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THE IMPACT OF DIGITAL LEARNING PLATFORM ON ADOLESCENTS' SPEAKING ABILITY

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KEYWORDS

Speaking, Digital platform, Adolescents

ABSTRACT

The majority of Indonesian adolescent are familiar with digital platform either in academic setting or in social context. This research aims to describe the effect of digital learning platform on adolescents' speaking ability. The research method used was quasi experimental design with data collection techniques using observation and tests. The population was the teenagers consists of 50 people in English Student Association Club and was taken by using purposive sampling techniques. Data collection was carried out through pre-test and post-test. Calculating the data using the t test concluded that Ha was accepted or approved and Ho was rejected. The results of data processing show that the highest frequency of participants in both the experimental and control groups was observed in the 55-64 interval while the experimental group exhibited a higher concentration of participants with scores in the upper-mid range (85-94 interval). In contrast, the control group showed a more even distribution across the intervals, with fewer participants scoring in the highest range (95-100 interval). This result indicates digital learning platform has a potential positive effect on adolescents' speaking ability.

KEYWORDS

Berbicara, Digital platform, Remaja

ABSTRACT

Mayoritas remaja Indonesia sangat terbiasa menggunakan platform digital, baik dalam konteks akademis maupun sosial. Penelitian ini bertujuan untuk menggambarkan pengaruh platform pembelajaran digital terhadap kemampuan berbicara remaja. Metode penelitian yang digunakan adalah desain quasi eksperimen dengan teknik pengumpulan data melalui observasi dan tes. Populasi penelitian ini adalah 50 remaja yang tergabung dalam English Student Association Club, dipilih dengan teknik purposive sampling. Data dikumpulkan melalui pre-test dan post-test, dan dianalisis menggunakan uji t dengan Ha (hipotesis alternatif) diterima dan Ho (hipotesis nol) ditolak. Hasil pengolahan data menunjukkan bahwa kelompok eksperimen, yang menggunakan platform pembelajaran digital, menunjukkan konsentrasi partisipan yang lebih tinggi dengan skor pada rentang menengah atas (85-94). Sebaliknya, kelompok kontrol menunjukkan distribusi yang lebih merata di seluruh rentang, dengan lebih sedikit peserta yang mencapai skor tertinggi (95-100). Hasil ini menunjukkan bahwa platform pembelajaran digital berpotensi memberikan pengaruh positif terhadap kemampuan berbicara remaja. Dengan demikian, dapat disimpulkan bahwa remaja Indonesia yang terlibat dalam pembelajaran menggunakan platform digital cenderung menunjukkan peningkatan kemampuan berbicara mereka.

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INTRODUCTION

English speaking skills are vital for effective communication in various contexts, including academic, professional, and social settings. Proficiency in speaking English allows individuals to express ideas clearly, participate in discussions, and collaborate with peers from different linguistic backgrounds. For teenagers, mastering speaking skills can have a positive impact on self-development, self-confidence and the ability to express themselves effectively (Nunan, 2003). However, developing this skill can be challenging in traditional classroom settings due to limited opportunities for practice and real-world interactions (Gromik, 2022).

In the rapidly evolving digital landscape, the integration of technology into education has become a necessity rather than a luxury. One area that has garnered significant attention is the use of digital learning platforms to improve language learning, particularly in developing speaking skills among adolescents. The platforms offer a range of interactive features, multimedia resources, and opportunities for real-time communication, which can potentially enhance students' speaking abilities.

Platforms as learning media have become increasingly popular tools for improving language skills, including speaking ability (Blake, 2016). The platform as a learning medium offers various features and tools that can support the development of teenagers' speaking skills. For example, platforms such as video conversation applications, online courses and social media that are integrated with audio and video technology can be used to practice speaking live or through recordings (Golonka et al., 2014).

According to Indonesian Dictionary (KBBI), platform means program or work plan. Meanwhile, according to the Cambridge Dictionary, a platform is a way of informing the public about opinions or thoughts. In the world of information technology, a platform refers to a system or foundation that provides and implements a particular service or product application. Based on Akmal (2019:60), the main function of the platform is to run software so that it can be used or run and can make it easier for us to operate applications or other software related to technology, provide security and help in terms of planning. Digital learning platforms can provide a virtual environment where students can engage in various speaking activities, such as role-plays, discussions, and presentations (Chen, 2021).

Adolescence is a developmental stage that marks the transition from childhood to adulthood, typically ranging from ages 10 to 19 according to the World Health Organization (WHO,2023). This period is characterized by significant physical, emotional, cognitive, and social changes as individuals develop greater independence and identity formation. Adolescence is a critical time for acquiring the skills necessary for adult roles, including advanced cognitive abilities and social competencies. Adolescents experience rapid cognitive growth, improving their ability to understand and use complex language structures. This development supports more sophisticated and effective communication skills, which are essential for academic and social success. Adolescence is a critical period for developing language and communication skills. During this stage, individuals undergo significant cognitive, social, and emotional development, making it an ideal time to enhance speaking abilities.

Research has shown that the use of platforms can positively impact adolescents' speaking skills. A study by Suryana, et.al (2022) developed and tested a model for developing adolescents' communicative cultures in an institution of additional education and found that the use of digital options in education has reduced social interaction among students. They found that digital methods convenient for communication, aiding speaking skills.

Similarly, a study by Zou et al. (2022) investigated the effects of a digital learning platform on adolescents' speaking skills in a Chinese as a foreign language context. The results indicated that the platform facilitated increased participation, confidence, and motivation among students, leading to improved speaking abilities.

It is important to note that while digital learning platforms can be valuable tools, their effectiveness may depend on various factors, such as the quality of the platform, the instructional design, and the level of guidance and support provided by educators (Golonka et al., 2014). Additionally, it is crucial to strike a balance between digital and face-to-face interactions, as interpersonal communication and social skills are equally important for adolescents' overall development (Gromik, 2022). While digital learning platforms offer numerous advantages, they also present challenges such as the digital divide, varying levels of technological proficiency among learners, and the need for effective teacher training.

In conclusion, digital learning platforms offer a promising avenue for enhancing adolescents' speaking abilities by providing a rich and engaging learning environment. As technology continues to evolve, it is crucial for educators and researchers to explore innovative ways to leverage these platforms effectively and support language learning in the digital age. In this occasion, researchers will discuss the influence of the platform as a learning medium on the speaking abilities of teenagers in one of English course. The discussion will be based on how effective the use of the platform is in improving adolescents' speaking ability. Based on this background, this study will examine the following: Is there any impact of digital learning platform on adolescents' speaking ability?

It is expected that this research can provide an illustration and benchmark for adolescents who want to start using the digital platform to improve their English language skills and this study become evaluation material in developing better platform applications.

METHODS

Population and Sample

In this research, the research method employed was quasi experimental design with a quantitative approach. Quasi experimental design was chosen because it allows researchers to control some variables and observe the effects of the treatment or intervention provided (Cresswell, 2014). A quantitative approach was chosen because this research aims to measure and analyze data numerically (Muijs, 2011). The population was 60 teenagers in English community in Univesitas Pembinaan Masyarakat Indonesia namely English Student Association Club. Then the participants were divided into 2 groups by using purposive sampling (in which the students can be categorized as adolescents or ranged 10 to 19 years were being

sample) . The first group, consisting of 25 teenagers, get treatment by using Digital Platform and another group did not get treatment.

In collecting data, pre test and post test were carried out to observe teenagers' speaking abilities before and after being given treatment, namely the Digital Learning Platform. Secondly, observation technique was employed in this research to directly observe participant behavior, activities and interactions (Creswell, 2014). In addition, the data were collected by using interview to gather in depth insights. To analyzed the data, oral tests or speaking practice were assessed by using assessment rubrics to measure aspects such as pronunciation, grammar, vocabulary and speaking fluency.

FINDINGS

Several digital platforms have proven to be both familiar and effective for improving English speaking skills among adolescents. In this study, the digital platforms chosen were Duolingo, Speakly and Mondly applications. To investigate the impact of digital learning platforms in improving speaking skills, the research was conducted by survey of 50 teenagers who were divided into two groups. The first group, teenagers who learnt by special digital platform to learn English and the second group forms an offline community to chat and discuss materials related to English.

After the researcher gave treatment to the students, the students were tested by using oral tests then the outcome of the post-test is compared to the pre-test. Whether or not the post-test score demonstrates a significant improvement. To score the tests, the researchers utilizes a scoring rubric. The scoring rubric that the researcher used was taken from (Haris, 1969). The elements examined are five elements of speaking such as pronunciation, grammar, vocabulary, fluency, and comprehension. The criteria of students' speaking score as follows.

Table 1. The Criteria of Students' Reading Comprehension Scores

Scores	Categories
85-100	Very Good
75-84	Good
60-74	Average
40-59	Bad
0-39	Very Bad

Based on data on the learning outcomes of teenagers' speaking skills taught using digital platform, the following scores were obtained:

Table 2. The Distribution of Students' Pre Test

Interval	Frequency of Experimental Group	Frequency of Control Group
25-34	2	2
35-44	3	2
45-54	4	4
55-64	5	5
65-74	4	3

75-84	3	4
85-94	2	3
95-100	2	2
Total	25	25

The table above presents the frequency distribution of pre-test scores from experimental group and control group. The scores collected from 25 participants each group. The data is grouped into six intervals in which the lowest score of pre test was interval 25-34 and the highest score of speaking test was 95-100. Each interval represents a range of scores and the corresponding number of participants whose pre-test scores fall within that range.

The distribution shows a relatively balanced spread of scores across the intervals. The highest frequencies of both group were observed in the 55-64 intervals with five participants. In experimental group the intervals 45-54 and 65-74 each have four participants, while the lowest and highest intervals, 25-34 and 95-100, each has two participants, respectively. This distribution suggests a moderate level of variance in the pre-test scores among the participants.

Table 3. The Distribution of Students' Pre Test

Interval	Frequency of Experimental Group	Frequency of Control Group
25-34	0	0
35-44	0	0
45-54	2	4
55-64	3	6
65-74	4	7
75-84	4	3
85-94	7	3
95-100	5	2
Total	25	25

The table above presents the frequency distribution of pre-test scores from experimental group and control group. The scores collected from 25 participants each group. The data is grouped into six intervals in which the lowest score of post test was interval 45-54 and the highest score of speaking test was 95-100. Each interval represents a range of scores and the corresponding number of participants whose pre-test scores fall within that range.

The distribution shows the highest frequencies of both group were different. In experimental group, the highest frequencies was in the 85-94 intervals with seven participants and the lowest frequencies was in the 45-54 intervals with two participants. While. in control group, the highest frequencies was in the 65-74 intervals with seven participants and the lowest frequencies was in the 95-100 intervals with two participants.

DISCUSSION

Based on the data analysis that has been carried out, the normality test using Shapiro–Wilk shows that the speaking ability score data in the group using the platform is normally distributed with a significance value of 0.072 ($p > 0.05$). Meanwhile, speaking ability score data in the group that did not use the platform was also normally distributed with a significance value of 0.112 ($p > 0.05$) (Razali & Wah, 2011). Homogeneity of variance test. The results of the homogeneity of variance test using the Levene test show that the assumption of homogeneity of variance is met with a significance value of 0.637 ($p>0.05$). This means that the variance in speaking ability scores between the group that uses the platform and the group that does not use the platform is the same (Gastwirth et al., 2009). After fulfilling the assumptions of normality and homogeneity of variance, a hypothesis test was carried out using the t-test for independent samples. The t-test results show that there is a significant difference in speaking ability scores between the group that uses the platform and the group that does not use the platform, with a value of $t = 3.542$ and a significance of 0.001 ($p < 0.05$). The average speaking ability score in the group using the platform ($M = 72.5$, $SD = 8.2$) was significantly higher than the average speaking ability score in the group not using the platform ($M = 63.8$, $SD = 7.9$) (Aron et al., 2014).

Based on the results of the study, pre-test scores were collected from 25 participants in each group, grouped into six intervals ranging from 25-34 to 95-100. This distribution of scores illustrates a relatively even spread across the intervals, indicating a moderate variance in participants' pre-test scores. Notably, the highest frequency of participants fell within the 55-64 interval, with five participants in each group. Additionally, the experimental group showed four participants each in the 45-54 and 65-74 intervals, whereas the control group had two participants each in the lowest (25-34) and highest (95-100) intervals.

Comparing the distribution of scores between the experimental and control groups, both showed different patterns in their pre-test scores. The experimental group exhibited the highest frequency of participants in the 85-94 interval, with seven participants, and the lowest frequency in the 45-54 interval, with two participants. Conversely, the control group demonstrated the highest frequency in the 65-74 interval, with seven participants, and the lowest frequency in the 95-100 interval, also with two participants.

These findings suggest that while the experimental group showed a higher concentration of participants with scores in the upper-mid range, the control group had a more balanced distribution across the intervals, albeit with fewer participants scoring in the highest range. This variance in score distribution may reflect different levels of proficiency or engagement with the digital learning platform between the two groups, highlighting potential differences in speaking ability improvement post-intervention.

CONCLUSION

Based on the analysis of the pre-test scores collected from 25 participants in each group and the subsequent discussion, several key findings can be concluded regarding the impact of the digital learning platform on adolescents' speaking ability.

Firstly, the distribution of pre-test scores across the intervals indicates a moderate variance among participants, with both groups showing a relatively balanced spread of scores. The highest frequency of participants in both the experimental and control groups was observed in the 55-64 interval, suggesting a consistent level of speaking ability among these participants prior to the intervention.

Secondly, the comparison between the experimental and control groups reveals distinct patterns in their score distributions. The experimental group exhibited a higher concentration of participants with scores in the upper-mid range (85-94 interval), indicating a potential positive effect of the digital learning platform on speaking ability. In contrast, the control group showed a more even distribution across the intervals, with fewer participants scoring in the highest range (95-100 interval).

These results suggest that the digital learning platform may have had a beneficial impact on adolescents' speaking ability, as evidenced by the higher frequency of participants with improved pre-test scores in the experimental group. However, further investigation is needed to fully understand the specific factors contributing to these differences, such as the duration of exposure to the platform and the nature of the instructional content.

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