, despite the fact that they exhibit a lot of potential.

Finally, the paper ends with the conclusion of relevant review theories and findings, the study is crucial because the researcher noticed that students struggle to switch from Bahasa Indonesia to English as a target language. This reality has sparked the researcher's interest in conducting formal research with the aim of finding a solution to the problem. According to the study, schools have a crucial role in preparing kids to be persuasive and responsive individuals. Additionally, pronunciation helps students communicate their ideas to listeners more effectively. The communication process can be made clearer and the topic can be transitioned more smoothly with appropriate pronunciation. In order to be understood and understood by the audience, speakers of foreign languages must master a variety of abilities, including pronunciation. Given this information, one of the potential outcomes of this study is to find out the effect of students' foreign language pronunciation by using Rosetta Stone. Therefore, the purpose of this study is to evaluate the effect of a Rosetta Stone for pronunciation in English subject.

METHOD

Research Design

The purpose of this study is to evaluate how well students' pronunciation are improved by using Rosetta Stone. This study

uses quantitative research techniques and quasi-experimental design with a single group pretest-posttest pre experimental design (Creswell, 2014). The experimental approach was utilized to assess students' capacity to solve their pronunciation problem before using application of Rosetta Stone. The experimental research design is a posttest-only control group design. In this scheme, samples were divided into groups at random and exposed as independent variables before a post test. After that, posttest results were compared to find out how well the treatment had worked.

Sample

30 students from seventh grade junior high school students from SMP As-Shofa Pekanbaru made up the research sample. Only one junior high schools that served as study locations. Through the use of purposive sampling, the research sample was chosen because it only one class for seventh grade. Students in SMP As-Shofa were grouped into two classes namely control and experiment class. The requirement that they have implemented Rosetta Stone application in the school.

Data Collection Tools

Pronunciation test was used to gather the research data. The test instrument was used to gather information on students' pronunciation abilities that provided into the Rosetta Stone that was divided into 20 units, and each unit consists of a group of four connected lectures that present new information and then give the student practice chances. This study just chose unit 1 as the teaching material. It was about adjectives, colors, greetings, and fundamental vocabulary for people and daily objects. Then, unit 2 focused on plurals, correctly utilize pronouns, and create yes/no questions and question words. Unit 3 was for students practice asking questions using the word "why" and giving suitable answers using the word "because." Unit 4 introduced comparative and superlative structures. 30 students participated in the current study by using data collection tools that are utilized in the Rosetta Stone application. 4 weeks treatment were treated for one class with two actions, first week without any implementation of application and then another three weeks used the Rosetta Stone application. Four sub topics (adjectives, colors, greetings, and fundamental vocabulary for people and daily objects) were introduced to the experiment class students.

Data Collection

The implementation of Rosetta Stone for students' pronunciation was evaluated using pronunciation test data from the independent teaching aid program. This research started with an analytical study or needs analysis that included curriculum analysis and context analysis of English subject. The researchers were also able to create English instructional

materials using the setting of Rosetta Stone based on the learning objectives. The researchers chose to test the students' pronunciation by using Rosetta Stone in order to determine their efficacy. Two groups participated in this trial process: the control group and the experimental group.

Data Analysis

The post-test results of the students were used as the quasi-experimental method data in this study and they were examined using statistical calculations. A new test analysis was carried out using a t-test to see the impact of Rosetta Stone application on setting of its significance for students' pronunciation. If there was a substantial difference between the experimental and control groups' post-test results, the treatment was deemed to have had an impact. Normality and homogeneity tests were carried out prior to the t-test analysis of the data. The homogeneity test measures how comparable the experimental and control groups are, whereas the normality test determines if the data distribution is regularly distributed. The SPSS 16 was used to calculate and analyze the students' pronunciation test.

FINDINGS

The pronunciation test shown that findings obtained from data analyses demonstrated that Rosetta Stone gave students access to more interactive learning environments, improved the quality of their pronunciation in English subject, and helped them achieve acceptable pronunciation that was more similar to that of native speakers. The usage of Rosetta Stone increased students' pronunciation because it had a significant potential to revolutionize the way pronunciation was taught. Teachers highlighted that utilizing technology does not constitute cheating. The following tables are the data analysis which have been calculated by SPSS 16.

The purpose of the normality test is to establish the normality of the distribution of post-test value data in the experimental and control classes. The findings of the calculation post-test data normality test on SPSS 16 are shown in table 1 above. Table 1 displays the class group with no treatment shown a significant level of $0.051 > 0.05 =$ based on the significance level of the test of $= 0.05$. This indicates that a normal distributed population provided the data. The Rosetta Stone yields a significance level of $0.118 > 0.05 =$. This indicates that the data came from a population that was

Table 1. Normality test

		<i>PretestPosttest</i>
Series or Sequence Length		60
Number of Missing Values in the Plot	User-Missing	0.051
	System-Missing	0.118

e cases are unweighted.

normally distributed. Pretest Posttest result from the figure1 shown below the graph that can be concluded that the data is normally distributed.

Table 2 shows that there were 30 samples in the control group (N = 30) meaning that all of the students who had been chosen for the study had taken part in the control. The mean of the pronunciation scores for the Pre-test was 5.49828 while the scores for the Post-test was 5.65523. Regarding the experimental group's standard deviations, the pre-test scores appear to be more variable than the post-test results, despite being roughly equal. This may give the conclusion that the post-test results for the samples were uniformly distributed both before and after the treatment. The average results of the pre-test and post-test show that there is a difference in the results where the post-test result is higher (86.13) than the pre-test result (82.10), so the result revealed a difference between the mean scores of the pre-test and post-test, the experimental group has improved between the pre-test and post-test.

Paired Samples Correlations

From table 3, the the significance value (Sig) the results of the correlation between the pre-test and post-test were 0.000 which means it is smaller than 0.05, so it was concluded that there were differences in the results between the pre-test and post-test.

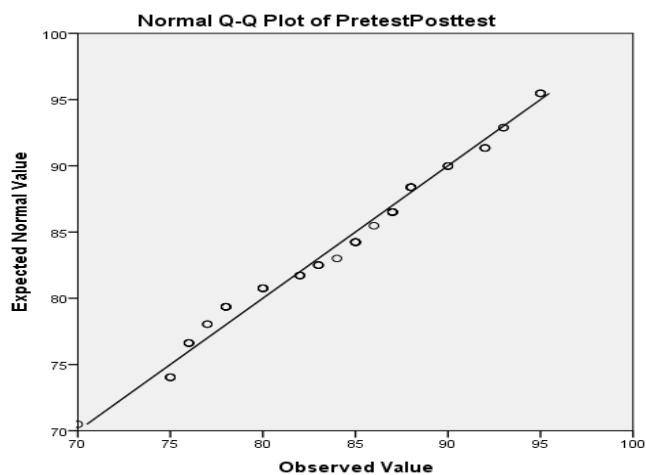


Fig. 1: The graph of normality distribution

Table 2: Paired Samples Statistics

<i>N</i>	<i>Std. Deviation</i>	<i>Std. Error Mean</i>
30	5.49828	1.00384
30	5.65523	1.03250

Table 3: Paired Samples Correlations

	<i>N</i>	<i>Correlation</i>	<i>Sig.</i>
Pair 1 Pretest & Posttest	30	.921	.000

Table 4: Paired Samples Test

		Paired Differences		95% Confidence Interval of the Difference			T	df	Sig. (2-tailed)
Mean		Std. Deviation	Std. Error Mean	Lower	Upper				
Pair 1	Pre test - Posttest	-4.03333	2.22033	.40538	-4.86242	-3.20425	-9.950	29	.000

Paired Differences T df Sig. (2-tailed)

Table 4 above shown that the significance value (2-tailed) between the pre-test and post-test scores, a value of 0.00 is obtained, which means it is less than 0.05. It can be concluded that there are differences in the results between the pre-test and post-test in the given class treatment or experiment. Based on $df = 30 - 1 = 29$ at a significant level of 5%, a t-table of 1,699 is obtained and at a significant level of 1%, a t-table of 1.311 is obtained. With a t-test of -9.950, it means that it is greater than t-table both at a significant level of 5% and a significant level of 1% ($1.699 < -9.950 > 1.311$) then H_0 is rejected and H_a is accepted. In other words, there is a significant difference between student learning outcomes between the pre-test and post-test in the experimental class.

DISCUSSION

Acquiring knowledge in advance of computer technologies, students take control of their own learning (Gkontelos et al, 2022; Gholamina, 2014; Santos, 2011). Students take greater initiative and assume responsibility for their own learning as the classroom becomes more learner-centered (Papadakis et al, 2022). When using computer technology in the classroom, teachers take on new roles as facilitators and resources who provide students with the tools they need to learn (Farhat, 2017; Tejedor, 2020). The technologies has altered the roles of teachers and students to be active instead of being passive recipients. students become active participants who have control over their own pronunciation acquisition (Mollaei and Riasati 2013).

When using computer technology in the classroom, teachers take on new roles as facilitators and resources who give students the tools they need to learn new information (Pourhosein Gilakjani 2020; Gholamina 2014). The function of the students drastically changes as they actively practice pronunciation (Alipanahi, 2014). Students have a lot of options when it comes to the pronunciation resources they use and how they are presented (Mujtaba, 2013; Zhu, 2010).

The findings of this study are lined with earlier research (Miqawati, 2020), showing that pronunciation software offers students a stress-free, private environment where they can practice pronunciation at their own pace and receive feedback on their pronunciation to the inclusion of automatic speech recognition. Students' pronunciation can be improved more

with this student-centered instruction than it can when they receive instruction from their teachers. Teachers can help their students achieve their desired learning goals by using this style of instruction (Haghighi, 2017). Moreover, other researcher Roohani and Rahimi (2019) revealed that teachers who used computers to teach pronunciation significantly improved their students' pronunciation ability in contrast to teachers who relied on traditional training.

The result of research finding above also in line with Seferoglu's (2005) research that discovered a considerable improvement in pronunciation in the group of students who had undergone software-based pronunciation training.

CONCLUSION

This study examined the students' pronunciation by utilizing Rosetta Stone to teach pronunciation. Completing the goals of this research, Rosetta Stone was utilized as a pronunciation program. It is important to pay special attention to pronunciation because it can be enhanced with the aid of contemporary technology. Teachers were able to handle several challenging scenarios, such as time constraints or unfavorable teacher-to-student ratios in a large class, with the aid of pronunciation software. The results of the offered statistically substantial proof of the effectiveness of pronunciation software in English pronunciation class. The outcomes showed that the students had favorable opinions of the software, demonstrating the value of incorporating Rosetta Stone into pronunciation. To determine when, how much, and which aspects of the classroom instruction should be substituted by the computer program, teachers in authentic teaching environments should take into account the demands of the students and the features of a certain computer program. Teachers would only be able to leverage the benefits of employing computer software for their students and inspire in this manner. The practical implication for this study was Rosetta Stone contributed as one of the media of teaching pronunciation which had a very simple method to teach English pronunciation, so based on this reasons, the researchers believed that the media will bring other researchers and teachers dig more to implement this media in the classroom. This study was still far from perfect, many limitation underwent during the research, so finally, more research will focus on the use this media towrad other skills of English subject.

SUGGESTION

Teachers of English as a foreign language should also consider the advantages that pronunciation software may bring to their curriculums and their students. This study showed that even after the pronunciation software is set up in a language lab, the responsibility of EFL teachers is not yet done. Before the program is used in their classes, they should test its efficacy. Using CAPT significantly affects learning and teaching English pronunciation. This study is believed to be reliable enough to be utilized in the future as a foundation for other studies.

LIMITATION

This study was only conducted on small sample of participants. So, it is limited to be elaborated more to provide necessary output but only to look at the effectiveness of Rosetta Stone just for pronunciation class.

REFERENCES

- Ahn, T. & Lee, S. (2015). User experience of a mobile speaking application with automatic speech recognition for EFL learning. *British Journal Of Educational Technology*.
- Alipanahi, F. (2014). Technology and English language pronunciation. *Indian Journal of Fundamental and Applied Life Sciences*, 4(3), 461–465. www.cibtech.org/sp.ed/jls/2014/03/JLS-63-S3-095.
- Borg, S. (2015). Researching language teacher education in Paltridge, B and Phakiti. *The Continuum companion to research methods in applied linguistics (Second ed.)*, 2015, pp. 541–560. London: Bloomsbury.
- Bakla, A., & Demirezen, M. (2018). An overview of the ins and outs of L2 pronunciation: A clash of methodologies, “*Ana Dili Eğitimi Dergisi*”, vol. 6, no. 2, pp. 475–495.
- Drolia, M., Sifaki, E., Papadakis, S., & Kalogiannakis, M. (2020). An overview of mobile learning for refugee students: juxtaposing refugee needs with mobile applications' characteristics. *Challenges*, 11(2), 31.
- Farhat, P. A., & Dzakiria, H. (2017). Pronunciation barriers and computer assisted language learning (CALL): Coping the demands of 21st century in second language learning classroom in Pakistan. *International Journal of Research in English Education*, 2(2), 53–62. <https://doi.org/10.18869/acadpub.ijree.2.2.53>.
- Fouz-González J. (2020). Using apps for pronunciation training: An empirical evaluation of the English File Pronunciation application,” *Language Learning & Technology*, vol. 24, no. 1, pp. 62–85, 2020.
- Gholamina, I. (2014). Application of computer and technology in EFL syllabus design. *Journal of language teaching and research*, 5(2), 376–381. <https://doi.org/10.4304/jltr.5.2.376-381>.
- Gilakjani, A. P and Rahimy, R, “Using computer-assisted pronunciation teaching (CAPT) in English pronunciation instruction: A study on the impact and the Teacher's role,” *Education and Information Technologies*, vol.25, no.1, pp. 1129–1159, 2020, doi: 10.1007/s10639-019-10009-1.
- Gilakjani, A. P and Rahimy, R. (2019). Factors influencing Iranian teachers' use of computer assisted pronunciation teaching (CAPT). *Education and Information Technologies*, Vol. 24, no. 2, pp.1715–1740. doi: 10.1007/s10639-018-09851-6.
- Gkontelos, A., Vaiopoulou, J., and Stamovlasis, D. (2022). Teachers' innovative work behavior scale: psychometric properties of the Greek version and measurement invariance across genders. *Soc. Sci.* 11:306.
- Haghighi, M., & Rahimy, R. (2017). The effect of L2 minimal pairs practice on Iranian intermediate EFL learners' pronunciation accuracy. *International Journal of Research in English Education*, 2(1), 42–48. DOI: 10.18869/acadpub.ijree.2.1.42.
- J. W. Creswell. (2014). *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches*, 4th ed. Thousand Oaks: SAGE Publications.
- Karim, A.; Hussain, F. (2019). When Will You Start Teaching the REAL Curriculum? Information and Communication Technologies for Development. Strengthening Southern-Driven Cooperation as a Catalyst for ICT4D. In *Proceedings of the International Conference on Social Implications of Computers in Developing Countries*, Dar es Salaam, Tanzania, 1–3 May 2019; Volume 551, pp. 675–686.
- Liu, S. C and Hung, P. Y. (2016). Teaching pronunciation with computer assisted pronunciation instruction in a technological university. *Universal Journal of Educational Research*, vol.4, no. 9, pp. 1939–1943, 2016, doi: 10.13189/ujer.2016.040902.
- Marashi, H and Mirghafari, S. (2019). Using content-based and task-based teaching in a pronunciation setting to improve EFL learners' writing. *Studies in English Language and Education*, vol. 6, no. 1, pp. 26–43. 2019. doi:10.24815/siele.v6i1.11745.
- Miqawati, A. H, “Pronunciation Learning, Participation, and Attitude Enhancement through Mobile Assisted Language Learning (Mall),” *English Review: Journal of English Education*, vol. 8, no. 2, pp. 211–218, 2020, doi:10.25134/erjee.v8.i2.2118.
- Mollaei, F., & Riasati, M. J. (2013). Teachers' perceptions of using technology in teaching EFL. *International Journal of Applied Linguistics and English Literature*, 2(1), 13–22. <https://doi.org/10.7575/ijalel.v2n1.p13>.
- Mujtaba Alsied, S., & Mubarak Pathan, M. (2013). The use of computer technology in EFL classroom: Advantages and implications. *International Journal of English Language & Translation Studies*, 1(1), 61–71 <https://docplayer.net/8042270-Typical-questions-answers.html>.
- Pamela Mary Revell Rogerson. (2021). Computer-Assisted Pronunciation Training (CAPT): Current Issues and Future Directions. *RELC Journal*, vol.00, no. 0, pp. 1–17.
- Papadakis, S., Gözü, A. İ. C., Kalogiannakis, M., & Kandir, A. (2022). A Comparison of Turkish and Greek Parental Mediation Strategies for Digital Games for Children During the COVID-19 Pandemic. In *STEM, Robotics, Mobile Apps in Early Childhood and Primary Education* (pp. 555–588). Springer, Singapore.
- Roohani, A., & Rahimi, Z. (2019). Comparative effects of using pronunciation software on Georgian bilingual and Persian monolingual EFL learners' pronunciation achievement. *International Journal of Research Studies in Language Learning*, 8, 1, 1–1,13. <https://doi.org/10.5861/ijrsl.2018.3005>.
- Santos, V. D. O. (2011). Software Review: Rosetta Stone Portuguese (Brazil) levels 1, 2, & 3 Personal Edition Version 4 (TOTALe),” *CALICO Journal*, vol. 29, no. 1, pp.177–194.

- Seferoglu, G. (2005). Improving students' pronunciation through accent reduction software. *British Journal of Educational Technology*, 36(2), 303–316. <https://doi.org/10.1111/j.1467-8535.2005.00459>.
- Stone, S. (2017). *Observational learning*. Encyclopedia Britannica Inc.
- Tejedor-García, C., Escudero-Mancebo, D., Cámara Arenas, E., González-Ferreras, C., & Cardeñoso-Payo, V, "Assessing pronunciation improvement in students of English using a controlled computer assisted pronunciation tool," *IEEE Transactions on Learning Technologies*, vol. 13, no. 2, pp. 269-282, 2020.
- Yulian, R. (2021). The flipped classroom: Improving pronunciation for critical reading of EFL learners in higher education. *Studies in English Language and Education*, vol. 8, no. 2, pp. 508-522, 2021, doi: 10.24815/siele.v8i2.18366.
- Zhu, C. (2010). Teacher roles and adoption of educational technology in the Chinese context. *Journal for Educational Research Online*, 2(2), 72–86. <https://pdfs.semanticscholar.org/c6d2/639d4494839dc52d543688a117cc783fc9bd.pdf>
- Zhu, C., Valcke, M., & Schellens, T. (2010). A cross-cultural study of teacher perspectives on teacher roles and adoption of online collaborative learning in higher education. *European Journal of Teacher Education*, 33(2), 147–165. <https://doi.org/10.1080/02619761003631849>.
- Weibert, A.; Krüger, M.; Aal, K.; Salehee, S.S.; Khatib, R.; Randall, D.; Wulf, V. Finding Language Classes. *Proc. ACM Hum. Comput. Interact.* 2019, 3, 1–23. [CrossRef]