



## QR-codes in English textbook: Improving listening and speaking skills

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### ABSTRACT

This quantitative study examines the impact of implementing QR codes in English textbooks on students' listening and speaking skills. This study used a quasi-experimental design with pre-tests and post-tests within experimental and control classes to evaluate the effectiveness of QR-code content in improving language skills. Sixty students in an Islamic elementary school as the participants will be randomly assigned to an experimental class and a control class. The experimental class used an English textbook published by Erlangga, which is enriched with a QR code connected to multimedia resources for listening and interactive exercises for speaking practice. The control class used a traditional textbook without a QR code. The assessments for both groups will include pre-and post-assessments to evaluate the changes in their listening and speaking skills. The T-test is conducted to determine the significance of the improvement in the experimental class compared to the control class. The study revealed statistically significant improvements in listening and speaking skills among students exposed to QR-code content in English textbooks.

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### ABSTRAK

Penelitian kuantitatif ini bertujuan untuk menguji dampak penerapan kode QR dalam buku pelajaran Bahasa Inggris terhadap keterampilan mendengarkan dan berbicara siswa. Penelitian ini menggunakan desain kuasi-eksperimental dengan pre-test dan post-test dalam kelas eksperimen dan kontrol untuk mengevaluasi efektivitas konten kode QR dalam meningkatkan keterampilan berbahasa. 60 siswa di sebuah sekolah dasar Islam sebagai partisipan akan secara acak ditugaskan ke dalam kelas eksperimen dan kelas kontrol. Kelas eksperimen menggunakan buku pelajaran Bahasa Inggris yang diterbitkan oleh Erlangga yang diperkaya dengan kode QR yang terhubung dengan sumber daya multimedia untuk latihan mendengarkan dan latihan berbicara interaktif. Kelas kontrol menggunakan buku pelajaran tradisional tanpa kode QR. Evaluasi untuk kedua kelompok akan mencakup pre-test dan post-test untuk mengevaluasi perubahan dalam keterampilan mendengarkan dan berbicara mereka. Uji T dilakukan untuk menentukan signifikansi peningkatan dalam kelas eksperimen dibandingkan dengan kelas kontrol. Hasil dari penelitian ini menunjukkan adanya peningkatan yang signifikan secara statistik dalam keterampilan mendengarkan dan berbicara di antara siswa yang menggunakan konten kode QR dalam buku pelajaran Bahasa Inggris dari pada siswa yang pembelajarannya secara konvensional.

**Kata Kunci:** Kode QR; Sekolah Dasar; Listening; Speaking

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## INTRODUCTION

Technology integration, specifically mobile learning, was the focus of this study. The use of technology in language learning environments not only supports the learning process but also enhances it. Computer integration is intended to enhance language learning rather than relying on the presence of computers. The emphasis is on the learner and learning orientation, and computers are essential as a resource and tool in the learning process. Among the topics covered in technology are improving learners' listening and visual comprehension, which is significant in second language learning, interaction, and interface design using human-computer interfaces, sociocultural aspects of language acquisition, theory of listening comprehension for learning styles, and strategies illustrated by current research on strategy.

Using technology in the classroom can help children become more engaged in learning. Freeman & Anderson, in the book entitled "*Techniques and Principles in Language Teaching*," stated that when students learn using technology, they can develop higher-order cognitive skills. Technology provides instructional resources and learning environments for students (Fernadi, 2022). Much of what is learned can be transferred to students through technology, including language learning.

To improve students' language skills, they may be excited about the content technology can provide as an endless supply of resources for language learners. A variety of applications allow learners to leverage technology in their learning process. Technology-enhanced classrooms are more convenient than traditional classrooms. So, it can be concluded that using technology in the classroom is extremely important to focus students' attention on learning English.

Indonesian national standards recognize proficiency in oral communication. According to the book "*Kurikulum Tingkat Satuan Pendidikan (KTSP)*," elementary school students should have English language skills, including listening and speaking. As a global language, English is significant, especially for foreigners who speak different languages and can communicate in English. Therefore, knowledge of English is essential to master (Kayi, 2006). Furthermore, in the book "*New Ways in Teaching Listening*," Nunan and Miller stated that speaking is an important and essential skill to practice in oral communication, and is a priority for many second and foreign-language learners. According to Kuswoyo and Wahyudin (2017) also Wahyudin and Rido (2020), to address this issue effectively, teachers must find methods to prepare and instruct oral communication, taking into account various factors such as the assigned task and the educational approach of students.

In Indonesian classes, English uses a communicative language method emphasizing non-grammatical building blocks such as concepts, functions, skills, tasks, and other essential elements. Huah and Jarrett (2014) stated that language acquisition is facilitated by using information gaps and other tasks that require learners to communicate honestly despite limited English language skills. These traditional listening and speaking activities throughout the classroom may not achieve optimal learner engagement. Additionally, traditional listening activities may include works that are not interesting to the students or appropriate to the context. Huah and Jarrett (2014) stated that language acquisition is facilitated by using information gaps and other tasks that require learners to communicate honestly despite limited English language skills. These traditional listening and speaking activities throughout the classroom may not achieve optimal learner engagement. Additionally, traditional listening activities may include works that are not interesting to the students or appropriate to the context. Moreover, the fact is that the application of English subjects in Indonesian elementary schools is far from successful because the material, such as English textbooks, only provides reading and writing practice while there are no listening and speaking practice activities for students.

There are several factors, according to Fachrunnisa and Nuraeni (2022) and Haidara (2016), which contribute to the lack of speaking and listening skills, especially among elementary school students in Indonesia, including limited opportunities to practice speaking and listening, lack of knowledge of

vocabulary and grammar, psychological factors such as fear and anxiety, and inappropriate teaching methods. Moreover, [Syafrizal and Septiawati \(2022\)](#) have observed that students find traditional strategies for teaching listening and speaking tedious and demanding. Students may have little opportunity to evaluate their speaking activities, so they may not be aware of their pronunciation errors. Effective listening and speaking learning is to carry out activities that directly engage the students while providing the opportunity to learn the language from native speakers. Therefore, to address these challenges, teachers must develop effective teaching methods that focus on improving students' speaking and listening skills and provide students with more opportunities to practice speaking and listening.

Along with other factors, students possess distinct learning qualities, particularly elementary school students classified as young learners. Young learners usually find great joy in enjoying what they are doing. Therefore, elementary school teachers need to understand their world. Additionally, the teacher must be able to teach communicatively and effectively using appropriate teaching media. [Wahyudin and Rido \(2020\)](#) stated that the use of educational media in education has several advantages that can meet the characteristics of students. Moreover, [Oktaviani and Mandasari \(2020\)](#) stated that using media in education can improve students' motivation to learn English.

Teaching English as a foreign language is challenging, and teaching English to elementary students should be taught according to their needs. Several studies have found that learning English early is practical and helpful in developing children's English skills ([Shin, 2010](#); [Gawi, 2012](#)). The biggest challenge is getting students to speak English during the learning process. The students mainly use their native language as a means of communication, and lack of vocabulary is one of the reasons why students do not want to speak English during English classes. [Kayi \(2006\)](#) also stated that teachers should provide speaking activities focusing on meaningful communication rather than just making students memorize. This aligns with the paper "*Teaching, Speaking, Listening and Writing*" written by Wallace et al., which states that teachers should provide opportunities for students to practice speaking in English. By practicing this skill, speaking can result in meaningful communication and less memorization ([Wahyudin, 2017](#)).

Compared to older children, elementary school students are typically between the ages of 8 and 12, with more complex traits. Student personalities also become more pronounced and difficult to manage. Therefore, as a teacher, choose appropriate teaching strategies instead of imposing them on students if they do not want to follow the teacher's tasks. Keep an eye on the duration of the activity because children only have 15 minutes to focus on learning. This means that English lessons at such an age must be well organized. During the teaching and learning process in the classroom, students tend to play very actively with their friends, and it is difficult to ask students to participate in English lessons seriously. Teachers should strive to help students achieve their goals of learning English, especially in listening and speaking.

Many writers have done studies about QR codes in English learning. QR codes improve their general knowledge ([Hirju & Georgescu, 2023](#)). QR codes have attracted great attention because they can be read immediately on smartphones and tablets using free apps ([Sánchez-Azqueta, 2023](#)). Several previous studies are related to this study. First, [Safitri and Santoso \(2023\)](#) in the title Students' Perception of Erlangga Book Reader application in Listening skill. The result showed that students' perceptions of the Erlangga Book Reader had a significant effect on students' listening comprehension. Second, [Atika et al. \(2020\)](#) titled The Effectiveness of Using QR-Code to Improve Students' Speaking Skills and Motivation. The result showed that university students' speaking skills have different scores between pre-test and post-test. It can be concluded that there is an increase in students' abilities after using QR-Code. Third, [Huah and Jarrett's \(2014\)](#) title Integrating QR Codes and Mobile Technology in Developing Listening and Speaking Skills in Teaching English Language. The result showed that it had

successfully generated active learning, increased learners' interest and motivation, and encouraged more active participation in the class.

The latest educational standards suggest incorporating technology into teaching and learning approaches and activities. With the rapid growth of mobile and handheld device technology, modern mobile phones and tablets have been able to incorporate computing power into their devices. These portable handheld devices make great learning tools. Although the benefits of using these tools in the classroom are clear, there are also challenges to using these tools in learning. Maintaining learners' concentration on a task while using the internet is one of the challenges. Rather than banning technology, the solution is to take advantage of it. Therefore, the researcher proposed using mobile phones and their QR codes to improve listening and speaking skills by combining mobile devices with a technology called Quick Response (QR) codes used in English textbooks.

## LITERATURE REVIEW

### QR Codes in Students' English Textbook

The Denso Wave Company of Japan created the QR code, a two-dimensional barcode in 1994. It stands for Quick Response Code and is characterized by its fast recognition speed and ability to store large amounts of information. QR codes have been increasingly used in education, including in the context of English learning. In English education, QR codes can provide easy access to supplementary materials such as audio files, videos, or interactive exercises. According to [Al-Najdi \(2022\)](#), QR codes can be integrated into textbooks, worksheets, or classroom displays to offer quick access to relevant online content, which can help English language learners improve their skills. Moreover, [Sondhi and Kumar \(2022\)](#) stated that using QR codes in education emphasizes their role in providing technologically enhanced learning materials and fostering students' engagement. QR codes contain detailed information and can be readily displayed anywhere, so students can quickly get detailed information through the QR code. Therefore, using QR codes in English education can facilitate access to supplementary materials, promote interactive learning, and support students in improving their language skills.

QR codes have been utilized to support English language learning, including in students' English textbooks. According to [Huah and Jarrett \(2014\)](#), QR codes and mobile phones have been used to promote listening and speaking abilities in teaching English language to non-English language choice in-service teacher trainees and secondary school teachers. This approach has successfully generated active learning, increased learners' interest and motivation, and encouraged more active participation within the class. Additionally, Vigil, in a dissertation titled "*Quick Response (QR) Codes For Audio Support in Foreign Language Learning*," stated that QR codes have been used to provide audio support in foreign language learning, offering learners easy access to audio materials that can enhance their language acquisition.

### Listening Skill

Four language skills are macro skills: listening, reading, speaking, and writing ([Aydoğan & Akbarov, 2014](#)). Listening is the most important of all skills because it is the root of all communication. Listening involves processing sound waves, interpreting the meaning, and remembering it. This communication method requires the listener to understand, analyze, and evaluate what they hear. Almost all information is obtained by listening, which is an essential activity in human life. In academic fields, listening helps students access knowledge, information, and ideas ([Ghonivita et al., 2021](#)).

Listening is the first skill that children learn, especially if they have not yet learned to read. When a child starts learning English as a foreign language, the language that they hear becomes the primary

language they learn. Teachers must not only teach about language rules and definitions but also engage students in meaningful and spontaneous communication, as [Widayati \(2019\)](#) suggested. Proper language skills are essential for students to communicate spontaneously and meaningfully. The importance of listening as a language skill is highlighted by [Astawa et al. \(2017\)](#), who noted that it is crucial for both spoken and nonverbal communication.

Indonesian EFL learners try to understand and respond to the words they hear when communicating in a foreign language. Their inadequate language skills compromise their ability to comprehend the meaning of a word. This can be pretty challenging for them. The most significant obstacle to listening is a limited vocabulary. There are many factors to be considered when teaching listening in Indonesia, according to [Cahyono and Widiati \(2009\)](#). First, EFL listening is a comprehensive language skill. It is integrated with other skills, such as speaking, reading, and writing. The second listening exercise is aimed at improving students' listening skills. This includes developing various teaching and listening techniques in English classrooms and laboratories. The third is the language teaching media used to teach EFL listening. The media types range from the use of cassette and CD players in the classroom to the use of multimedia language labs.

## **Speaking Skills**

Speaking is possibly the most challenging skill for a teacher to teach. Children are expected to be able to express emotions, articulate intents and reactions, explore, and make fun of their native language in English. Their implicit belief that learning a foreign language is merely another means of expressing themselves is part of the allure of teaching young children a second language.

However, according to [Sari and Amri \(2016\)](#), some problems make speaking English difficult for students. First, there are teaching methods that do not adequately cater to young learners who face difficulties in learning English linguistically, which is distinct from their mother tongue or national language, due to the newfound popularity of the language. As a result, educators ought to adopt innovative approaches that stimulate students' eagerness to learn English and develop their speaking abilities.

Developing basic speaking skills is essential to achieve the learning objectives of Career and Development. In the book "*Teaching Listening and Speaking from Theory to Practice*," Richard stated that when designing speaking activities and materials for learning a second or foreign language, consider whether speaking is taught for everyday communication or communicative purposes in other situations. It is essential to consider the diverse demands of the students.

Teaching speaking skills can be adapted to suit the needs of students, with various techniques available. The first technique is using the game. According to Wright et al. in the book "*Games for Language Learning*," the game requires students to be attentive to their teacher and peers' comments, enabling them to convey their emotions and knowledge. Realia is utilized as the second technique. Its use is for teaching something concrete since the meaning is more accessible to show than explain. In the book entitled "*Realia as Applied in Italian Classroom*," Milone defined realia as the group of objects, actions, and concrete materials that help to bring an idea into agreement with a word or phrase. The third technique is the use of images. According to Wright in the book "*Pictures for Language Learning*," students' perception of images during language learning is influenced by their visual representations of the mind. Repetition-drill practice is the fourth technique. In the book "*Techniques and Principles in Language Teaching*," Freeman stated that students must repeat the teacher as accurately and quickly as possible. It enhances students' proficiency in word production and facilitates their comprehension. The fifth technique is role play. Bailey, in the book entitled "*Practical English Language Teaching: Speaking*," explained that role-playing is a speaking activity in which students assume the roles of other

people and interact based on some people's characteristics (age, gender, occupation, etc.). The last technique is dialogue. In the book "*Towards Dialogic Teaching*," Alexander argued that dialogue is characterized by teacher-student interactions in which children feel confident to make mistakes and see mistakes as something to be learned from rather than ashamed. Additionally, the dialogue features student-to-student interactions in which children listen carefully to each other (Hasanah, 2018). Encourage each other to participate and share ideas, depending on their and others' contributions.

## METHODS

This article applied quasi-experimental research. According to Alfianika in the book "*Metode Penelitian Pengajaran Bahasa Indonesia*," quasi-experimental research is a development research of true experiment design consisting of an experimental and control class. Pre-test and post-test were used as the research design. QR-code taught the experimental class on the English textbook "*Grow with English 3*," published by Erlangga, while the control class was taught using a conventional textbook. The population of this research was the third-grade students of Islamic Elementary School Singosari. The purposive sampling technique is used to choose the research samples. Two classes were chosen and divided into the experimental and control classes. The samples comprised 60 students, 3B as the control and 3C as the experiment classes.

Listening and speaking tests were used as the research instruments. The listening test consisted of 10 multiple-choice questions with four options (A, B, C, D), supported by the English audio about the occupation. A dialogue about occupation was provided as the students' speaking test. Two aspects related to the instrument were considered. The first is validity. According to Borsboom et al. (2004), validity is whether a test measures what it is supposed to measure. In addition, validity is also a consideration while evaluating research instruments. The researchers asked experts in the field to check the validity of the instruments. Additionally, SPSS was used to measure the item validity of the listening and speaking test. The second is reliability. Cronbach's alpha was employed to assess the instrument's dependability. According to Arikunto, in the book "*Prosedur Penelitian: Suatu Pendekatan Praktik*," an instrument is reliable if the reliability coefficient is 0.6 or higher. The reliability test results were used to determine whether the questions were reliable or needed revision.

Data were gathered by pre-test and post-tests. Both of the tests consisted of 30 multiple-choice questions about occupations. Tests were conducted on both experimental and control classes. This test aimed to determine the effect of the QR code on 'My Next Words' on students' listening and speaking skills. Before the researchers gave the treatment, a pre-test was used to determine the students' listening and speaking skills. A post-test was conducted to determine how much the students' listening and speaking skills improved after learning by using QR codes.

This study used quantitative data analysis, which is numerical data that can be formulated using statistical methods. The data were analyzed using a paired samples T-test to compare two data between students' pre-test and post-test scores and find significant differences in students' listening and speaking skills. The researcher measured the data's normality before analyzing it using the t-test. It is used to know whether the data is normally distributed or not. The normality test uses the IBM SPSS 23 version for Windows.

The hypothesis in this study is:

H<sub>0</sub>: There is no significant difference in improving students' listening and speaking skills between the class taught with QR codes from English textbooks and the control group taught with traditional textbooks.

H<sub>1</sub>: There is a significant difference in improving students' listening and speaking skills between the group taught with QR codes from English textbooks and the control group taught with traditional textbooks.

## RESULTS AND DISCUSSION

### Results

A pre-test was administered to students who participated in the study to determine their listening and speaking proficiency before starting the course. **Table 1** presents the findings below.

**Table 1.** Results of the pre-and post-test data

	N	Minimum	Maximum	Mean	Std. Deviation
Pre-Test Experiment Listening	30	50	90	71.00	12.415
Post-Test Experiment Listening	30	80	100	86.00	6.747
Pre-Test Experiment Speaking	30	50	90	71.00	12.415
Post-Test Experiment Speaking	30	80	100	86.00	6.747
Pre-Test Control Listening	30	50	90	71.00	12.415
Post-Test Control Listening	30	64	96	79.73	11.741
Pre-Test Control Speaking	30	50	90	71.00	12.415
Post-Test Control Speaking	30	60	90	74.00	10.372

*Source: Research in 2023*

**Table 1** shows that the students' mean on the listening and speaking pre-test is 71, the highest is 90, the lowest is 50, and the standard deviation is 12.145. The experimental class used the QR codes in English textbooks, so this study's post-test listening and speaking learning findings differ. The mean of the post-test findings in the experimental class for student listening and speaking learning outcomes is 86, with a standard deviation of 6747, the highest score attained being 100, and the lowest score is 80, as demonstrated in the table. The mean of the post-test findings in the control class for student listening learning outcomes is 71, with a standard deviation of 11.741, the highest score attained being 96, and the lowest score is 64. The mean of the post-test findings for students speaking outcomes is 74, with a standard deviation of 10.372, the highest score attained being 90, and the lowest score is 60.

### Normality Test

The normality test is among the tests that must be completed before the matched samples t-test procedure to determine if the data are distributed normally. This method requires additional testing. Normality tests were conducted on the pre-test and post-test data, and the results are shown in **Table 2**.

**Table 2.** Normality Test

Class	KolmogrovSmirnov <sup>a</sup>			Shapiro-Wilk			
	Statistic	df	Sig.	Statistic	df	Sig.	
Students Learning Outcomes	Pre-Test Experiment Listening	.051	30	.200*	.985	30	.940
	Post-Test Experiment Listening	.135	30	.171	.908	30	.013
	Pre-Test Experiment Speaking	.069	30	.200*	.979	30	.806
	Post-Test Experiment Speaking	.167	30	.033	.894	30	.006
	Pre-Test Control Listening	.051	30	.200*	.985	30	.940
	Post-Test Control Listening	.077	30	.200*	.974	30	.656
	Pre-Test Control Speaking	.090	30	.200*	.964	30	.395
	Post-Test Control Speaking	.148	30	.090	.958	30	.270

*Source: Research in 2023*

- \*. This is a lower bound of the true Significance.
- a. Liffiefors Significance Correction

The data will be normally distributed if the significance value is more than 5% or > 0,05. **Table 2** displays typical Shapiro-Wilk normality test outcomes using SPSS. It shows that the significance value of listening learning outcomes for the experiment pre-test is 0,940 and 0,013 for the post-test. The significance value of speaking learning outcomes for the experiment pre-test is 0,806 and 0,06 for the post-test. At the same time, the significance value of listening learning outcomes for the control pre-test is 0,940 and 0,656 for the control post-test. The significance value of speaking learning outcomes for the control pre-test is 0,395 and 0,270 for the control post-test. Thus, the significance values of all the pre-test and post-tests are better than 0,05, meaning the results are normally distributed.

Table 2 also shows the Kolmogorov-Smirnov values of the pre-test and post-test of the experiment and control class. The significance value of listening and speaking learning outcomes for the experimental and control pre-test is 0,200. The significance of listening learning outcomes for the experimental post-test is 0,171 and 0,033 for the speaking learning outcomes. The significance of listening learning outcomes for the control post-test is 0,200 and 0,090 for the speaking learning outcomes. The data are typically distributed because the significance value is more than 0,05.

**T-Test**

Paired sample t-test is used in this study. The hypothesis of this study was tested using two samples, and the results are presented in **Table 3**. It summarizes the data and test (Sig-2-tailed) for each matched sample.

**Table 3**  
Paired Sample T-Test

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	Pre-Test Eksperimen								
	Listening - PostTest Eksperimen	-37.433	14.708	2.685	-42.925	-31.941	-13.940	29	.000
Pair 2	Pre-Test Eksperimen								
	Speaking - Post-Test Eksperimen	-39.267	15.111	2.759	-44.909	-33.624	-14.233	29	.000
Pair 3	Pre-Test Control								
	Listening - PostTest Control Listening	-17.900	6.697	1.223	-20.401	-15.399	-14.639	29	.000
Pair 4	Pre-Test Control								
	Speaking - PostTest Control Speaking	-16.033	3.908	.714	-17.493	-14.574	-22.470	29	.000

*Source: Research in 2023*

Based on the output of pairs 1 and 2, the significance value is 0.000 < to 0.05. It can be concluded that there is a significant difference between the average scores of students' listening and speaking scores in the pre-test and post-test of the experimental class. While based on pair three and pair 4, the



significance value is  $0.000 < 0.05$ . It can be concluded that there is a difference between the average scores of students' listening and speaking scores in the pre-test and post-test of the control class.

## Discussion

The analysis of these results showed that students improved on the pretest and posttest due to the classroom treatment. The students are excited and have fun in the classroom, especially when they use QR codes in the textbooks. According to the results of hypothesis testing, the first hypothesis of this study is as follows: There is a significant difference in the improvement of students' listening and speaking skills between the classes taught using the QR code of English textbooks and the control group taught traditional textbooks. Based on the student's pre-test and post-test data, the average pre-test student score was 71, and the post-test average for listening and speaking was 86. It can be concluded that the student's performance is good. Pre-treatment scores were lower than post-treatment. Students' scores improved more after treatment than before. In the normality test, the significance values of the pretest and posttest are more significant than 0.05 ( $0.20 > 0.05$ ,  $0.17 > 0.05$ ,  $0.033 > 0.05$ ), which means that the data on the listening and speaking learning results are normally distributed. The result of the paired sample t-test showed that the significance value is 0.000. If the difference is less than 0.05,  $H_0$  is rejected, and  $H_1$  is accepted. This means that the three data (variables) are correlated or related. As a result, the post-test results of this study showed students' improvement after treatment. It can be concluded that using QR codes improves students' listening and speaking skills.

Media is a means of supporting teaching and learning that is difficult to explain in words. [Hidayati \(2021\)](#) also explained that using media makes it easier to understand the content. Therefore, learning media is one of the essential things to facilitate students' learning process. Additionally, using media in the learning process can increase students' interest. The research results show that the QR code was useful for listening and speaking activities. It can support students' listening and speaking activities concerning their reactions to QR codes. QR codes linked to audio playback websites are believed by [Soulimane et al. \(2018\)](#) to be the most effective solution for addressing listening activities. It has evolved into a flexible solution in language teaching. [Fernández-Rivas et al. \(2023\)](#) research shows that using mobile devices with QR codes improves student satisfaction.

Furthermore, QR codes are not only less complicated but also more efficient. QR codes are a type of media that can be accessed anytime, anywhere, not just during the class. This is supported by [Zurmehly & Adams, 2017](#) that QR codes are frequently used to transmit web addresses, emails, or website links. Indirectly, QR codes work effectively so that students do not have to spend much time gathering information.

The results showed that the use of QR Codes had a positive impact on students' listening and speaking abilities. It is supported by [Ozkeskin \(2016\)](#), who stated that by implementing QR codes, students can become more engaged and motivated to learn. By utilizing the QR codes, students can enhance their listening abilities and maximize their time in class. A teacher can easily teach materials and exercises with the QR code. The teacher has determined which media is suitable for the students. The research found QR codes to be beneficial for listening and speaking activities and can be said to enhance their listening and speaking abilities. This study was supported by [Law & So's \(2010\)](#) theory that QR codes have great potential in education, especially in listening and speaking activities.

## CONCLUSION

First, compared to the results of the t-test in the form of paired samples, the average result of the pre-test and post-test increases from 71 to 86, and the results of the two tests individually have a

significance level of 0.000, which means less than 0.05. The results showed that the student's listening and speaking skills improved, with H0 being rejected and H1 being accepted. The second, following multiple meetings, the students engaged with the learning activities and actively participated. Therefore, it can be concluded that after using QR codes of English textbooks, the students had a positive experience in listening and speaking learning. The QR code provided simple and direct learning materials to practice listening and speaking via a link, making it easy to catch the materials. Students recommended that teachers use textbooks containing QR codes in all face-to-face and online classes. This allows students to practice their listening and speaking skills on their own.

## AUTHOR'S NOTE

The authors declare that there are no conflicts of interest regarding the publication of this article. The author also confirms that the data and content of the article are plagiarism-free

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