



Development and validation of podcast as a supplementary listening material

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Abstract

This study was to assert the potential of the developed podcast that was used as a supplementary material in enhancing the listening skills of the fourth grade learners. This study used 4D model by Semmuel and Semmuel (1974 as cited by Hirayato, 2022) namely define, design, development and disseminate. The participants were the thirty-six (36) grade four learners. The percentage, mean, frequency, were used to analyzed the competencies of pre-test and post-test. The pre-test resulted as low in listening competencies with the mean score of 16.58 After the implementation of the developed podcast, post-test was conducted which resulted as moderate with the mean score of 24.47. Podcast developed showed improvement in listening skills to the learners when the pre-test and post-test result were compared using the dependent t-test at $\alpha=0.05$ level of significance. The significant difference of the pre-test and post-test showed $-7.865p<.05$ at .05. The level of acceptability in terms of content quality, instructional quality, technical quality and other findings of the developed podcast were highly acceptable with a mean score of 4.75.

Keywords: *podcast, 4D model, learners' listening skills, development and validation*

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Introduction

Listening is receiving language through the ears, which involves identifying the sounds of speech and processing them into words and sentences. Listening skills is essential in human interaction and crucial not only the language but also for learning the subject. The four macro skills such as reading, speaking, writing and listening are the essential keys in developing the language proficiency. According to Marx et al. (2016), listening comprehension requires mental processes in order to understand highly demanding listening material. Yet, only listening contributes primarily for language expertise. As Renukadevi (2014) argues that learning the language, listening has an important place in learning as it is one of the four major skills in language acquisition. Despite its salience, listening was often treated as the Cinderella skill in second language (L2) learning (Talip, 2020), simply because much valuable class time is questionably devoted to reading, grammar, and vocabulary.

Listening lags behind other skills though listening skills are also of crucial importance in language acquisition. Low level learners of the EFL have problems in listening comprehension and listening seems the most demanding skills. The common practice in the class is that teachers and educators focus on the outcome of the listening rather than listening itself the process of listening (Rezaei & Hashim, 2013). Today, modern technology is preferred by many as the first go-to source of a dynamic hub of knowledge and learning (Merzifonluoğlu & Gonulal, 2018).

Podcasts are usually in the format of an MP3 and can be played on any digital device, such as laptops, tablets, and smartphones. From this perspective, one particular method that can both embrace mobile technology, and combine flexible and extensive learning is the implementation of podcasting technology (Abdous et al., 2015). Sheperd (2023) cites that as of January 2023, there are 4.7 million of podcast that was developed by the Spotify company and 2.5 million has its features. According to Tabrizi and Chalak (2019), podcasting technology has motivated a number of scholars to investigate as a material to be used to improve L2 learners' listening skills. Hence, this research investigates the listening skills of fourth grade learners in Mandong Integrated School through the use of podcast. The main purpose of this study is to determine the learners' improvement in listening skills after using the developed podcast. This study specifically aims to answer the following questions:

1. What is the pre-test level of competencies of Grade four learners in listening skills?

2. What is the post-test level of competencies in listening skills after using the podcast?
3. Is there significant difference in the pre-test and post-test results?
4. What is the level of acceptability of the podcast as a support supplementary material in grade four?

Methodology

This study used the 4D model in developing learning tools. The 4D model was developed by Semmel and Semmel (1974). As the name implies, the 4D model consists of four main stages, namely define, design, develop, and disseminate.

Define phase. During the define phase, the researcher used the front-end analysis identifying the learners' basic problems in learning process. The researcher identified the problem in listening skills by reading the stories to the 36 fourth grade learners and the pre-test result were gathered and analyzed showing low performance.

Design phase. The design phase used the media selection where the researcher designed podcasts patterned on the fourth grade English textbook and curriculum guide and questionnaires for pre- test and post – test.

Development phase. The development phase used the development testing trial where the researcher distributed the validation forms of the podcasts and questionnaires to the research professor, elementary learning resource district coordinator, elementary English district coordinator, statistician and the research adviser to ensure content quality, instructional quality, technical quality and identify other errors. Likert-scale and mean score were used to describe the level of acceptability of the developed podcast.

Dissemination phase. Lastly, the dissemination phase, the researcher carefully observed the three stages in this phase, the validating, the diffusion and the adoption. After validating the podcast on its content quality, technical quality, instructional quality and other errors, podcast were materialized and adopted in fourth grade English class. After disseminating of podcast, there was post-listening test if the leaners performance was enhanced after the use of podcast. The difference between the pre-test and post-test was evaluated using the dependent t-test. The decision was based on the 0.05 level of significance.

The 36 grade four learners consist of 17 males and 19 females were chosen to be the participants. They listened to the podcast that was developed by the researcher and then answered the multiple choice questionnaire. Using 10 items on each stories for the total of 40 item questionnaire, this questionnaire was used as the main data gathering instrument.

The pre-test and post-test of the learners were analyzed using frequency counts, mean and percentage. The scores earned were tabulated. The inferential statistics was treated and analyzed using SPSS version 27 statistical software system.

Findings

Firstly, the pre- test level of competencies of fourth grade learners showed the low results with mean score of 16.58; learners showed least ability to apply and transmit critical content knowledge because of not engaging activity to develop learners' skills in listening. Secondly, the post-test level of competencies in listening skills of learners after using the podcast showed the moderate results with the mean score of 24.47, which implied that learners have independent ability to analyze and criticize important content and knowledge because of the catchy material developed in enhancing the listening skills of the learners. With the use of dependent t-test at 0.05 level of significance, the difference in the pre-test and the post-test results (-7.865 $p < .05$ at .05) showed level of significance reflected by the p-value. The developed podcasts were highly significant in improving the listening skills of the learners. Lastly, the level of acceptability in terms of content quality, instructional quality, and technical quality of the developed podcasts showed highly acceptable rating and effective in enhancing the listening skills in teaching.

Conclusion

While the pre-test of learners showed least ability to apply and transmit critical content knowledge, the post-test showed learners' independent ability to analyze and criticize important content and knowledge. Hence, the developed podcast is highly acceptable in developing listening skills of the learners. Podcasts can be helpful for auditory learners who prefer to listen to information. As the post-test result shows, listening to podcasts produced a moderate level of learning gain. Therefore, podcast is an effective supplementary material to aid the learning gap in listening of learners in the second language.

References

- Abdulrahman, T., Basalama, N., & Widodo, M. R. (2018). The impact of podcasts on EFL students' listening comprehension. *International Journal of Language Education*, 23–33. <https://doi.org/10.26858/ijole.v2i2.5878>
- Avila, E. C., & Lavadia, M. K. S. (2019). Investigation of the acceptability and effectiveness of academic podcasts to college students' scholastic performance in science. *Indian Journal of Science and Technology*, 12(34), 1–8. <https://doi.org/10.17485/ijst/2019/v12i34/127382>
- Blau, I., Shamir-Inbal, T., & Avdiel, O. (2019). How does the pedagogical design of a technology-enhanced collaborative academic course promote digital literacies, self-regulation, and perceived learning of students? *The Internet and Higher Education*, 45, 100722. <https://doi.org/10.1016/j.iheduc.2019.100722>
- Bremner, N., Sakata, N., & Cameron, L. (2022). The outcomes of learner-centred pedagogy: A systematic review. *International Journal of Educational Development*, 94, 102649. <https://doi.org/10.1016/j.ijedudev.2022.102649>
- Budiasningrum, R. S., & Rosita, R. (2022). Using podcasts to improve listening and speaking skills: Literature review. *JOLADU Journal of Language Education*, 1(1), 13–20. <https://doi.org/10.58738/joladu.v1i1.11>
- Chaves-Yuste, B., & Peña, C. D. (2023). Podcasts' effects on the EFL classroom: a socially relevant intervention. *Smart Learning Environments*, 10(1). <https://doi.org/10.1186/s40561-023-00241-1>
- D. Renukadevi. (2014). The role of listening in Language acquisition; The Challenges & Strategies in Teaching listening. *International Journal of Education and Information Studies*, 4(1).
- Gezer, B., & Anilan, H. (2021). The effect of digital materials on listening comprehension levels of second grade elementary students. *Acta Didactica Napocensia*, 14(1), 127–141. <https://doi.org/10.24193/adn.14.1.10>
- Ginting, F. Y. (2018). An analysis of students' ability in using punctuation marks in descriptive paragraph writing. *Budapest International Research and Critics Institute (BIRCI-Journal) Humanities and Social Sciences*, 1(3), 338–344. <https://doi.org/10.33258/birci.v1i3.57>

- Goldman, T. (2018). *The impact of podcasts in education*. Sta. Clara University. https://scholarcommons.scu.edu/cgi/viewcontent.cgi?article=1029&context=engl_176
- Gonulal, T. (2020). Improving listening skills with extensive listening using podcasts and vodcasts. *International Journal of Contemporary Educational Research*, 7(1), 311–320. <https://doi.org/10.33200/ijcer.685196>
- Hogan, T. P., Adlof, S. M., & Alonzo, C. N. (2014). On the importance of listening comprehension. *International Journal of Speech-Language Pathology*, 16(3), 199–207. <https://doi.org/10.3109/17549507.2014.904441>
- Locker, M. (2018). *Apple's podcasts just topped 50 billion all-time downloads and streams*. Fast Company. <https://www.fastcompany.com/40563318/apples-podcasts-just-topped50-billion-alltime-downloads-and>
- Marx, A., Heppt, B., & Henschel, S. (2016). Listening comprehension of academic and everyday language in first language and second language students. *Applied Psycholinguistics*, 38(3), 571–600. <https://doi.org/10.1017/s0142716416000333>
- Phillips, B. (2017). Student-produced podcasts in language learning – exploring student perceptions of podcast activities. *IAFOR Journal of Education*, 5(3). <https://doi.org/10.22492/ije.5.3.08>
- Prasetya, F., Fajri, B. R., Wulansari, R. E., Primawati, N., & Fortuna, A. (2023). Virtual reality adventures as an effort to improve the quality of welding technology learning during a pandemic. *International Journal of Online and Biomedical Engineering (iJOE)*, 19(02), 4–22. <https://doi.org/10.3991/ijoe.v19i02.35447>
- Renukadevi, D. (2014). The role of listening in language acquisition: The challenges & strategies in teaching listening. *International Journal of Education and Information Studies*, 4, 2277-3169.
- Rezaei, A., & Hashim, F. (2013). Impact of awareness raising about listening micro-skills on the listening comprehension enhancement: An exploration of the listening micro-skills in EFL classes. *Australian Journal of Teacher Education*, 38(8). <http://dx.doi.org/10.14221/ajte.2013v38n8.4>
- Rintaningrum, R. (2018a). Investigating reasons why listening in English is difficult: Voice from foreign language learners. *Asian EFL Journal*, 20(11), 112–120.

- Rogers, P. (2017). Digital language learning and teaching: Research, theory and practice (a review). *Training, Language and Culture*, 1(3), 104-109. <https://doi.org/10.29366/2017tlc.1.3.7>
- Saraswaty, D. R. (2018). Learners' difficulties & strategies in listening comprehension. *English Community Journal*, 2(1), 139. <https://doi.org/10.32502/ecj.v2i1.1003>
- Syahabuddin, K., & Rizqa, K. (2021). Improving students' listening skill using podcasts. *Journal of Digital Education Communication and Arts (DECA)*, 4(01), 51–61. <https://doi.org/10.30871/deca.v4i01.2867>
- Thaosiri, S., & Chano, J. (2022). The development of an instructional model based on social Cognitive theory to enhance English listening and speaking skills for Grade 6 students in small size schools. *Journal of Educational Issues*, 8(2), 20. <https://doi.org/10.5296/jei.v8i2.19919>
- Wolf, M. C., Muijselaar, M. M. L., Boonstra, A. M., & De Bree, E. H. (2018). The relationship between reading and listening comprehension: shared and modality-specific components. *Reading and Writing*, 32(7), 1747–1767. <https://doi.org/10.1007/s11145-018-9924-8>