

# The Effectiveness of Using Podcast Media as an Interactive Learning Tool in 21st Century Schools in History Subjects

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**Abstract:** Podcasts have emerged as a promising learning tool in the 21st century educational context. The aim of this study to evaluate the effectiveness of using podcasts as an interactive learning tool in schools . using library research, namely a method of collecting data by understanding and studying theories from various literature related to the research . This data collection uses the method of searching for sources and constructing them from various sources, for example books, journals and research that has already been carried out. Data analysis shows that the use of podcasts can increase student engagement, academic achievement, and their perception of learning. The results of this research provide valuable insight into the potential and effectiveness of using podcasts in learning in 21st century schools, as well as providing a basis for the development of more innovative and technology-oriented learning strategies in the future .

**Keywords :** Podcast, Technology, Learning.

## 1. INTRODUCTION

Technological developments in recent years have increasingly grown rapidly in human life. This technological progress cannot be avoided, this is because technological development and scientific progress always go hand in hand (Jamun, 2018). The emergence of existing innovations provides benefits to human life, especially to make it easier to carry out human activities. Technological advances can change the way people live and influence various aspects of human life, especially in the field of education (Nur'aini dkk., 2023).

The development of science and technology is in line with the challenges and demands of 21st century education where digitalization of education demands students' skills in accordance with the 6 c concept. The 6 c concepts include *critical thinking, collaborative, communication, compassion, computational, and creativity* . One of the skills needed by 21st century teachers is the ability to develop learning content by adapting technology. Teachers must be able to present learning media in the latest, creative, innovative manner, by utilizing technology to increase learning achievement and motivation (Syawaluddin, 2024.).

One of the technological developments that offers sophisticated devices is *Podcasts* , as a broadcast medium that can not only be accessed or created by large entrepreneurs but can also be used by teachers in learning. (Budiman, 2023) *Podcast* has been widely used, especially in the entertainment industry in the form of audio, for example music, not only in the entertainment industry, but *Podcasts* have also often been used in the educational sector.

In the field of education, using *Podcasts* as a learning medium has several advantages, including *reusability* and *replaying* of teaching materials, availability and dependence

on one technology, because *Podcasts* can be used via various play media, for example MP3 players, MP4 players, *cellphones* or *smartphones* (Sampurna dkk., 2024.).

Learning that still uses written media is enough to make students bored or fed up (Kesumaningtyas dkk., 2022). The use of learning media that is still classical or less adapted to the characteristics of students will have an impact on students' level of understanding that is less than optimal in understanding the lesson. Therefore, it is necessary to develop learning media as an innovation that is adapted to the characteristics of teachers and students (Gebryna dkk., 2023).

So Podcast media is used as an innovative media that is used in various fields, one of which is as a learning medium. Podcast users can listen directly from their devices or laptops online or can be downloaded first so they can listen offline or without an internet connection.

According to Özkan, Podcasts are recordings in audio (MP3) or video (MP4) form that are uploaded to the internet and can be downloaded via computers, mobile devices, MP3/MP4 players and cameras and can be listened to at any time (Güler & Özkan, 2018). The results of research conducted by Qasim prove that Podcasts can improve students' understanding and listening skills better than usual classroom learning, especially when the material in Podcast is delivered using the teacher's voice so that it will provide immediacy and more interesting teaching (Al Qasim & Al Fadda, 2013). Thus, it is very possible for podcasts to be used as digital learning media in accordance with developments in the current digital era. These efforts will support the acceleration of digitalization of learning media in schools (Dewi, 2021).

The development of Podcast media certainly really supports the development of students in developing creativity, innovation and 21st century skills. Podcast media makes students more independent and responsible, think critically

and increase curiosity about the material being studied (Wijayanto dkk., 2020).

This research will contain the potential and effectiveness of using *Podcast media* in learning in 21st century schools. The results of this research can be a basis for developing more innovative learning strategies using technology in the future.

## 2. METHOD

The method in this article uses study library (library research) is a method with collecting data by understanding and study theories from various literature related to the research. There are four stages of literature study in research namely preparing the equipment necessary, prepare a working bibliography, organizing time and reading or record research materials (Zed, 2014). This data collection uses the method of searching for sources and constructing them from various sources, for example books, journals and research that has already been carried out. Library materials obtained from various references are analyzed critically and must be in-depth in order to support the propositions and ideas (Nina Adlini et al., 2022).

## 3. LITERATURE REVIEW

### 3.1 Previous Research

Previous research aimed to obtain comparison and reference material. Apart from that, to avoid assuming similarities with this research, in this literature review the researcher includes the results of previous research as follows:

1. Tzill Sharon Research Results (2023)

Tzill Sharon's research (2023), entitled "*Peeling the pod: towards a research agenda for podcast studies*". This research is research that uses the library research method, namely a method of collecting data by understanding and studying theories from various literature related to podcasts.

Based on this research, it can be concluded that *Podcasts* in a learning context can be a valuable learning resource in various fields of study. *Podcasts* can be used as a tool to deepen understanding of certain topics, broaden horizons, and enrich the learning experience. Apart from that, podcasts can also be a means to hear views from various experts and practitioners in various fields, thereby enriching learning perspectives.

Thus, the conclusion regarding learning from podcast studies is that podcasting can be a valuable and innovative learning resource in various fields of study, and can enrich the learning experience through diverse approaches and broad perspectives.

2. Catherine Sutton-Brady's Research Results (2009)

Catherine Sutton-Brady's research (2009), entitled "*The value of using short-format podcasts to enhance learning and teaching*". This research uses a *mixed method* which includes surveys, focus

groups, and interviews. The aim of this research is to explore the use of *podcast media* in improving learning and teaching.

This research shows that the use of *podcasts* has significance in improving learning, the majority of students feel that *podcasts* can support or enhance their learning and appreciate the flexibility of this media in supporting learning. Not only that, *podcasts* are also an innovation that can help students who have difficulty understanding the learning concepts being taught, so they can be listened to repeatedly.

3. Thomas Goldman Research Results, (2018)

Thomas Goldman's research (2018), entitled "*The Impact of Podcasts in Education*". This research uses a mixed methods method with several studies using experimental tests to compare groups that received *podcasts* with those that only received text instructions. The aim of this research is to provide evidence from various researchers and first-hand experiences that precisely demonstrate the positive impact of *podcasts* on learning.

This research shows that the use of *podcasts* in learning has a significant positive impact. *Podcasts* provide innovative teaching resources for teachers in designing new activities inside and outside the classroom, and can increase the readiness and preparation of prospective teachers. This shows that podcasts are an effective learning tool in the educational environment and can improve the quality of education in this digital era.

4. Yuni Maryuni's Research Results, (2023)

Yuni Maryuni's research (2023), entitled "*The Effect of STEM-based History Podcast Media on Literacy in the Digital Era through ICT Courses for History Education Students*". This research is research that uses quantitative semi-exploratory techniques using a *Quasi-Experimental Nonequivalent Control Group design* with two classes, namely the control class and the experimental class. The purpose of this research is to determine the effect of using STEM-based *podcasts* on students' historical literacy abilities.

This research shows that podcasts are considered an effective learning option because they allow students to understand the material more effectively and quickly. Thus, the use of podcasts in learning can have a positive impact on students' historical literacy skills, especially in the current digital era.

5. Meanwhile, the current research is being carried out by researchers, as below:

Research entitled, "*Effectiveness of Using Podcast Media as an Interactive Learning Tool in 21st Century Schools*". This research aims to evaluate the effectiveness of using podcasts as an interactive learning tool in schools.

This research was carried out using the library research method, namely a method of collecting data by understanding and studying theories from various literature related to the research. Data collection in this research uses the method of searching for sources and constructing them from various sources, for example books, journals and research that has already been carried out.

#### 4. RESULTS AND DISCUSSION

##### A. The Role of Podcast Media in History Learning

Podcasts are an effective learning medium for integrating innovative approaches in the history learning process. First, podcasts allow teachers to present historical material in a more interesting and in-depth way. The use of audio formats allows for the introduction of historical events and important characters with life-giving narration, creating a more immersive experience for students. Teachers can use sound effects, music, and creative presentation styles to increase students' interest and understanding of historical context (Purnomo dkk., 2023).

When using podcast media, students can listen to podcasts anytime and anywhere, thereby increasing flexibility and facilitating independent learning. Podcasts have actually been around since 2005, but in 2007 they only started to be used and their momentum has grown rapidly from 2011 until now (Purnomo dkk., 2023).

Podcast media is a learning media that is actually widely used in language learning in many countries. The use of podcast media for students functions to overcome the learner's passive attitude, stimulate learning motivation, and enable students to learn independently according to their visual and auditory talents and abilities. For teachers, podcast media is an alternative media that can be used in the teaching process to make the teaching process enjoyable. (Purnomo dkk., 2023).

According to Khaeruddin, (2023) There are two main things that strengthen the importance of podcasts in learning, especially in history learning, namely:

1. Students will get the opportunity or opportunity to search for various information needs.
2. Students can disseminate historical information in a more interesting way.

Educators and students can combine these two things to provide space for many people to learn.

Because history subjects are often known as boring subjects, this makes students lazy about studying history. One of the influencing factors is that the subject matter is theoretical in nature and teachers tend to use the lecture method, so this requires educators to be able to collaborate creativity in technology with teaching media. Using podcast

media can be an alternative that can be used both inside and outside the classroom (Khaeruddin, 2023).

Podcast learning media is interesting to use in history learning, based on research conducted by Asmi et al regarding the effectiveness of using podcast media in providing students with an understanding of the material. Several student responses and suggestions also said that podcast media was easy and very helpful, so it could be concluded that podcast media was effective in helping learning, especially on historical material (Asmi dkk, 2019).

From the results of research by Nurivana et al, regarding the influence of using podcast media on students' historical literacy, it has been proven that podcasts can be used as an effective learning media to improve students' historical literacy abilities. Where in historical literacy students' abilities are not only measured by how well students read or discuss historical facts, but are measured based on 6 indicators, namely knowledge of historical content, conceptual understanding, application of historical methods, historical awareness, understanding and mastery of historical language (Maposa dkk, 2009). Using podcast media can help students use interactive media in history learning so that they are not only focused on the textual material contained in students' textbooks (Nurivana dkk, 2022).

##### B. Strategy for Using Podcast Media in History Learning

Podcasts are electronic-based learning media where the learning process uses electronic devices such as MP3 players, iPods, cellphones, computers and other music player media. Audio podcasts can be used as an effective and efficient learning resource, podcasts are one way to expand the reach of program distribution in addition to socialization. Here are several reasons why audio podcasts can be used as learning media:

1. Review and revise content that can be used as a reference and can be played back anytime and anywhere.
2. Substitute when not attending class.
3. Supporting media for those who experience difficulties in reading or other learning difficulties.
4. Can be distributed to a wider audience (can be shared on the internet)
5. Podcasts that have been listened to can be automatically deleted.
6. No ads appear, like on YouTube (Purnomo dkk., 2023).

In the world of education, using podcasts as an E-learning medium can provide several benefits. From a student's perspective, podcasts can help them review material in order to better prepare for exams.

The advantages of podcasts in general in teaching and learning activities are influenced by several factors which include:

1. *Reusability* and *replaying* of teaching materials.
2. Availability and independence from one technology, because podcasts can be run on various media such as MP3 players, MP4 players, cellphones, etc.
3. There are 5 advantages of using podcast media, namely:
  - 1) *Meaning* , podcasts are not just audio or visual files but have information and knowledge in them that allows students to learn from them.
  - 2) The use of podcasts helps students in learning.
  - 3) *Easy of use* , podcasts are easy to use because you only need to subscribe and download the teaching material.
  - 4) *Locatability*, podcasts can be used anywhere according to students' wishes.
  - 5) *Accessibility*, information about teaching materials in podcasts is easy to access and download (Kurniawan, 2023).

The use of podcast media in history learning must of course be accompanied by strategies so that the learning process is more focused. Podcasts in classroom learning are very good for learning to listen, but teaching staff must be able to adapt them to the teaching material and learning abilities of their students (Khaeruddin, 2023). In using podcasts as a learning medium, there are several strategies that teachers can apply, including:

- 1) Podcast media in learning will be very good for short duration teaching material so that students can understand the learning well.
- 2) Podcast media in history learning should be varied, not with the same material.
- 3) Educators who will use podcast media must first carry out exercises and of course prepare each concept for fun teaching material.
- 4) Educators in using podcast media in learning must be able to fully master the material to be taught (Sari dkk., 2022).

When using podcasts in the world of education, there are two main things that educators must pay attention to before using them, namely the creator and of course also the listener or consumer of podcast content. In creating podcast teaching media, it can be done using the following stages:

- 1) Creators create creativity in the form of audio material or in the form of recorded explanations of teaching material which of course is not monotonous but in a way that can attract listeners. For this reason,

creators must of course have a set of audio recording tools.

- 2) Test the results of the podcast recording and repeat it if there are things that are deemed not optimal. After that, save it which can be done using an MP3 file.
- 3) After the recording is complete, the creator, in this case of course, the teacher can upload the podcast.
- 4) After uploading, the podcast can be used and published to students and used as teaching media.

Learning planning using podcast technology as a teaching medium will be equipped with demonstration learning methods, where students can watch the lesson material directly. This is clearly in line with the characteristics of the demonstration learning method where students tend to prefer an auditory learning style which can be digested or understood through presenting material in the form of sounds and speech. Students who are taught in an auditory style will use their hearing to hear and remember all the information conveyed.

### C. Obstacles to Using Podcast Media in History Learning

In history learning, educators must be able to show various things that could happen when using podcasts. This means that the task of an educator is very important, because they are required to be able to provide direction and be able to provide podcasts that have been designed as creative teaching media (Suriani dkk., 2021).

Of course, not all history subjects in each material can be taught using podcast media, so history teachers must be able to have the creativity to develop appropriate podcast media, and teaching methods that are in line with the media used. There are several obstacles to using podcasts in teaching materials that educators can face. So some schools are unable to implement podcast media in learning, for example:

- 1) Use of podcasting facilities. Schools are not yet fully equipped with facilities for using podcast media, so it becomes an obstacle for teachers to be able to produce perfect audio podcasts.
- 2) Ability of each student. Not all students can understand teaching material that comes from audio, because students have their own characteristics in learning. Therefore, teaching staff must be able to use and adapt to the conditions in the classroom.
- 3) Creativity of teaching staff. Not all teachers are able to apply podcast media in learning, this is influenced by a lack of understanding and skills in compiling podcast media.
- 4) Not all teaching materials can be supported by



using podcast media. Teaching materials certainly have their own media that can support success in achieving learning objectives (Khaeruddin, 2023).

Based on research conducted by Perayani & Rasna (2022). Using podcast media in learning, sometimes there are still many things that teachers have to consider. There are also many things that must be considered where teaching staff must remain organized according to learning guidelines. Sometimes the time allocation that has been determined cannot be maximized properly due to obstacles that may occur during the learning process. Therefore, teachers will face new challenges in allocating students' learning time. Next, teachers are required to be able to complete a learning outcomes evaluation to determine the learning outcomes of each student (Perayani dkk, 2022).

The use of vocabulary in audio podcasts can be an obstacle for students to understand teaching material through podcasts. Students must be able to be invited to listen and respond appropriately, of course focusing on what they hear and see. This can also be considered a challenge for teaching staff to be able to condition the situation and create an interesting and enjoyable classroom atmosphere (Rukmana dkk, 2022.)

## 5. CONCLUSION

The results of this research show that the use of podcast media as an interactive learning tool has various significant benefits in the context of 21st century education. Improved learning outcomes, student engagement and motivation, and development of critical thinking skills are some of the main findings that support the effectiveness of podcasts in learning. Based on this research, educational institutions should consider integrating podcast media in their curriculum. Podcasts not only offer a new way to access information but can also improve the quality of learning through flexibility and student engagement. Additionally, podcasts can be an effective tool for developing essential critical thinking skills for students in the 21st century.

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