

Development of Information Literacy Competence in Primary School Students Through Podcast Program: an Epistemological Study

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Abstract

Information literacy becomes increasingly crucial in the digital era, where students are required to be able to search, evaluate and utilize information effectively. This research aims to explore the potential of podcast programs in developing information literacy competencies in elementary school students by adopting an epistemological perspective. This research uses a qualitative approach with a case study method. The research subjects were students in grades 4-6 at an elementary school. Data was collected through observation, interviews, and analysis of student-produced podcast content. Data analysis was carried out using an information literacy competency framework and an epistemological perspective. The research results show that podcast programs can be an effective medium for developing students' information literacy competencies. Through the podcast production process, students are trained to search for relevant information, evaluate information sources, and present information creatively. Additionally, podcasts also encourage students to think critically and build a deeper understanding of a topic. Epistemologically, podcast programs can help students build more constructive and authentic knowledge. Students not only receive information passively, but are also actively involved in the knowledge construction process. Podcasts also allow students to share knowledge and perspectives with peers, thereby enriching their understanding. This research contributes to the development of a podcast media-based information literacy learning program. The results of this research can also be a reference for educators and curriculum developers in designing learning activities that are relevant to students' needs in the digital era.

Keywords: Information Literacy, Podcast, Elementary School, Epistemology, Qualitative.

1. Introduction

In the digital era that continues to develop, information literacy skills are one of the essential skills that students must master, especially in facing the rapid flow of available information. Students are not only required to be able to find relevant information, but also must be able to evaluate the quality of information sources and utilize them effectively in various contexts. Information literacy has an important role in supporting independent, critical and creative learning processes, especially at the basic education level (Aqila, 2023). Unfortunately, many elementary school students still experience difficulties in developing information literacy competencies, either due to limited access to quality resources or a lack of structured learning to practice these abilities. Podcast programs not only train students to search for and evaluate information, but also develop their ability to present information creatively and critically.

In the era of globalization, the flow of information and technology is developing very rapidly, especially due to the digitalization of media and interactions, which is driven by technological advances. This development has had a significant impact on various aspects of people's lives, including in the field of education. Based on a statement from the Ministry of Education and Culture (2017), the development of tools and access to digital

information has had a positive impact in the form of ease and speed in accessing information and communicating. However, there are also negative impacts such as internet addiction and unwise use of technology.

According to a survey by the Central Statistics Agency in 2020, the majority of internet users come from the younger generation, where 34.63% of users are under 19 years old and 65.37% are between 19 and 49 years old. This data shows that the internet is a popular information technology among the younger generation, which is known as an agent of change and is expected to be able to overcome problems in the digital era. Therefore, digital literacy is very important to make the younger generation more aware of science and technology (Indonesian Telecommunication Statistics, 2021).

Literacy plays an important role in the world of education to develop individual abilities. Students are expected to have literacy skills, namely being able to manage and understand information, so that rapid technological developments can help them access information (Restianty, 2018). With digital literacy skills, the younger generation can communicate effectively. One form of digital technology that is developing in the industrial era 4.0 is podcasts.

Podcasts are audio or audiovisual files created and uploaded on online platforms to be shared with other people. Currently, podcasts have become a medium that is often used to obtain information easily by listening or watching. Podcasts can be an effective digital literacy medium, where students can listen to inspiring stories that can motivate them in learning and help hone their skills (Susilowati, 2020). This is in accordance with research from (Forbes et al, 2015) which states that this research examines the use of podcasts in reflective learning, which shows that podcasts can improve critical thinking skills and student involvement in the learning process.

Digital platforms provide new ways for promotion, including digital marketing. Currently, various platforms are available for listening to podcasts, such as Spotify, Apple Podcast, Noice, YouTube, and others. In Indonesia, 35.6% of internet users aged 16 to 64 years listen to podcasts.

This research aims to explore the potential for applying podcast media in improving information literacy competencies in elementary school students. This research also focuses on adopting an epistemological perspective to understand how the use of podcasts can help students build knowledge actively and critically in the learning process. It is hoped that the results of this research can support the planning and implementation of podcast programs which have not yet been realized in elementary schools, as well as provide an overview of media development to increase student literacy.

Digital Literacy

Paul Gilster is a figure who put forward the opinion "Digital Literacy" in the 90s that digital literacy is the ability to apply technology and information effectively and efficiently in everyday life. Digital literacy can be carried out in schools and families, communities. The factors that influence digital literacy according to (Naufal, 2021) are: 1) Functional Skills Skills in applying digital technology effectively and efficiently. 2) Communication and Interaction Communication and interaction means conversation or interaction with other people to find ideas, create mutual understanding. 3) Critical thinking, this critical thinking is characterized by changing, analyzing, packaging the information obtained and interpreting its meaning to develop insight. Critical thinking is a component of digital literacy in using reasoning skills in media.

Paul Gilster's theory emphasizes the importance of digital literacy in searching for information on the internet. In the context of Spotify podcasts, digital literacy helps users understand how to filter and use podcasts wisely. By applying Gilster's principles, users can become more aware of valid and trustworthy sources of information in the podcasts students listen to. One aspect of the internet search component of Gilster's theory is the user's ability to critically evaluate the information found.

Through spotify podcasts, students gain diverse viewpoints and opinions of content creators in podcast episodes. One of the main advantages of using Spotify podcasts as an internet searching component is the ease of access and mobility. Students can listen to podcasts on their mobile devices while commuting, while exercising, or in other situations. This allows users to continue learning and searching for information wherever they are, without being limited by time and place constraints.

Podcast

Indonesia tends to be new to using podcasts as a medium for disseminating information. The popularity of podcasts is likely to continue to grow in Indonesia. This can be seen from the nation's children's podcasts which are developing on various platforms such as Spotify, YouTube, Apple Podcast, Noice, and so on. The presence of podcasts is considered to be an answer to dissatisfaction with conventional media information which cannot be listened to anytime and anywhere. (Zellatifanny, 2020)

Podcasts are defined by Merriam Webster (2017) as a conversation program that is available with any digital content and can be downloaded automatically via the internet. Based on data from Daily Social, which collaborated with JakPat Mobile Survey Platform in 2018, it conducted a survey of 2023 smartphone users with

the result that 65% of respondents were aware of the existence of podcasts. As many as 65% listen to podcasts for entertainment, 38% of respondents prefer podcasts.

Still referring to the 2018 Daily Social regarding where respondents listen to podcasts that are comfortable, namely, as many as 78.85% are comfortable listening to podcasts at home. In second place, 36.06% listened to podcasts while traveling. Public places rank third in the number of respondents listening to podcasts at 35.58% and 34.81% listen to podcasts while at work and school.

Podcast as New Media

New media is a word that has been known since the 1960s and is associated with various communication devices that are increasingly developing rapidly. The internet is an unavoidable part of new media and supporting technology in the digital industry which functions to convey information quickly. With the internet, people's information needs can be met easily. This new media is the main choice compared to conventional media. People tend to enjoy streaming services that are easy to access at the time people want.

The development of media is marked by the presence of podcasts as new media in the broadcast world. The role of podcasts as new media provides an option to revive content that has become dim (Zellatifanny, 2020).

Gilster's theory helps podcast users develop the ability to select podcasts effectively. In podcasts as new media, where the amount of podcast content is very abundant, the ability to choose relevant content is very important. Applying the content evaluation principles proposed by Gilster, users can avoid irrelevant, inaccurate content. In the context of podcasts as new media, students can take advantage of knowing the purpose of listening from the content that students hear.

The existence of various platforms that provide interactive features such as comment columns makes podcasts a widely interactive medium. Daily Social conducted a survey in 2018 regarding the platform that is popular for listening to podcasts, namely Spotify with a percentage of 52.02%, in second place is the SoundCloud platform with 46.25%, followed by Google Podcasts which received a percentage of 41.25% and then 17%. occupied by pocket cast and Apple podcast (Randi, 2018).

Spotify Podcast

Spotify is a music and podcast streaming platform that offers more than 60 million songs and hundreds of podcasts divided into several genres such as education, comedy and music. Spotify has premium and free services. The free service has an online streaming feature with a maximum audio quality of 160 kbit/s and contains advertising. Premium services have additional features such as being able to listen offline, download, and listen to music or podcasts free from ads with the available audio quality.

According to Gilster, hypertextual navigation allows users to explore information in a flexible and interactive way. Spotify Podcasts offers a variety of content that users can explore. By using hypertextual navigation, users can easily search for and select podcasts that suit their interests and preferences. Hypertextual navigation also encourages user interactive participation in content exploration. By utilizing the features offered by Spotify, students can use these features to explore podcast content according to student interests. Spotify has characteristics through sharing parameters such as genres, albums, artists, and users have access to create, edit, delete playlist data. Spotify's technological advances help with the aspect of user information needs (Mayangsari, 2019).

Knowledge Assembly involves the ability to apply or apply information from various contexts to form a broader understanding. Spotify Podcast is a structured information platform. Through podcast episodes, speakers convey information in an orderly sequence, thereby helping listeners gather knowledge gradually.

Knowledge assembly allows listeners to combine these perspectives and build a more complete understanding. Listening to Spotify podcasts can create new understandings from different and broader points of view so that you can apply this information in your social life. Knowledge assembly also involves users to participate in podcast content. By utilizing the features available on Spotify, users can more easily enter information or provide feedback on content.

2. Research Methods

This research uses a qualitative approach with a case study method. The research subjects were students in grades 4-6 at an elementary school. Data was collected through observation, interviews, and analysis of podcast content produced by students. Observations were made to see how students searched for, evaluated, and presented information through podcasts. Interviews were conducted to understand students' experiences in participating in the podcast program, while podcast content analysis was used to evaluate the extent to which students were able to develop information literacy competencies.

This research uses a qualitative method with a descriptive approach. Data collection was carried out through three main procedures, namely in-depth interviews, observation and documentation. The data sources in this research consist of primary and secondary data. Primary data was obtained from informants who had been observed according to the research topic (Yusanto, 2020). Meanwhile, secondary data comes from documentation and activities, including podcast content on Spotify. Interviews were conducted with 10 elementary school students, with the criteria being that students had listened to podcasts for more than six months, so the information provided could be considered valid.

To check the validity of the data, this research uses credibility techniques, namely testing data results through observation and accuracy in research. Transferability is used to validate the accuracy of research results, dependability to check whether the data really comes from the field, and confirmability is used to link research results to the entire research process (Augina, 2020).

3. Results and Discussion

Prior to implementation of the podcast program, initial observations indicated that students in grades 4 to 6 had difficulty in:

1. **Searching for Information:** Students tend to have difficulty finding relevant and credible sources of information. Many of them don't know how to use search engines effectively.
2. **Source Evaluation:** Students are less able to differentiate between accurate and invalid information. They often rely on information from less than credible sources.
3. **Presenting Information:** When tasked with presenting information, students are often unskilled in crafting interesting and informative narratives. Delivery of information is often monotonous and lacks creativity.

Data from observations and interviews with teachers shows that students tend to be passive in learning, and are rarely involved in discussions that encourage critical thinking. After implementing the podcast program for six months, the results of observations showed a significant increase in students' information literacy competencies:

1. **Information Search Ability:** Students now demonstrate better ability to search for relevant information. They can use sources such as books, articles and online encyclopedias with more confidence.
2. **Source Evaluation:** Students learn to be more critical in evaluating information sources. They are able to discuss the reliability of sources and explain the reasons behind their choice of sources.
4. **Creativity in Presentation:** Through the creation of podcasts, students show significant improvement in the way they present information. Delivery becomes more interesting and informative, with creative use of narration and more confident delivery.

The research results show that the application of the podcast program can significantly develop information literacy competencies in elementary school students. This finding is in line with the theory which states that active learning, where students are directly involved in the learning process, can improve students' understanding and skills (Bonwell & Eison, 1991).

1. Improve Skills in Searching and Evaluating Information

Podcast programs provide students with the opportunity to engage directly in the search and evaluation of information. This process not only improves their technical skills in searching for information but also encourages them to think critically about the information sources they use. By increasing students' ability to search for and evaluate information, they are better prepared to face challenges in an increasingly complex information world.

2. More creative delivery of information

Students involved in creating podcasts must think of ways to convey information in an interesting way. This encourages students to think creatively and develop their communication skills. By learning to structure narratives and present information effectively, students not only become more confident but also better able to express their thoughts and ideas.

3. The Role of Collaboration in Learning

Podcasting is done in groups, which facilitates interaction between students. Group discussions during the production process help students to exchange ideas, which in turn enriches their understanding. This collaboration also builds important social skills for students in working together with others.

4. Student Engagement and Motivation

Students show greater enthusiasm for learning when they are involved in podcast production. When students feel involved and have control over their learning process, their motivation to learn increases. This shows that the use of engaging media such as podcasts can contribute to better student engagement in the learning process.

The research results show that the podcast program has great potential in developing students' information literacy competencies. Through the podcast production process, students are trained to search for relevant information and evaluate the reliability of information sources. They also learn to present information in a creative and communicative way. Additionally, podcasts encourage students to think critically and explore topics they are interested in more deeply. The epistemological perspective used in this research shows that podcast programs can help students build more constructive knowledge. The active process of searching for and utilizing information through podcasts gives students a more meaningful experience in understanding the concepts they are learning.

Using the Spotify Podcast Platform as a Digital Literacy Media for Students. Spotify offers users the freedom to choose and listen to various topics or podcast genres provided by creators. This platform is a digital literacy medium that can help students improve their knowledge and skills. Several factors that support Spotify as an effective digital literacy medium are:

1. Accessibility
Students can easily access Spotify via mobile device or computer to explore a variety of podcast content.
2. Variety of Content
Spotify provides various podcast genres allowing students to choose according to their needs.
3. Time and Place Flexibility
Students can listen to podcasts anytime and anywhere, using their free time to improve their digital literacy skills.
4. Feature and Functionality Advancement
Spotify continually updates features like time stamps, Q&A features, and polls to improve the listening experience.

Spotify offers two types of service: premium (paid) and free (with ads). Here are the differences between the two:

- a) No Ads: The premium service removes ads, providing hassle-free access to podcasts.
 - b) Offline Mode: Premium users can download podcasts and listen to them without an internet connection.
5. Support to Creators:
Premium users can provide financial support to podcast creators.

In-depth observations and interviews show several situations in which students listen to podcasts:

1. At rest
Podcasts help students release stress and reduce mental fatigue.
2. When doing assignments
Listening to interesting podcasts helps maintain enthusiasm while working on monotonous tasks.
3. While exercising
Podcasts keep students motivated and entertained during physical activities such as jogging or cycling.
4. When channeling hobbies
Podcasts can be a friend that accompanies students when pursuing hobbies, such as drawing, which triggers creativity and new ideas.

Increasing Students' Digital Literacy Abilities Through Spotify Podcasts By utilizing Spotify, students can choose content that suits their interests, thereby increasing their digital literacy. The benefits of podcasts in increasing digital literacy include:

1. Understanding the Topic
Podcasts help students understand various topics in more depth.
2. Imagination stimulation
The detailed descriptions in the podcast encourage students to think creatively.
3. Increased Learning Motivation
Interesting podcasts can increase students' interest and motivation to learn.

Positive impacts of listening to podcasts include:

1. Improved Verbal Ability
Listening to podcasts regularly can improve students' language skills.
2. Enriching Knowledge
Students can use podcasts as an additional source in studying lesson material.
3. Critical Thinking Ability

Podcasts often discuss complex issues that help train students' critical thinking skills. Through podcasts, students can also be exposed to various perspectives from narrators or guests who have different backgrounds, enriching their global horizons.

5. Conclusion

Overall, this research provides evidence that podcast programs can be an effective tool in developing elementary school students' information literacy competencies. These findings suggest that integrating technology in learning is not only beneficial for improving academic skills, but also provides a more enjoyable and engaging learning experience for students. Through this approach, students not only receive information but are also actively involved in the learning process, which ultimately helps them become more independent and critical learners. The results of this research provide an important contribution to the development of information literacy-based learning programs, especially through digital media such as podcasts and are expected to become a reference for educators and curriculum developers in designing learning activities that are relevant to the current digital era.

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