# **CHAPTER I**

# **INTRODUCTION**

## **Background of the Research**

In the 21st century, digital resources have become significant for the world of education because there are global demands that demand the world of education to always adapt technological developments to efforts to improve the quality of education, especially adjusting its use for the world of education, especially in the learning process. the research from to Merkel (2014), argues that the 21st century is an amalgamation of digital technology and the internet with conventional industry. It can be said that the revolution in the 21st century is digital-based. Likewise, various kinds of digital technologies should be applied in classroom teaching education. In the world of education, it is necessary to plan innovative and creative learning techniques using technology-based learning (Kristiawan, 2014). In essence, education and educational institutions must adapt to the new world so that education can surf above the shifting waves and not sink under them (Sumardianta, 2018). According to the Organization for Economic Cooperation and Development (OECD), technical advances have resulted in new learning tools. These sources are distinguished by their digitization (Camilleri, 2016). To perform various activities, digital refers to the combination of hardware (processing, memory, input, and communication) and software (operating system and application programs). As a result, digital learning resources can be considered as a collection of hardware and software components that can overcome learning difficulties and facilitate learning activities (Christina, 2016).

Digital resources for learning can be described as technology-based multimedia content that is explicitly designed for educational and training purposes. Likewise, the research from Churchill (2017), digital resources are designed based on how people learn to use these media in their activities and how these resources can be designed and developed or managed for specific purposes. Likewise, the research from Benhadj, Messaoudi & Nfissi (2019), digital resources make everything easy and effective and help teachers manage their classes efficiently. Ahmad (2018) states that digital resources (technology) allow teachers to customize classroom activities, enhancing language learning. There have been several previous studies using apps to improve speaking skills. According to Susanti (2017), the application can be complementary material for students to practice speaking inside and outside school.

In the era of the 21st century, the ability to speak English plays an important role in society that functions as a communication tool. Mastery of speaking skills in English is a priority for many second or foreign-language learners. This means that speaking is the main essential skill for telling and sharing ideas in communication. the research from Aggryadi (2014), speaking is an activity that a person uses to communicate with others. It happens everywhere and has become part of our daily activities. When a person speaks, he interacts and uses language to express his ideas, feelings, and thoughts. Meanwhile, the research from Garg & Gautam (2015), speaking is a useful skill for those who understand it because it will be easier to get a job. They can also communicate and interact with other people around the world while they are traveling. Quoted in Rusmawan (2019) and Fachrurrazy (2011) stated that speaking is a skill to speak English fluently and ‘ effectively supports students' success in vocational high schools and future careers.

As a learning medium, digital materials have advantages and disadvantages. The term "digital resources" refers to systems that enable students to learn more widely and in a variety of ways. Teachers and students are involved through technology and internet networks (Munir, 2017). Various instructional resources and practice questions are now available online through websites and apps. As a result, the implementation of digital learning requires the use of technical gadgets and a strong internet network. The utilization of digital resources in learning media can improve the quality of Sandman (2011) supports this by stating that the use of various learning media can overcome the passive attitude of students because learning media play a role in increasing student enthusiasm for learning. Because it is an effective and efficient means of delivering knowledge, the adoption of information technology-based novel learning media has significant potential to improve the quality of learning (Iman & Sunaryantiningsih, 2017). The research from Hutahaean et al., (2019), the benefits include students being able to access multimedia-based content in the form of audio, video, photos, or animation. Increase enthusiasm and enthusiasm for student learning. Students can engage with the media based on feedback on the activities they complete to improve their abilities, students are free to express themselves, especially shy students because they are more comfortable when they have their place and time to use it, which can be accessed anywhere and anytime.

However, as a learning medium, digital resources show some the lack. one of them according to the research from Rasyidah (2017), the lack of connection between lecturers and students, or even among students themselves, can slow down value creation in the teaching and learning process. In addition, students who do not have a strong level of learning drive are more likely to fail. There are some limitations, including the lack of internet access in all locations. Meanwhile, in the research from Hutahaean et al., (2019), the shortcomings are in the form of learning that takes a long time for novice students who are still unfamiliar with digital gadgets. Because communication is done online, other learning modalities that require face-to-face conversation are minimized, and possible technical problems because a lot of software is required to operate it, and computer or smartphone capabilities affect the speed of accessing efficiency.

There have been several studies conducted on similar subjects, such as research conducted by Rositasari (2017) who researched the use of digital storytelling to improve students' speaking skills in retelling stories. Ihfal (2016) conducted a study on the effect of applying podcasts as a medium on students' speaking achievement. Siti (2019) conducted research using digital storytelling to improve students' listening skills (Pre-experimental Research in Class VIII MTs Syekh Yusuf Sungguminasa Academic Year 2018/2019). Budiastomo (2020) conducted research on An Educational Game for the introduction of the solar system. Amanda (2020) conducted research on the Development of Android-Based Mobile Learning Media on Materials for the Class VII Student Association of MTS NU Hasyim Asy'ari 03 Kudus for the 2020/2021 academic year. Hermawati (2020) researched the effectiveness of using digital storytelling in teaching speaking at SMA Muhammadiyah 9 Makassar. Safitri, (2021). Student perceptions of the use of social media for learning English (Case Study on Class XI Students of SMA Al-Hasra Academic Year 2020/2021).

Therefore, digital speaking resources are indispensable for education in today's 21st century. It can be easier and more practical as an alternative to learning English. The alternative is to build digital learning as a medium to practice English conversation. As is known, in the 21st century, technology is very sophisticated. This change brings a series of influences and challenges that must be addressed wisely in the world of education. the research from Churchill (2017), digital resources alone aren’t enough to achieve overall learning outcomes. In addition, when developing instructional designs, teachers need to consider activities, support, and evaluation. The most effective digital resources for learning are designed to be used as mediating tools in learning activities. However, Garcia & Silva (2018) show that students are more valuable when using technology for academic activities than in university information systems, mainly because of the ease of use for the first time.

In this study, research has been conducted on problems that occur in learning using website-based digital resources, such as errors in website features, difficulties in submitting assignments through learning websites, learning media that are difficult to access, network difficulties, etc. because website-based digital resources are still very rarely found as English learning media, most students are not used to using digital resources for learning. One of the reasons is that network conditions and digital resources redeveloped according to student needs. therefore researchers conduct research by collecting data, researchers analyze the data. The steps in analyzing the data the researcher collect data through interviews and documentation. Then, the researcher selects, identifies, and focuses data on the formulation of the research problem. After collecting the data, the researcher displays the data in good sentences. After displaying the data, conclusions are drawn. In addition, to get the validity of the data, researchers conducted interviews supported by documentation. This documentation is data or information that contains digital resources for teaching English skills to tenth grade vocational students.

## **Identification of the issue/ phenomenon**

Problem identification is important to describe the problem to be investigated. To find out what kind of digital resources students need in English speaking skills. Many problems occur in student learning by using website-based digital resources, such as errors on the website, difficulty sending assignments through learning websites, learning media that is difficult to access, etc. website-based digital resources are still very rarely found in English-speaking digital learning resources. Most students are not used to using digital resources for learning. One of the reasons is due to the condition of the network and digital resources will be redeveloped to some of the needs of students.

## **Limitation and focus of the Research**

In line with problem identification, the focus of the research is to develop digital-based learning resources following the needs of students at vocational high schools and create website-based digital resources. The decision was taken by considering the situation of students in digital learning. Therefore, the targets of this research were tenth-grade students and two English teachers. this research uses the interview method, which the researcher to find out what are the needs of tenth-grade students in learning English speaking digitally (website).

## **Questions of the Research**

Based on the description above, the problem of this research was formulated into the following question:

1. What are students need in learning English speaking skills using digital resources in vocational schools?
2. How to develop speaking digital resources for tenth-grade vocational high schools students?

## **Aims of the Research**

Based on the research statement, this study aims to determine:

1. To explain the students’ need in learning speaking skills to use digital resources in vocational schools.
2. To explain the developing speaking digital resources in vocational schools.

## **Significances of the Research**

The results of this study are expected to be used theoretically and practically:

1. Theoretical significance
   1. teacher

This media can be used by teachers to develop teaching techniques. Hopefully, it can inspire, teachers to make some variations in teaching English so that students don't feel bored with the lesson.

* 1. Student

Vocational high school students in City Cirebon’s tenth grade are encouraged to be more interested and pay more attention to learning English, especially speaking. They must get a new perspective on learning English, especially in terms of pronunciation when speaking with this medium. Nor should they be bored while learning English or be afraid or nervous when speaking in public.

1. The author thinks that this Thesis can be useful for readers, especially the English department at IAIN Syekh Nurjati Cirebon, in the future when teaching speaking English in class.
2. Practical significances
3. Teachers

Vocational teachers in Cirebon City in particular can take advantage of digital resources to help students learn English and can help students improve their pronunciation. It is thought that this will increase students' interest in the teacher and make the content more absorbable.

1. Students

For the 2022/2023 academic year, students, especially vocational high schools in Cirebon City, are expected to be able to practice learning English pronunciation independently by utilizing video media. They can study on their own while watching English films or videos at home, just like at school. It is hoped that it can help students overcome their difficulties in learning English and become more confident and not afraid to speak English.

## **Theoretical Foundation**

### **Digital Resources**

#### Definition of Digital Resources

Digital resources for learning can be defined as technology-based multimedia as a means of learning activities specifically designed for educational purposes, as said by ( Bullock, 2015; Akyuz & Yavuz, 2015; Nunez, & Looy, 2015; Churchill, 2017; Hartanto & Nurharjanti, 2018; Santoso & Santosa, 2020). In contrastMunirir (2017) says that digital resources in learning are student learning systems to be broader and more diverse, teachers and students can communicate interactively by utilizing technology and the internet. However, Dukare (2020) defines digital resources as a resource that requires access to computers or any electronic product that provides data sets, such as multimedia, electronic journals, and so forth. Meanwhile, Costley (2014) the use of digital resources in learning can provide benefits that can increase student motivation, with a variety of learning materials and exercise questions also carried out online based on a website or application, which requires the support of technological devices and stable internet networks. However, According to Jewitt (2011), digital resources may give students a variety of chances for active learning outside of the classroom, as well as independent spaces such as blogs and forums, access to games with educational advantages, and a safer area for formative evaluation and feedback. So digital resources are learning facilities designed for educational purposes that can be accessed using the internet and can motivate students in learning because they are creatively designed.

#### Characteristics of Digital Resources

There are several important characteristics of digital resources, the research (Salaam, 2008; Khasanah, 2016; Jotangia, 2020) as follows:

1. Making use of electronic technology.
2. Use self-study materials and keep them on a computer so that students may access them whenever and from wherever they are.
3. Take advantage of the benefits of computers (digital media and computer networks).
4. You may always access the learning schedule, curriculum, learning progress results, and administrative matters related to education online.
5. The data is digital or in a format that can be read by a computer.
6. Digital technology is used for processing, presentation, storage, display, and communication.
7. Provides a range of search and browsing options and opportunities including online learning.
8. It is simple to move electronic resources from one location to another.
9. E-resources speed up searches and save time.
10. It offers the ability to conduct many searches simultaneously.

#### Types of Digital Resources

Depending on their features, digital resources are split into two categories: online digital resources and other electronic resources. The following is by Dukare (2020), Jotangia (2020), and LISBDNET (2022):

1. Online digital resources.

Online digital resources, can include online resources, that provide information to their users via the Internet. Online resources are considered virtual resources. Users can use the information in an intangible way. Some examples of online resources are as follows:

* E-Book

Digital text files that have been transformed and published as electronic books are known as e-books. Computer systems, e-book readers, and other digital gasket devices with e-book software applications may display and read it.

* E-journal (full text and bibliographic database)

Electronic journals featuring full-text journal articles can be published online or on DVD. A web platform makes it possible to access online journals. It includes a highly user-friendly search feature. Some open-access journals can be accessed for nothing or at a cost. E-journals are designed to offer a unique type of electronic publication that includes elements required for academic study and research.

* Online database

An online database is a structured set of data saved on a computer that can be automatically searched. As user demand grows, there are more and more e-databases with bibliographies and full-text sources accessible, and new ones are routinely added. Some of these databases are web-enabled, while others are network solutions.

* Website

A website is a document-related system that serves as a platform for the online presentation of text, pictures, video, and other content.

* Online reference sources

Reference sources are digital reproductions of hard-copy reference materials often found in libraries. Examples include dictionaries, encyclopedias, citation analysis guidelines, atlases, maps, and bibliographic sources.

* E-thesis/dissertation

ETDs are short for electronic theses and dissertations. Digital versions of traditional theses and dissertations are known as ETDs. ETDs are tools for graduate students who are co-writing a thesis and dissertation and publishing it online.

* Blog or weblog

An online diary in which a person, group, or business publishes a record of their actions, opinions, or views is known as a blog, weblog, or complete weblog. Some blogs serve primarily as news aggregators, aggregating information from numerous internet sources and adding succinct remarks and connections to other websites.

There are several types of digital resources, but in this research, the researcher chose website-based digital resources to be developed because the website has several document-related systems that can function as learning platforms that can be used for online presentations in the form of text, images, video, and other content.

1. Other digital resources.

Offline resources kept in libraries as electronic materials might be considered another kind of digital resource. It is reachable by users and usable. The following are some instances of resources:

* CD ROM

Large volumes of material are stored on CD-ROMs (Compact Disc, Read-only Memory), which are the library's main electronic resource and come with simple search tools.

* Diskette

diskette Is a storage medium shaped like an envelope and can store data between 700 KB to 1.44 MB.

* Other portable computer databases.

#### Criteria of Digital Resources

Criteria for good digital resources for learning, there are several criteria the research from Asyhar (2012) & Allison (2019), identifying criteria for good digital resources as follows:

1. The color combinations and graphic presentation must be appealing. Layout, typefaces, colors, and page length all contribute to appearance.
2. The language must be simple to comprehend.
3. Interactive content is offered (allows student participation),
4. Take into account the requirement to accommodate different learning styles, cultural aspects of the target audience, the characteristics of the students, the materials, and the desired outcomes.
5. Can be utilized as a substitute for traditional learning aids, can be used to create a virtual learning environment, and consists of ongoing, uninterrupted learning activities rather than sporadic, fragmented learning activities.
6. Usability, often known as ease of use, refers to "how well a website may be utilized to achieve a certain goal." Navigation, efficacy, and efficiency are required (Alison 2019).
7. Information about the website's readability, thoroughness, correctness, relevancy, and timeliness
8. Website functionality in terms of links, speed, security, and browser and device compatibility.
9. Web design that incorporates elements like media utilization, search engine functionality, assistance resources, website legitimacy, sitemaps, and upkeep.
10. Interactivity with alternatives for suggestions, comments, email, forums, frequently asked questions, customer support, and background music.
11. Loyalty, which reveals a website's first impression.

#### Aspects of Applying Digital Resources in Learning

Martinovic & Zhang (2012) assert that a variety of factors, including technological knowledge (TK), pedagogical knowledge (PK), and content knowledge (CK), which are all interrelated to form a comprehensive digital competence, need to be taken into account when using digital resources for learning. Meanwhile, Wahyudin (2022) asserts that, in general, several elements need to be adopted through education to execute digital transformation. The most crucial factor is vision, which calls for an educational institution to be aware of a paradigm change in the way it delivers educational services to have a clear understanding of the best teaching model in light of generational and technological trends. Naturally, supporting components are needed to accomplish the visual aspect. Culture is one of the crucial supporting factors. The application of digital culture is mainly about altering the attitude (mindset) to adapt to digital advances, therefore in this sense, it is a necessity for digital transformation. Technology is also a fundamental aspect because digital transformation is present because of supporting technology. The next aspect is planning or planning, where an institution must have a clear road map for implementing digital transformation.

#### Digital resources development stage

There are several stages of development for the successful use of digital resources, as stated by Plomp (2009) recognizes three different stages in the development of successful use of digital resources in schools:

1. Teachers supplement conventional teaching techniques such as exercises and practices, text-based lessons, whole-group discussions, and desk work with digital tools and resources.
2. Teachers develop their technical skills and confidence as they implement increasingly avant-garde teaching strategies including team teaching, interdisciplinary project-based learning, individual-pace learning; and
3. Teachers go on to the imaginative stage, where they try new things and adjust how they employ technology to encourage active creative learning.

#### Advantages and Disadvantages of digital resources

Digital resources have advantages and disadvantages, such as According to Duare (2020) & Jotangia (2020), digital resources have advantages and disadvantages, as follows:

Advantages of Digital Resources

Digital resources provide various advantages for users, writers, editors, publishers, and archivists in addition to booksellers. The Advantages are:

1. Compared to printed texts, production, and publication expenditures are less expensive.
2. Data can always be saved and updated on electronic media and is simple to change regularly.
3. Digital resources are regarded as the Internet's quickest form of communication. Users may do their desired information search at any time and from any location. E-resources, therefore, save both users’ and libraries’ time.
4. E-resources may be accessed from any network and enable flexibility, rapid access, retrieval, downloading, and printing of pertinent concerns.
5. Networked goods provide simultaneous access to many users at various points in time (24 hours a day, 7 days a week), as well as remote access from any location at any time.
6. E-resources might have a lot of information, but they also often include mixed media, such as animations, videos, music, and photographs, which cannot be replicated in print.
7. Takes up less real estate and is simple to convert into several languages.
8. The issue of missing issues is simple to fix.
9. E-resources may be accessed anywhere, at any time, and they make it easier for people to share knowledge and receive the most recent information at a cheaper cost.
10. Local network and multiple access made simple.

The disadvantage of Digital Resources

Some of the drawbacks of using electronic resources are as follows:

1. Requires expensive hardware and software installation expenses and initial infrastructure to access electronic resources.
2. To handle e-resources, qualified individuals are needed.
3. It necessitates copyright concerns.
4. Annual renewal of the membership for regular access.
5. Online electronic resources need a high Internet speed.
6. Requires LIS professionals and users to complete training to manage and use electronic resources.
7. The incompatibility of several editors
8. Problems with hardware and software compatibility.

#### Issues And Challenges Of Digital Resources

There are several challenges in offering a high level of service to users. Some of the challenges faced by e-resources management, according to Jotangia (2020), are as follows:

1. Shortage of library funds

For sustainable infrastructure and services, ICT calls for increased financing. The majority of libraries lack the funding to purchase online resources, which prevents users from quickly getting the information they require. Therefore, a noted obstacle to the

introduction of digital libraries is the lack of funding for their setup and maintenance.

1. Technical infrastructure

Infrastructure, such as software, hardware, internet connectivity, and other physical equipment, is required in a digital information service system to offer simpler, quicker, and more thorough access to information. Implementing digital libraries has difficulties due to a lack of reliable technical network infrastructure, including servers, physical cables, and wireless access points.

1. Lack of professional skills

Academic library personnel lacks the managerial and technical abilities necessary to administer e-resources. Therefore, a noted obstacle to the introduction of digital libraries is the lack of qualified specialists who can create or manage them.

1. Online/virtual crimes and security

Cybercrimes and web crimes are now frequent threats on the Internet. Mandatory Virus Proof measures should be applied while obtaining electronic data from any other system to overcome this problem. The database can be altered using anti-hacker measures to protect the system against infections. The network system has to be customized with a unique login and password scheme. Installing database security software or firewall technology to safeguard the database is crucial to resolving the aforementioned database security challenges and problems.

1. Privacy/confidentiality

Accessing information online presents still another problem: maintaining secrecy and privacy. There are complex challenges between privacy and the right to information because it is difficult to control software piracy, copying, or downloading all of the content of any electronic resource at once, even if the right to access information and the right to withhold or prohibit access is important. Securing databases on the Internet and Intranets also involves protecting one network from another to maintain information confidentiality.

1. Copyright issues

When delivering electronic/digital information services, academic library workers now confront significant challenges from software piracy and widespread plagiarism. Information retrieval costs and timeliness are taken into account as well. Librarians must consent to specific limitations on photocopying or disseminating electronic resources when negotiating access with publishers. All users must be made aware of copyright concerns by libraries.

1. Collection of e-resources

Another fundamental principle of librarianship is gathering resources and making them accessible to all potential users in the future. It is difficult for librarians to help define practical collection development plans that include collecting and making electronic materials accessible to both existing and potential users. Libraries may now share their resources with other organizations both locally and internationally thanks to digital collections. What versions will be offered, how much access will cost, and how much access will be allowed are all decisions made by the publisher.

1. Organizational structure

Another significant factor affecting how the work of librarians will change in the knowledge society is the way that technology has dismantled inflexible hierarchical organizational structures. The form and organization of digital libraries, as well as the division of work within them, are very much up for experimentation, and they are far from mimicking the organization of traditional libraries.

### **SPEAKING**

#### Definition of speaking skill

There are several definitions of speaking skills according to experts. Understanding of speaking skills conducted by Darmuki & Hidayati (2019), Aggryadi (2014), and Amrullah (2015), speaking ability is an important skill for students to communicate, share, and e knowledge, ideas/thoughts, and share messages or information with students. Meanwhile, conducted to Boonkit (2010) and Genc & Bada (2010), speaking is one of the four macro skills that must be developed as an effective means of speaking. communication is good in the context of first and second language learning. and every human being needs language to communicate with others. They can express their opinions and feelings through language. They also share thoughts and ideas through language itself. But Speaking is a skill that must produce sentences or speech in spoken mode. Different from other skills are more difficult than others because it is more than just saying words (Bashir, 2011). Conducted by Torky (2006) states that speaking is an interactive process of constructing meaning that involves the production, reception, and processing of information. Meanwhile, based on the Oxford Dictionary (2017), speaking is the act of conveying information or expressing one's feelings in speech. So speaking is the activity of delivering a speech, speaking is also a medium of the transaction between the speaker and the listener, the speaker sends a message to the listener, and the listener responds to the information the speaker provides.

#### Students' needs in speaking

There are some needs for students in speaking English. there are several notions of needs analysis according to Nation & Macalister (2010). needs analysis ensures that learning will contain things that are relevant and useful to learn. various focuses of needs analysis, such as:

a. Necessities: according to Nation & Macalister, 2010 needs are the demands of the target task. That is, what should students do when they study at school the things they have to do are listen to subjects, follow tutorials, write assignments and tasks, and take exams.

b. Lacks: involves seeing where the learner is at the moment. The source of the deficiency can be the university lecturer who marks the assignment, or the student himself is also a very useful source of information about the deficiency (Nation & Macalister, 2010).

c. Wants: learners have their views on what they find useful for them. At least, this information is useful to know whether the views of the learner and the views of the needs analyst are the same or not (Nation & Macalister, 2010).

According to Evans & John (2011), needs analysis includes several aspects which include target analysis, current situation analysis, and learning needs analysis. Analysis of the current situation is concerned with identifying the weaknesses or shortcomings of students (Petrova, 2008). Meanwhile, learning targets and needs are also referred to as objective needs and subjective needs (Petrova, 2008; Nation & Macalister, 2010). The target or objective needs analysis looks at the language requirements used in the context in which course participants are likely to use English. Subjective learning or needs analysis examines the learner's perception of what the course should look like. In other words, an objective needs analysis should reveal the language skills or language focus that must be further developed for the learners to be able to cope with the target situation in the future.

There are several tools for gathering information in this needs analysis. Nation & Macalister (2010) say that information about objective needs can be collected through questionnaires, personal interviews, documentation, observations, tests, and informal consultations with teachers and students. Subjective needs are found through self-assessment of students using lists, scales, questionnaires, and interviews.

#### Aspects of speaking

Speaking is more than simply understanding language patterns and terminology; it also involves a student's ability to express oneself verbally, clearly, fluently, and accurately in contexts where it is appropriate. Torky (2006) and Richa (2011) contend that for students to become communicators and communicate successfully in everyday situations, they must develop a variety of speaking skills. These are some things to think about:

1. Face-to-face communication: In this setting, facial expressions, gestures, and gestures all have significant meaning.
2. Speaking is interactive: With the correct context and environment, conversations between engaged speakers and listeners flow naturally.
3. Conversation enables self-correction and repetition while taking place in real-time language contact between the speaker and the listener. They will therefore be able to react to urgent situations more rapidly.
4. Connected speech: Sound in connected speech must be regulated by dilution, omission, or addition. English speakers must thus possess strong communication skills.
5. Expressive tools: for the listener to understand what is being said, speakers use a variety of physical and nonverbal cues as well as volume, pitch, and speed changes to communicate their emotions while speaking.
6. Grammar and lexicon: The teacher must have ready phrases like "agree" and "disagree," "hello," and "dislikes.".
7. Negotiation language: To get a structural classification of what we say, we must use good negotiating language.

#### Teaching speaking

Teaching is a way for teachers to transfer their knowledge to students. Teaching speaking is training students to communicate how to use language communication, to transfer ideas, thoughts, or even feelings to others. The purpose of teaching speaking skills is to communicate efficiently. Students should be able to make themselves understood and use their current abilities to the fullest. They should try to avoid confusion in messages carried out for incorrect pronunciation, grammar, or vocabulary and to achieve social and cultural rules that apply in every communication situation.

There are nine principles of teaching speaking skills, according to Anuradha et al (2014), the following are the principles of teaching speaking skills:

1. Encourage students to speak straight from day one. If not, start early and don't wait until he teaches them a collection of words, phrases, or sentences.
2. Tolerate students if some of them just repeat what they said.
3. If a student gives a one-word answer to any question, hold it for a while.
4. Let learners speak actively with whatever knowledge of English they have.
5. Suggest structures/phrases/words and let students use them in different situations and drill as much as possible.
6. Encourage back-chaining or tail-forwarding techniques to create long sentences combining more than ten sentences.
7. Arrange role play and pair work as much as possible and supervise students to correct the action and activate the passive.
8. Be well prepared in advance in terms of lesson planning, activities, and assignments.
9. Let students make mistakes at an early stage. Interruptions and corrections hinder fluency and discourage students.

#### The assessment of speaking

Teaching speaking skills is one of the activities in learning English that requires separate assessments. Speech assessment is very important to understand because Speech assessment will be an important thought for listeners. After all, they can receive any information from the speaker and provide feedback to respond to what the speaker said. According to Rahmawati & Martin (2014), there are several things regarding the assessment criteria for teaching speaking skills:

1. Grammar

Seeing students' use of sentences, whether they are correct and accurate, and avoiding grammatical errors in speaking. Conducted to Thornbury (2010), most speakers often use personal pronouns and determinants in speaking the language.

1. Vocabulary

Choosing the right vocabulary affects someone in speaking. By word Chastain in Eliyana (2012) states that vocabulary is learned using receptive skills. He explained that this aspect has to be learned by practicing, though only repeating words. According to Eliyana (2012), there are three steps to teaching vocabulary effectively. They are: The learners are asked to learn the words as much as possible, they use those words to communicate, and then repeat those words continuously.

1. Understanding

Understanding what the person is saying will give a good response to a question.

1. Fluency

Good pronunciation will create a good presentation so that listeners can easily give feedback on what they hear. Bailey (2005) explains that Fluency is the ability to speak fluently, confidently, and at a level consistent with relevant native norms.

1. Pronunciation

Pronunciation relates to how often we make mistakes, so the speaker needs to understand this.

#### Fluency level speaking in English

In learning a new language that is different from the mother tongue or foreign language, speaking is one of the skills that must be mastered by learners. One aspect of assessing speaking performance is the fluency of the speaker. Dore (2016) states that there are many definitions of fluency, but there is no definite definition of it. Although there is still no definite definition of fluency, it is important to know what fluency is to avoid misinterpretation. Dore (2016) says that fluency is when the speaker speaks fluently and flows easily. The term smooth and easy flow here means a state in which the speaker speaks at a constant rate of speech and does not make long pauses. If a person stutters a lot, it will affect the speed of speech.

Meanwhile, the longer the speaker pauses the more speech will not flow easily which interferes with fluency. Fluency in speaking will build good communication. And in the purpose of fluency is so that the speaker can express his ideas easily. On the other hand, fluency in English makes a person much better at speaking if it can make the listener feel more pleasant, natural, and impressed when listening to it. Fluency allows for successful communication without distractions in speech. Fluency, conducted by Koponen in Luoma (2004), is defined by flow, fluency, speed of speech, length of speech, conceptual connection, the absence of excessive pauses, and the absence of troublesome indecision indicators. Meanwhile, according to Stockdale (2009), fluency is defined as the ability to speak a foreign language fluently with at least quiet pauses and pauses containing pauses (ooo or mm). fluency, Bailey (2005) explains that “Fluency is the ability to speak fluently, confidently, and at a level consistent with relevant native norms. According to Thornbury (2005), the characteristics of fluency are:

1. pauses may be long but not frequent;
2. Pauses are usually filled;
3. The pause occurs at a meaningful transition point, and
4. There are long syllables and words between pauses.

Stitutio & Lee (2008) mentions that there are two criteria for determining fluency. First, Doubt. Hesitating phenomena such as fillers are most likely to occur at the beginning of an utterance or phrase, perhaps as a consequence of the greater demands placed on the planning process at these times (Corley & Stewart, 2008). Second, formula phrases. Mentions that formula expressions are associated with language. Both formulaic phrases and idioms are related to figurative language or language that does not mean exactly what it says (Fonseca, 2018).

Fluency is one of the most common criteria featured in holistic and analytical grading scales in many standardized speaking tests, for example, Cambridge General English, CEFR, IELTS, and TOEFL iBT tests (de Jong, 2018). Aspects of fluency displayed in this rating scale include the length of speech, hesitation, repetition, self-correction, the flow of speech, pauses, speed of speech, rhythm, wrong start, and speech flatness. Some tests also refer to causes of doubt, such as whether it is related to content or language. Because everyone has different skills, weaknesses, and learning methods, it is difficult to assess language competence.

However, the way a person speaks, the number of words spoken in English, and native English speakers can all be used to identify these possibilities. to be able to understand the level of English with the Common European Framework of Reference for Languages because it is difficult to measure a person's capacity to speak English (CEFR). The CEFR (Common European Framework of Reference for Languages) is a commonly used international benchmark for language understanding and proficiency in Europe. CEFR applies to many languages, including English. This standard can be used to assess a person's English proficiency, either passively or actively. In addition to CEFR, EF SET, TOEFL, IELTS, and TOEIC are some of the international standards used to describe the level of English competence. A1 Beginner, A2 Elementary, B1 Intermediate, B2 Upper Intermediate, C1 Advanced, and C2 Proficient are the six levels of this standard.

* A1 Beginner

The first level of CEFR is beginner which refers to speakers with a basic command of English. able to understand some basic Simple English phrases and nouns.

* A2

The second level of the CEFR i.e. A2 or basic is the most basic. They can speak in whole sentences and phrases about this easy theme at level A2. Level A2 vocabulary covers a wider range of topics than level A1, although engagement is still limited to direct information exchange.

* B1 Intermediate

The third level, known as the B1 intermediary, is the next step forward. After reaching level B1, one's English proficiency is considered "intermediate". This means that someone can communicate in English about their daily activities. And can discuss more abstract or subjective things like hopes, dreams, or opinions (in very simple terms).

* B2 Upper-Intermediate

The fourth level of CEFR is B2, at this level can participate in conversations about various real and abstract problems as a B2 English speaker. Even if you don't have much technical language, you can communicate difficult ideas, explanations, experiences, or ideas with moderate precision.

* C1 Advanced, this level C2 is considered an advanced learner of English, with a better knowledge of more complex grammatical structures, suggested meanings in text and speech, and the ability to communicate fluently in English in all situations.
* C2 Advanced

CEFR level C2 is the highest of the six levels. At this level can understand a lot of English encountered, both spoken and written. Although minor mistakes are conceivable, his skills are comparable to or equal to that of a native English speaker. even in complex texts or situations, being able to understand the subtleties of tone, pace, and word choice C2 speakers may have studied English for years and practiced it with native speakers regularly.

### **MEDIA**

#### Definition of media

The research from Omodara & Adu (2014), Rusman (2017) Soffa et al., (2021) Halliday (2000) Anita (2009) Bastian (2019) media is a tool as an intermediary or liaison between two people to distribute messages or information to the sender. receiver. Meanwhile, the research from Kustandi & Sutjipto (2011) Moreira, Pereira, & Gusmão (2018) Haryadi (2019) Widodo (2018) Madhuri (2019) learning media are tools, instruments, or means to channel material that stimulates students' thoughts, feelings, interests, and attention in the teaching and learning process to achieve better and more perfect learning objectives, which can show facts, concepts, principles, and procedures to make them more real or concrete, both traditional and modern. However that Holzberger (2013) defines digital media for learning purposes as text or images in digital form via the internet and includes content or teaching materials aimed at increasing teaching effectiveness. Keane (2012) explains that digital media consists of digital tools (computers, laptops, that are provided online (internet) or offline. In this study, digital media is the use of computers, laptops, and mobile phones online or offline which includes the use of social media, online quizzes (Kahoot), PowerPoint presentations, and videos.

Media has six basic categories of media, namely text, audio, visual, video, manipulative (manipulating objects), and people. The purpose of media is to facilitate communication and learning (Smaldino et al., 2019). The most frequently used medium is text. The text itself is an alphanumeric character and can be displayed in any format, such as a book, poster, whiteboard, computer screen, and so on. Another medium commonly used in learning is audio. Audio includes all audible sounds, such as music, and other sounds that can be recorded or heard. Visual is a category commonly used to clarify material such as diagrams and pictures. Another type of media is video, a type of media that displays images and actions such as computer animations, video recordings, and so on. Within each category, there are many types of media formats. A media format is a physical form that contains and displays a message. For example, whiteboard markers (visuals and text), PowerPoint slides (text and visuals), CDs (sound and music), DVDs (video), and computer multimedia (audio, text, and video). The types of messages that can be recorded and displayed each have different advantages and disadvantages (Smaldino et al., 2019). So the media has many types, which aim to facilitate communication and learning. One of the most frequently used media for learning is text and audio/video.

#### The principles of selecting learning media

Educators must pay attention to the principles in the selection of learning media to optimize information in learning. Conducted to Setyosari (2005), the principles of media selection are (1) identification of media characteristics that are considered according to conditions, performance, or level of each learning goal, (2) identification of student characteristics (learners) who require special learning media, (3) identification of learning environment characteristics concerning the learning media to be used, and (4) identification of practical considerations that allow which learning media to be used. Meanwhile, conducted by Saud (2009), the following are the principles for selecting learning media: (1) acceptable, in the sense that the learning media used are in line with core skills, (2) efficient, in the sense that the learning media used may boost student motivation, and (3) varied, in the sense that the learning media users were able to stimulate students' active learning attitudes.

#### Types of learning media

There are three forms of learning media, according to Seels & Richey (2014): 1) media created with print technology, 2) media created with audio-visual technology, and 3) media created with a combination of print and computer technology. Meanwhile, Rusman (2013) divides learning media into categories based on their nature, scope, and distribution methods. The classification of current media highlights the variations in the features of each learning medium, allowing it to be used as a reference for selecting the appropriate media for a lesson.

#### Benefits of using digital media

According to Martin & Betrus (2019), There are various benefits of employing digital media in the classroom:

1. Ease of use: In most situations, digital material is simple to use and may be integrated into current classes in a variety of forms, including self-paced, hybrid, and online.
2. Immersive experience: When digital media is developed with a lot of interactivity, it gives students an immersive experience.
3. Reach a huge audience: Digital media enables vast numbers of students to be reached beyond geographic boundaries.
4. Content may be quickly updated and shared with learners if digital media is supplied online.
5. Self-paced: Digital media may function alone. Individual learners can traverse digital media classes when they are properly designed and successful.
6. Cost-effectiveness: With the rapid digital media development tools recently on the market, developing selected digital media products becomes more cost-effective.

#### Challenges and Limitations of using digital media

Some of the problems that exist in employing digital media in learning, the research from Martin & Betrus (2019), are:

1. Lack of interactivity: Some digital media initiatives are "page-turners," which means they are not interactive. This is not conducive to successful learning.
2. Expenses: While some digital media might be inexpensive, certain digital media solutions can be rather costly to produce (eg, high-fidelity games, simulations).
3. Cost of updating: When digital media is not available online, updating and sharing with students can be costly. For example, updating digital media that is still delivered on CD is costly.
4. Decay: While digital media ceases to function as technology advances, video, audio, and text remain and are translated across time and forms.

#### Learning media criteria

Sudjana & Rivai (2011) reveal six criteria in choosing learning media, which consist of 1) Accuracy of media with learning objectives, 2) media support for the content of teaching materials, 3) Ease of obtaining media, 4) Teacher skills in using media, 5) Availability of time to use media, and 6) Media according to students' thinking level. In addition, the use of good language, images, colors, and appearance are also criteria that must be met in choosing the right media to be used in learning.

#### The Importance of media

in helping the teaching and learning process by using important media, as said Suyanto (2007) stated that the media is useful for Helping to learn a simpler language, Reducing the use of the mother tongue, Increasing student motivation, Providing a brief explanation of the new concept, and Making the teaching and learning process interesting and fun, Improving the quality of learning English.

Therefore, it can be argued that media has a crucial role in enhancing teaching and learning, motivating students, boosting positive student learning, and improving and clarifying communication.

## **ENGLISH TEACHERS IN THE 21ST CENTURY**

People today are living in the twenty-first century, which is characterized by amazingly developed yet affordable and portable technological advancements that contribute to the world. The rapid dissemination of information is a feature of the twenty-first century, and almost everyone uses information technology in their daily lives. Technological advances and globalization characterize the twenty-first century, and challenge academies to educate students to enter a future world of work marked by change and uncertainty (Bachore, 2015; Chu, 2017; Talmi et al., 2018; Gu, 2020). At this time, technology plays an important role in education as a major component. Teaching and learning English is no longer limited to textbooks in today's world, the expertise of a teacher can also provide opportunities for students to collaborate on digital skills (Anderson, 2019). Conducted to Muhammad and Seng (2019), one must have sufficient ability and knowledge to keep up with progress. Therefore, competencies must be developed according to the times, one of which is the ability of 21st-century instructors to investigate ICT in learning. In addition, the relationship between technology integration and the increasingly rapid changes in the 21st century must be adjusted to the potential that can support English language learning optimally.

Student demands are becoming increasingly complicated in the twenty-first century. In the twenty-first century, the abilities that students must master are evolving. In the World Economic Forum's New Vision of Opening Education, basic literacy (scientific literacy, literacy, and numeracy), competencies (creativity, critical thinking, communication, and collaboration), and character qualifications are among the skills that must be mastered in the twenty-first century. As a result, the technology used by students to study English in the twenty-first century must be updated to meet current standards. The 21st-Century Abilities Framework indicates that core school skills like reading, writing, and arithmetic will serve as the foundation for additional competencies. In the context of 21st-century skills, the key issues of 3R are translated into [1] life and career skills, [2] learning and innovation skills, and [3] information media and technology skills, according to Trilling and Fadel (2009).

## **VOCATIONAL SCHOOL**

Vocational High School is one type of formal education that can be a solution to reduce the unemployment rate in Indonesia because Vocational High Schools focus on preparing students to become graduates who are ready to work because vocational education emphasizes mastery of knowledge, skills, attitudes, and values ​​needed by the world of work (Faslah, 2019). Because Vocational High Schools focus on preparing students to become graduates who are ready to work, vocational education is emphasized mastering the knowledge, skills, attitudes, and values ​​that students need. Vocational education can be a solution to reduce unemployment. in Indonesia. world of work An effective school culture sets the standard for thinking about what is good, what is right, and how to achieve it. School culture can be defined as the quality of school life that develops and develops as a result of the spirit and values ​​of the school community, as well as the attitudes it adopts. School culture is reflected in the bonds between school members both at work, teaching, and learning or when communicating with each other (Segiovani, 2010).

The research from Segiovani (2010), vocational education strives to: (a) address the community's manpower needs; (b) expand educational possibilities for each individual, and (c) encourage continual learning motivation. The goal of vocational education is to increase students' intelligence, knowledge, personality, noble character, and skills so that they may live independently and continue their studies in a practical program. They must have high stamina, master the field of expertise and the fundamentals of science and technology, have a high work ethic, be able to communicate the demands of their work, and can develop themselves to work effectively and efficiently, develop their expertise and skills. This can lead to negative school culture. Based on the problems described, it is necessary to conduct a study on how to describe the characteristics of PBM and effective school culture (Hoachlander, 2019).

To the research findings, effective schools have the following characteristics: (1) entrepreneurial leadership in vocational education; (2) a clear vision and mission for student achievement; (3) a safe and fun learning environment; (4) an emphasis on basic skills; (5) continuous monitoring of student progress; and (6) the school's goals are clear and well understood (Davis & Thomas, 1989). By Bagerson, (2006), effective schools have five distinct characteristics: (1) managerial techniques with good classrooms; (2) high academic struggle; (3) monitoring student achievement; (4) improving learning as a school priority; and (5) clear goals and objectives. conducted to Bagerson (2006), a school is successful if it is supported by several factors, including (1) a clear focus; (2) high expectations; (3) Vocational High School leaders can collaborate with DUDI; (4) high interactive collaboration; (5) have a standard curriculum, learning, and assessment; (6) monitoring early learning; (7) focus on professional development; (8) a supportive learning environment; and (9) relationships.

## **PREVIOUS RESEARCH**

In this study, there are previous studies that have similarities in research such as the first study, research conducted by Rositasari (2017). This study aims to examine the use of digital storytelling in improving students' speaking skills in retelling a story. This study uses classroom action research to be able to package digital storytelling into media that can attract students' attention and become an effective medium for teaching speaking skills. the participants of this study were 19 students of class XI IPA 1 SMA PGRI 1 Temanggung. The research instruments used were observation sheets, tests, questionnaires, and answers. The results showed that digital storytelling was effective in increasing student learning motivation because it was presented in an attractive form.

The second study was conducted by Ihfal (2016). This study aims to determine the effect of applying podcasts as a medium on students' presentations in speaking. This researcher uses descriptive quantitative research and uses an experimental research design so that students' scores experiment by applying Podcasts as a medium in this study to determine their speaking achievement. The participants of this study were 32 students from the Private Vocational School of Pelita Pelita Perak. The results of this study indicate that the application of Podcasts as a medium increases student achievement in speaking, as evidenced by the results of the count > t table (18.53 > 2.04). So, the application of Podcasts as a medium has a significant effect on students' speaking achievement. In other words, students who are taught by applying podcasts as a medium get better achievements from pre-test to post-test. It means that the alternative hypothesis is accepted or that Podcast as a medium has a significant effect on student achievement in speaking.

The third study conducted was by Hermawati (2020). This study aims to determine whether the use of digital storytelling is effective or not in improving students' speaking fluency in expressing ideas. This research is focused on testing the effectiveness of using digital fairy tales to improve students' speaking fluency in expressing ideas. This study uses a pre-experimental research design. The study used a purposive sampling method and took the research sample only for class XII which amounted to 37 students. In addition, this study applies an oral test instrument, in the pre-test and post-test. The results of this study can be concluded that digital storytelling material has a significant effect on students' speaking fluency through question and answer.

The fourth study, conducted by Safitri (2021), This study aims to explore students' perceptions of the use of social media to learn English. The participants of this study were 83 students from a private high school in Depok. This study uses a qualitative method with a case study design. This study uses a questionnaire and semi-structured interviews as data collection methods. Basic statistical analysis was used to analyze the data from the questionnaire, while the interview data were analyzed using the Flow model of Miles and Huberman. The results of this study indicate that students use social media to learn and improve their English skills.

The fifth study was conducted by Arif (2019). This study aims to examine the use of social media in learning English. The researcher used an exploratory study to investigate the use of social media for learning English. The participants of this study were sixty-seven students of the English study program at Jambi University. Questionnaires and semi-structured interviews were conducted to collect data. Researchers analyzed data from questionnaires using basic statistical analysis, and interview data were analyzed using phenomenological case analysis combined with thematic coding. The results showed that several social media applications, especially Instagram and Facebook, were the most widely used by students. Thus, the students spend more time using social media for general purposes than learning English. However, they still show a positive attitude toward the use of social media in learning English.

The sixth study was conducted by Ramos (2016). This study aims to examine the use of virtual resources to develop speaking skills in English for business at Autonoma University. This research is categorized as Action Research. The subjects of this research are level 5 business students at Autonoma University. The main data of the research This was collected by conducting classroom observations and transcripts were collected by conducting interviews which were analyzed qualitatively and supported by others, the data in the form of photos and videos were also analyzed qualitatively, and besides that, a questionnaire was applied.

The seventh study was conducted by Anisa (2018). This study aims to examine the use of digital storytelling as an effective tool for training speaking skills and students’ creativity in the process of compiling and editing the materials. The subjects of this research were the six students of English Specific Purposes (ESP) Speaking Class with a major in Communication Science in the academic year 2017. The instruments used in this research were an assessment rubric and interview guideline whereas the test and semi-structured interview was the technique for collecting the data.

The eighth study was conducted by Sinaga (2018). This study aims to develop speaking materials based on Task-Based Learning of eight grade students in Junior High School. The subject of this research was VIII-5 students and the English teacher of SMP Negeri 4 Pematang Siantar. The data was taken from interviewing the English teacher and distributing questionnaires to 38 students. This research was conducted based on educational Research and Development (R & D) by applying the six phases of educational research and development of Gall and Borg consisting: of 1) Gathering information and Data, and 2) Analyzing Data. 3) Designing speaking materials based on task-based learning, 4) Validating new speaking materials based on task-based learning by experts, 5) Revising speaking materials based on task-based learning, and final 6) Final Products (speaking materials based on task-based learning).

The ninth study was conducted by Abril (2021). This study aims to analyze whether there are differences based on gender, age, and educational stage. The results show that the participants in this study were motivated to use this digital tool that enables them to make comments on their partners’ videos, send messages about the oral texts, and include additional media, among many other options, going then beyond reading texts on a computer screen.

The tenth condition. Malaysian researchers Rashid, Mohamed, and Abidin carried out the tenth study. "Developing 21st Century Digital Speaking in English as a Foreign Language Class: New Literacy and Oral Skills in Basic Education," by Syadiah at unisza.edu.my (2015). The goal of this project is to use cutting-edge audio-based interactive apps to integrate ICT into education and help students who are less adept in the language speak English more fluently. Five children from an elementary school and an English teacher worked together to build and test the "V-Buddy" application from the standpoint of sociocultural learning.

The difference between this research and previous research is the selection of research objects and the addition of research variables. Likewise, the research the researcher do is to collect some teaching materials first, then the teaching materials developed by the researchers to be able to produce more effective teaching materials that can make students more confident, and not afraid to speak, especially speaking. in public. Then after being developed, researchers create digital-based learning media, such as websites that contain teaching materials or learning videos in English.

## **Frame of Thought**

Some concepts are formed based on the background and research topic. In the twenty-first century, technological progress is accelerating, and technological innovations in education have a significant impact. especially in terms of language acquisition. Students can easily access learning by using technology. This begins with the researcher analyzing the needs of students and teachers by conducting interviews, after that the researcher collects data and determines the purpose of product planning, after that designing the initial form of the product, and making the product is the frame of mind used in this study. The following diagram represents a simplified version of the concepts mentioned above:

Speaking

Digital Resources

Digital Resources of Speaking

(Websites)

Need analysis

Interview

product design

planning goals

Collecting Data

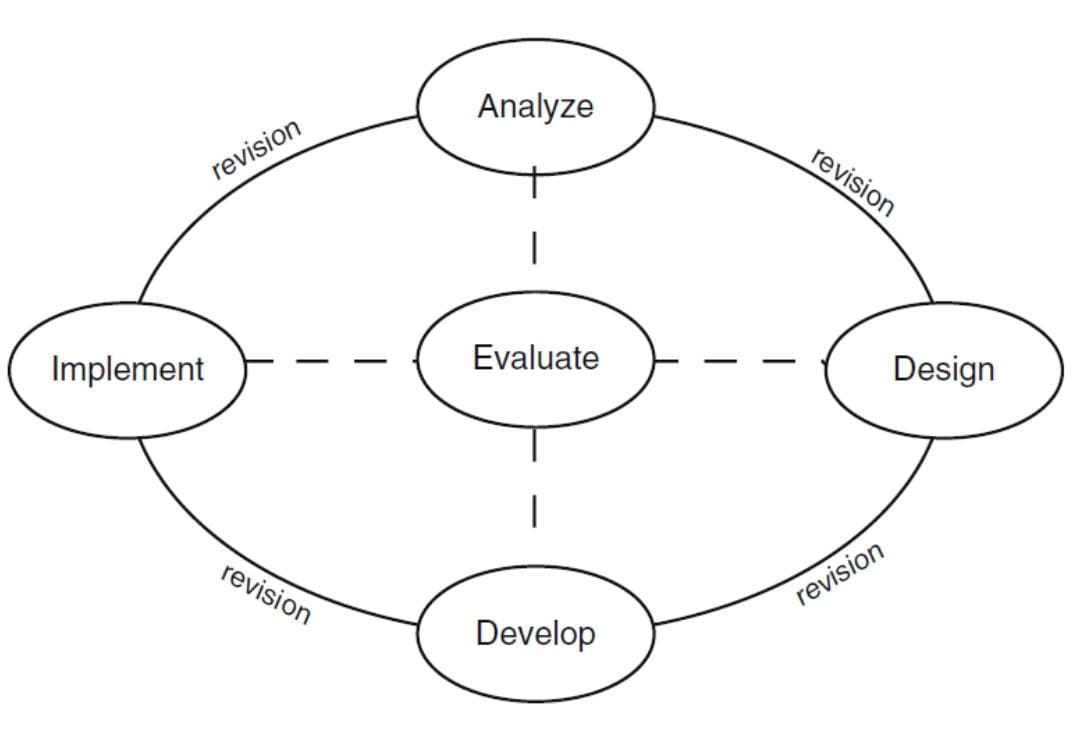
Result

(Websites)

## **RESEARCH METHOD**

### Research design and steps of the research

This study applies the ADDIE development approach with a development model, a sort of research and development (R&D). Research (R&D) is defined by Borg and Gall (in Setyosari, (2012) as a process to create and facilitate research outputs. Creating a product and evaluating its effectiveness is the goal of research and development (R&D) (Sugiyono, 2015). According to Branch, the methodology utilized in this study employs a development model using the ADDIE technique. The ADDIE instructional design model is a generic instructional model that provides an organized process for developing teaching materials. This systemic model is a five-step cyclical process that can be used for both traditional and online instruction. There are 5 steps to this methodology: analysis, design, development, implementation, and evaluation (Branch, 2009). The steps of R&D research utilizing the ADDIE approach technique are illustrated as follows:



The steps taken in this study can be summarized in the table below based on the phases above:

**Table 1.1 steps R&D**

|  |  |  |  |
| --- | --- | --- | --- |
|  | Analyze | Design | Develop |
| Concept | identification of possible causes of gaps | verification of desired performance and appropriate test methods. | generate and validate learning resources. |
| Procedure | 1. Validating performance gaps.  2. Establish educational objectives  3. Verify the research topic and audience  4. List the necessary resources.  5. Establish the budget strategy  6. Create a work schedule. | 1. set the task  2. Develop learning objectives  3. Develop a testing strategy  4. Calculating investment | 1. Creating learning media  2. Development of supporting media  3. Develop a guide for students  4. Develop a guide for teachers  5. Perform formative revision  6. Doing experiments |

Based on several research models that have been mentioned, the ADDIE research model, by Branch is considered more suitable for the development of learning media products. because by considering the limitations of the research which only reached the feasibility test stage, this method is by the conditions and objectives in developing learning products in the form of websites.

### Source and type of data

The data sources are tenth-grade students and English teachers at vocational high schools. Therefore, researchers need resource persons from students and teachers about digital resources for speaking English. Researchers collected primary data from students and teachers using interviews and documentation. The interview method is a data collection method by seeking information about the digital resource in speaking English. Then the researchers also collected data with the documentation method. The documentation method is a data collection method by observing various digital-based learning resources.

### Data collection techniques and instruments

For data collection techniques, researchers conducted interviews and documentation. the instrument in this study was an audio recording. In collecting data, researchers used semi-structured interviews. Researchers interviewed English students and teachers to gather further information. This process involves recording information through a research protocol. According to Cohen, an interview is a flexible tool for data collection, enabling multi-sensory channels to be used: verbal, non-verbal, spoken, and heard. The interview is a powerful implement for researchers (Cohen, 2011). the main purpose of this interview is to obtain the students’ perception of digital resources for speaking skills.

### Data analysis technique(s)

Interview data were analyzed using the Miles and Huberman (1992) flow model. The model has several components to be analyzed, such as data reduction, data presentation, and drawing conclusions. The first is data reduction. This refers to the process of selecting, focusing, and summarizing raw data from interviews, documents, or others. (Miles et al., 2014). The second stage is displaying data. The purpose of presenting data is to help researchers understand what is happening in the data presented and consider what to do next. In this study, interview data are presented in narrative form. The last is drawing and verifying conclusions. After displaying the data, the researcher makes conclusions based on the research questions. In addition, to get the validity of the data, researchers conducted interviews supported by documentation. This documentation is data or information that includes digital resources for learning English speaking skills for tenth grade vocational high school students. After the researcher got the results of the interviews, the next researcher created a website-based digital learning resource that was packaged according to the interviews that had been conducted.

### Research timeline

This research needs six months to be investigated starting from writing the research proposal until thesis revision. This research begins from September to march 2023 as shown in the following table:

**Table 1.2 Research Timeline**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  | Time | |  |  |  |
| No | Description | September | October | November | December | January | February | March |
|  |  |  |  |  |  |  |  |  |
| 1 | Consult study area with academic guidance lecturer |  |  |  |  |  |  |  |
| 2 | Registration of proposal titles |  |  |  |  |  |  |  |
| 3 | Verify the study area by the department |  |  |  |  |  |  |  |
| 4 | Guidance proposal with lecturer |  |  |  |  |  |  |  |
| 5 | Revised proposal |  |  |  |  |  |  |  |
| 6 | The proposal was approved by the lecturer |  |  |  |  |  |  |  |
| 7 | Proposal seminar registration |  |  |  |  |  |  |  |
| 8 | Seminar proposal |  |  |  |  |  |  |  |
| 9 | Thesis research |  |  |  |  |  |  |  |
| 10 | Thesis guidance with a guide |  |  |  |  |  |  |  |
| 11 | Comprehensiveness |  |  |  |  |  |  |  |
| 12 | Munaqosah test |  |  |  |  |  |  |  |