

## **CHAPTER I**

### **INTRODUCTION**

This chapter introduces the nature of the present research and the theoretical foundation of the research. It begins with a background of the research, identification, and main of the problem, limitation of the research, question of the research, aims of the research, significance of the research, previous research, and theoretical foundation.

#### **1.1 Background of the Research**

This chapter describes the nature of the current study as well as its theoretical background. Research in this field is very important where we can see schools in Indonesia, especially now that they have adopted the 2013 curriculum where all basic competencies must use technology for the learning media used. Therefore, the technology used is of course adhered to an appropriate pedagogical system, there are aspects of self-regulating, and of course for this 21<sup>st</sup> century digitalization helps students in accelerating fluency that is compatible with the 21<sup>st</sup> century. This study will create a Technology Enhanced Learning Language based digital learning resources that are compatible with 21<sup>st</sup> century framework.

In the areas of curriculum and pedagogy, examination system, teacher training, and literature teaching, radical measures must be implemented as soon as possible (Alwasilah 2014; 2012). Previous research indicates that it is necessary to review and reflect on developments in society, technology, and language-learning systems in the twenty-first century. It presented a conceptual model of language-teaching and learning that acknowledged the importance of individualized meaning-making in the learning process in general and language-learning, and it proposed solutions that were consistent with perceived social and technological developments in the twenty-first century.

Hughes (2016) states in this scenario, the instructor can leverage the advancement of Information and Communication Technology (ICT) for teaching and learning activities. Simply throwing a computer into a classroom does not

make learning more effective: teachers must understand how to use technology effectively, as well as the learning theories that underpin the practice. They must also understand how to select the right technology for the learning outcomes they seek. A digital pedagogy is required for teachers. In both learning, technology plays a significant part in education. Most teachers, on the other hand, use traditional ways to teach English. It suggests that the teachers are using an ineffective technique and digital media. Listening to the explanation and reading the materials are still parts of some school exercises. Furthermore, the learners are unresponsive. It denotes a lack of engagement between teachers and students.

Another issue is the media that is being used. Traditional media such as textbooks, LKS (worksheets), and other printed materials are used by the teachers. Students will have poor motivation to study English, become bored, and ultimately have low accomplishment because of these situations. Verbotonalism has been viewed as effective in the learning of pronunciation to emphasizing the importance of hearing as an act of meaning- making and the fundamental value of prosody, i.e., stress, rhythm, and intonation (Guberina, 1972). Speaking as a meaning of making comes as a process to which words that are given and shared socially determine thoughts and how thoughts bring words to life.

The vision of digital learning that will be developed is to make them happy to learn through games but in it there is learning material that is delivered. The students tend to prefer modern things seeing the developments of today's era because they learn without having to be pushed. Learning using textbooks is no longer required in the modern era as it is today but using digital-based technology is. Because the learners and teachers at a junior high school in Kuningan, West Java have their own notebooks, the English teachers at a junior high school in Kuningan, West Java have no problems with the available technology. However, most teachers continue to have difficulties in figuring out English interactive digital resources that are appropriate for their learners' needs.

Furthermore, there are no English interactive digital tools for learning the speaking skill at a junior high school in Kuningan, West Java. It is critical to do research based on these issues entitled "Developing Digital Resources for

Learning Speaking in Junior High School: A Technology Enhanced Learning Perspective”.

## **1.2 Identification of the Issue**

The process of teaching English as a foreign language is very complicated because there are many components involved. Students, teachers, resources, procedures, and media are those components. All language components should be presented correctly and interestingly in English speaking skill development since they will support the success of the speaking learning process in the classroom. Traditional media such as textbooks, LKS (worksheets), and other printed materials are used by the teachers. Students will have poor motivation to study English, become bored, and ultimately have low accomplishment because of these situations.

In the learning process in the 21<sup>st</sup> century, a teacher requires media or digital resources to present the materials. Students will be more stimulated to learn because of the interactive and innovative digital media, which will inspire them to participate actively in the activities. Digital media can be anything from a simple object to a high-tech device such as a computer. In this instance, digital content in English can assist the learning of presenting the materials.

The learning method has an impact on the learning process and outcome. The teacher will use a variety of instructional strategies to make the learning process more engaging. The usage of a cellphone in the learning process is one of the teaching strategies. Using English internet resources will, without a doubt, be an effective strategy. The students will not become bored with the materials, and they make it easier for them to comprehend. Furthermore, many learning approaches will keep students' interest in the classroom.

Electronic tools, systems, devices, and resources that generate, store, or process data are referred to as digital technologies. Social media, online games, multimedia, and mobile phones are all well-known examples. Any sort of learning that makes use of technology is referred to as digital learning. It can occur in any of the curriculum's learning areas. Learners can engage in self-behavior,

independent interaction, and an atmosphere in which errors are handled and specific feedback is provided thanks to technology. Feedback in software is becoming increasingly important, according to research.

The value of technology will increase when it comes to explanations, further support, and good reference. Students' minds become casual because of the current technology, allowing them to be fully engaged in the subject rather than see it as a difficult task to do. The vision of digital learning that will be developed is a big reason why the researcher chose the issue because the research created a Technology Enhanced Learning based digital learning resources that are compatible with 21<sup>st</sup> century framework they can make students happy to learn through a story but in it there is a learning material that is delivered. of course, they tend to prefer modern things.

### **1.3 Delimitation of the Research**

The researcher described many problems above. However, the researcher did not identify the entire problem. The researcher limited the problem to make the researcher focused and analyze the problem deeply. Then, the researcher focused on exploring English digital resources for enhancing speaking skills which consider the qualities, application, needs and wants of junior high school students. This study's focus was only on one element of learning processes, which is to create a Technology Enhanced Learning based digital learning resources compatible with 21<sup>st</sup> century framework for grade VII students at a junior high school in Kuningan, West Java. The school had not had any English digital resources for enhancing spoken fluency skills which considered the qualities, application, needs and wants of junior high school students.

The researcher took the data from students' speaking to know about their speaking skills, and from the teacher and experts. To avoid ambiguity and do the research in the right way, the researcher limited the type of the text that will be the source of data. Then the researcher used Word Press <https://Word Press.com/> to get data for observing this research. This study's focus is only on one element of learning processes, namely digital resources with the use of pedagogy in mastering the spoken fluency. The research objective is to improve students'



English-speaking skills. Learning from the 21<sup>st</sup> century is one of them, that is technology-based learning. It will improve or develop the speaking fluency of high school students through the use of digital technology-based materials that students can easily access.

#### **1.4 Research Questions**

Based on the research context, there are several problems studied, namely investigating the following research problems:

- 1) What pedagogical principles are embraced in developing digital learning resources for learning speaking in junior high school?
- 2) What types of digital learning resources are compatible with the curriculum used by the teacher in the school?
- 3) What does the teacher say about the utility of these learning resources?

#### **1.5 Aims of the Research**

In this section, it is explained that based on the research problems described above, the research objectives are based on the research problems above:

- 1) to identify pedagogical principles embraced in developing digital learning resources for learning speaking in junior high school.
- 2) to identify types of digital learning resources that are compatible with the curriculum used by the teacher in the school.
- 3) to investigate what the teacher says about the utility of these learning resources.

#### **1.6 Literature Review**

This section is the theory used to build the research. In this study, the researcher wanted to create or design speaking materials that are in accordance with the curriculum in the 21<sup>st</sup> century. It aimed to improve students' fluency by using digital resources.

##### **1.6.1 Pedagogical Principles in the 21<sup>st</sup> Century**

Education is currently in the era of knowledge, and the increase in knowledge is accelerating given the almost daily changes in technology.

Bouزيد (2016) hopes that today's students will not only succeed in demonstrating manual skills, but also demonstrate their ability to find, discover, share and use information to solve complex problems. However, in the 21<sup>st</sup> century, it is expected not only to develop knowledge and personality, but also to improve skills in various fields. One's knowledge and personality are not the main important things. In the Indonesian education system, the development of knowledge and personality is a basic process of education and learning in the classroom, from elementary school to university.

According to studies, digital pedagogy is a strategy centered not only on teacher technology abilities, but also on how a teacher as a facilitator uses technology to increase thinking ability while also developing a student's emotive side (Shahroom, & Hussin, 2018). There has been a great deal of research and speculation about the use of computers in the classroom, and technology is frequently viewed as a tool to help both teachers and students. Some educators were initially ecstatic about technology as its potential was being explored. There was a lot of foreshadowing about the computer replacing the teacher, which resulted in some negative backlash about incorporating technology into classrooms.

Lian (2011) considers the developments of society, technology, and language learning systems in the 21<sup>st</sup> century. He presents a conceptual model of language teaching and learning that acknowledges the importance of individualized meaning-making in the learning process in general, and language-learning, and proposed solutions that are consistent with perceived social and technological developments.

According to Richard (2015), small chats, conversations, transactions, discussions, and presentations are all genres for materials. The final phase is to select classroom activities such as dialogue work, information gap, survey, role-play, storytelling, and picture descriptions. The materials' properties and the students' needs were used to make the decision. The goal of those exercises is to help them develop their speaking techniques.

(A and M.V 2014) develop a structure for the creation of independent learning environments that are, of course, linked to information technology networks that are essentially rhizomatic in nature, where students determine how to think and navigate through information and mechanisms to build knowledge that is both personally relevant and appropriate in learning. Thus, the availability of a rhizomatic-based PLE system such as the one proposed here will aid in the solving of general learning issues.

A new trend in language learning and literacy pedagogy is consistent with the biological nature of the human learning mechanism. At the end of the first quarter of the twenty-first century, English language teacher education in Indonesia should embrace a new learning pedagogy that promotes student agency as a new benchmark for higher education quality, as demanded by the New Standards of Higher Education (Sudimantara : 2020).

According to Nisei (2019) through some of the principles of effective pedagogy that pave the way for innovative learning there are Inclusion, Motivation, Consistency and Transparency, and Innovative Approaches. Inclusion is pedagogy should support practices so that every learner can improve their learning ability. The learner's motivation depends mainly on the personality of the teacher and their ability to build and maintain a fruitful relationship, which can be done to recognize the needs, interests, and experiences of the learner and to shape each student's learning. Consistency and Transparency pedagogy must be methodical and consistent. The elements of online learning must correspond and be transparent in their intent; the learner must understand what they are expected to do. Innovative Approaches Online learning, in theory, should be fit for purpose, bringing an innovative approach that cannot be achieved in any other way.

(A-P 2017) technology can help the learners. There are many aspects of Pronunciation/Intonation aspect (1) individual problems diagnosed. (2) Enable easy confrontation, contrast, and contest. (3) Enhance awareness and optimize the input to get maximal benefit from their activities. (4) Lighten the processing load. (5) Act at once on several brain areas.

A multisensory approach used to supplement reading and speaking with multiple sensory components, including auditory learning is teacher instruction comes with an online auditory component. Students can take phonetics lessons to see and listen to combinations of speech, letters and sounds simultaneously. Sensory motor: Students Learn and recognize words to help decipher them. Visual learning: All lessons are projected and interactive in the classroom while students are learning. In addition, students use anchor diagrams. Provide a visual reference for the skills taught and published in the classroom Malibu (2017). From the few about the principle given that technology clearly has a huge role to play in the future of learning. The learners will be autodidacts even if in formal courses as their needs must be met but there are at least two obstacles: (1) technology needs to be normalized and embedded into learning and (2) innovations and creativity are needed new models but sometimes problematic.

#### **1.6.1.1 Learning Speaking in the 21<sup>st</sup> Century**

Rich (as cited in Education Week, 2010:25) defines 21<sup>st</sup> century skills as “specialized core competencies”. Proponents believe that these skills need to be taught at schools for students to succeed in today's world. Quieng et al. (2015) argues that the essence of 21<sup>st</sup> century technology is to prepare future people to face real-world situations to support global development and transform them into better living conditions. They also added that the goal of 21<sup>st</sup> century learning is to enable learners to use “subject knowledge, specific skills, literacy, numeracy, and skills”.

The 2013 curriculum is the most recent curriculum, with a focus on developing students' competencies and character (Ministry and Culture, 2013). The Core Competences (*Kompetensi Inti/KI*) state four aspects of competences that are expected to be attained: spiritual, attitude, knowledge, and skills. These aspects are stated in the purpose of national education (Article 3 the Constitution No 20 Sisdiknas



2003), which states that to develop students' potential to become faithful and pious, noble, healthy, knowledgeable, skilled, creative, independent, as well as democratic and responsible citizens.

According to Laurier (2016), there are four levels of oral communication in the 21<sup>st</sup> century where good ideas are used to teach students to think critically and communicate effectively. Through a truly effective model of communication, students smoothly build the listening and speaking skills necessary for academic and personal success.

This new approach to academic writing appears to have given new experiences, understanding of what possible and how else things is can be done in the context of EFL learning. An approach using online learning can help students learn on their own or independently without direction from the teacher, so they are free to choose the time and place when they will learn. Learning in the 21<sup>st</sup> century assisted by technology is of course adapted to the ability of their respective brains to (Bumela 2020).

#### **1.6.1.2 Macro and Micro Skills of Speaking**

Brown (2004) defines micro skills as the ability to produce smaller chunks of language such as prosody, accuracy, phrasing, and rate. Fluency, discourse function, style, cohesion, nonverbal communication (paralinguistic elements are gestures and posture) are examples of macro skills. Micro skills are concerned with smaller units of speech. We use words in our communication because they are the simplest units that everyone is familiar with. Under words, there are phonemes and morphemes, and collocations and phrases are more complex than words. While macro skills are more complex than micro skills, macro skills are more concerned with the speaker's impact on the language. The fluency, style, discourse, and strategic options of

one speaker differ from those of another. Brown's macro and micro speaking skills are explained in greater detail below (2004:142-143).

#### 1.6.1.2.1 Macro Skills

Macro skills are to explain the speaker's focus on the large elements that have the ability in speaking aspects that are greater in influencing speaking skills Brown (2004). Here are the macro skills in speaking.

- 1) Fluency is how the flow and are also apparent in speaking.
- 2) Discourse function is how the expression is used at a particular time appropriately. Discourse functions appear at each stage, especially at the dialogue stage.
- 3) Style is a style of speaking with a particular accent.
- 4) Cohesion is the attachment between one sentence and another related to what is said.
- 5) Nonverbal communication is a communication process in which the message is conveyed without using words. This can be said by paralinguistic which explains the gestures and postures of a person. It is exemplified in a story which can be seen in the following figure 1.1:



Source: <https://www.pearson.com/jp/en/educators/pearson-english-graded-readers/pearson-english-kids-readers.html>

Figure 1.1 Example for Nonverbal Communication

#### **1.6.1.2.2 Micro Skills**

Micro skills explain how to produce the smaller chunks of language Brown (2004).

- 1) Prosody is related to several things, namely rhythm, emphasis, and intonation in speaking.
- 2) Accuracy is speaking in the absence of errors.
- 3) Phrasing is the division or fragmentation of a word that gives a pause.
- 4) Rate knows the speed in speaking at a certain speed.

The researcher assumes that speaking requires both micro and macro skills. Micro skills are concerned with many simple units of the language itself, whereas macro skills are concerned with speakers' influence over the language that they use. Macro skills are concerned with facial expression, body language, pragmatics, and many other aspects that speakers must master to effectively convey their message to the listener.

#### **1.6.2 Speaking in the 21<sup>st</sup> Century**

This subchapter will explain the ability to speak, namely the definition of speaking and components of speaking skills. Speaking ability is one of the direct communication skills, which is communicated directly to someone. The ability to speak is very important in all aspects because this ability is an ability that must be mastered by everyone. The ability to speak is also an ability that is carried out to two people, namely as listeners and speakers who both contribute to capturing messages at high speed. Many experts have expressed this understanding in different ways Ytreberg (2004).

Another definition of speaking abilities is the ability to communicate speech articulation or to deliver a speech for the purpose of expressing an idea or a message. Speaking is extremely important in the general language development of young learners, according to Linse and Nunan (2005). In

addition, according to Cameroon (2001), speaking is the active use of language to express meanings so that others can understand them. Cameroon also claims speaking places more significant stress on language learners' language resources and skills than listening. Because speaking actions need thoughtful and plentiful assistance of numerous kinds, this is the situation. It is not just receiving, but also production that is supported. Hosseinnia (2018) speaking in the 21<sup>st</sup> century is interrelationships between the five sub constructs of the 21<sup>st</sup> century skill (Critical Thinking and Problem Solving, Communication and Collaboration, Interpersonal Skills, Leadership and Technology Literacy).

From some of the definitions described above, it can be concluded that speaking ability is a habit or skill and the ability to express the meaning of language accurately and clearly by using language that can be understood by listeners and expressing thoughts, feelings, and some information. Directly to the listener or other people in the conversation. Speaking skill is one of the skills used to communicate with other people clearly and in the context being discussed.

#### **1.6.2.1 Neuroscience of Story**

The relationship between story, the chemical compound oxytocin, and empathy. Rahamdhani (2022) in the story process, when we hear or read a story, our brain will naturally release a neurotransmitter called Oxytocin, and is a chemical compound in the brain that makes us feel empathy, and for the empathy is a person's ability to feel what another person feels. So, if we can empathize with other people, we can respond to a situation in the most appropriate way, and then conditions like this should be the basis for making decisions. And according to the latest reference I have analyzed, empathy is crucial because it is the highest level of critical thinking (Ncte, 2020). This means that all language pedagogy containing listening, speaking, writing, and reading learning activities must



strengthen empathy. Therefore, I chose to use a story approach to develop holistic skills where reading, writing, speaking, and listening can be achieved thoroughly, and also the children can increase their empathy. Agrawal (2019), that when we read a good story, our brain will be five times higher, and the story can be memorized by the brain 22 times faster.

Furthermore, the story will activate the brain parts that will be more active when we hear or read a story, namely the brainstem, limbic system, and neurocortex. Cleveland Clinic (2017), on its website, mentions that the Brainstem is a stalk-like portion of the brain that connects the brain to the spinal cord (column of nerve tissue that runs down your spine). It is part of your central nervous system and is located near the bottom of your brain. Some body functions, such as breathing and heart rate, are regulated by your brainstem. Your balance, coordination, and reflexes are also controlled by the brainstem. Your brainstem communicates between your brain and the rest of your body. Balance, blood pressure, breathing, facial sensations, hearing, heart rhythms, and swallowing are all regulated by your brainstem. The brain stem also houses ten of the twelve cranial nerves (nerves that start in your brain). Your facial movements, sensations, and taste are all controlled by these nerves. Your brainstem is made up of three parts:

- 1) The midbrain is the top part of the brainstem that regulates eye movements.
- 2) Pons: The brainstem's middle portion coordinates facial movements, hearing, and balance.
- 3) Medulla oblongata: The bottom part of the brainstem regulates your breathing, heart rhythms, blood pressure, and swallowing.

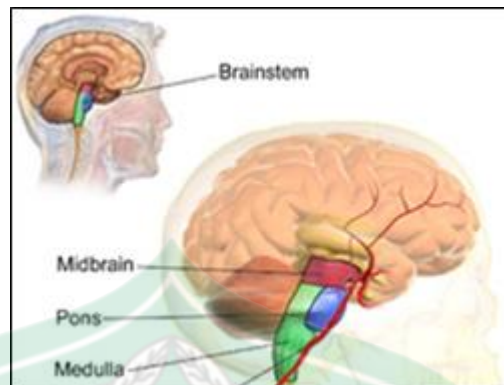


Figure 1.2 Brainstem

Furthermore, the part of the brain that will be more active when hearing or reading a story is the part of the Limbic system. According to Sridanti. (2022) the limbic system is the part of our brain responsible for regulating our body's physiological and emotional responses. The anatomical structure of the limbic system is responsible for processing our emotions and regulating us. The limbic system is a group of structures involved in feelings, memory, and behavior. Some of the limbic system's well-known functions include:

- 1) Involved in the regulation of feelings and emotions.
- 2) Memory storage or memory formation.
- 3) Participate in the learning process.
- 4) Involved in the body's stress response (fight or flight response).
- 5) Controls the autonomic nervous system, which controls involuntary bodily functions like thirst, hunger, and heart rate.

The limbic system, according to Ihda Fadila (2021), is made up of several brain areas, including the hippocampus, amygdala, and hypothalamus, as well as other nearby areas that are also involved.

#### 1) Hippocampus

Ihda Fadila (2021) the hippocampus is a curved seahorse-shaped part of the brain. This part of the brain is located in the brain area, specifically on the left and right sides or hemispheres of

the brain. The hippocampus is the brain's memory center. Short-term memories are then stored in long-term memories in the cerebral cortex in this section. Furthermore, the hippocampus connects memories to various senses, is important in spatial abilities, and is associated with emotions and learning.

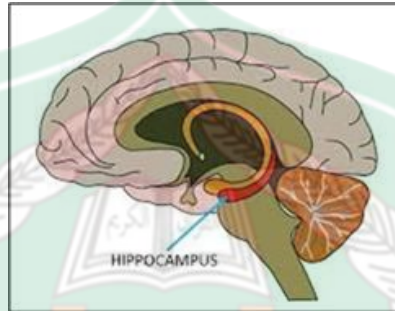


Figure 1.3 Hippocampus

## 2) Amygdala

The amygdala is an almond-shaped limbic system structure located next to the hippocampus. Its main function is to control emotional responses like feelings, fear, anger, and happiness. The amygdala is also linked to emotions and memory. This component is critical in determining the strength of the memory to be stored. Furthermore, the amygdala is involved in the formation of new memories associated with fear (Ihda Fadila : 2021)

## 3) Hypothalamus

According to Ihda Fadila (2021) the hypothalamus is a small part of the brain located on either side of the third ventricle, below the thalamus. The ventricles are areas of the cerebrum that contain cerebrospinal fluid and are located directly above the pituitary gland. The hypothalamus's function is to release hormones that regulate emotions such as pain, hunger, thirst, pleasure, sexual feelings, anger, and aggression. Furthermore, it maintains homeostasis by controlling most autonomic functions such as heart rate, body temperature, blood pressure, and breathing.

One of the hormones released by the hypothalamus is the hormone oxytocin, a chemical compound in the brain that can feel empathy.

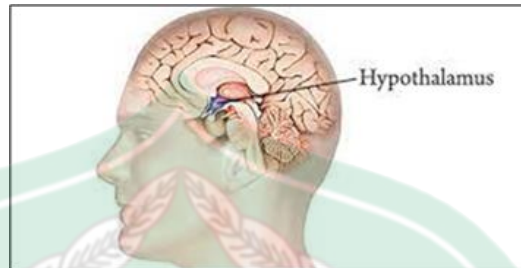


Figure 1.4 Hypothalamus

#### 4) Cingulate Gyrus

The cingulate gyrus is the cerebrum structure closest to the three limbic system structures mentioned above, just above the corpus callosum. This area of the brain connects the thalamus to the hippocampus. The function oversees controlling autonomic motor functions and helps regulate emotions, behavior, and taste. The cingulate gyrus is also involved in tissue processes and emotional responses (Ihda Fadila : 2021)

#### 5) Basal Ganglia

The basal ganglia are a group of brain structures located at the forebrain's base and above the midbrain. The caudate nucleus, putamen, globus pallidus, and substantia nigra are all part of this system group. Its primary function is to control volunteer movements, including eye movements, and to aid in the maintenance of balance and posture. Furthermore, this area of the brain is involved in repetitive behavior and attention span, both of which are linked to addictive behavior and habit formation (Ihda Fadila : 2021).



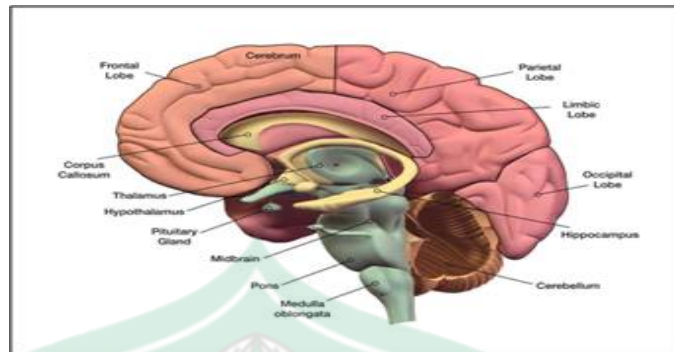


Figure 1.5 Limbic System

Finally, there is a region of the brain known as the neocortex. According to Baffet Alexandre (2020), this part of the brain is the brain's center for higher brain functions such as perception, decision-making, and language. We know it is related to when all parts of the brain are going to read or hear a story, that there is one part of the brain that is involved in our behavioral and emotional responses, namely the hippocampus brain, which is located in the limbic system. The limbic system includes the hippocampus. According to Olivia (2021) the limbic system is the part of the brain that is involved in behavioral and emotional responses, particularly in survival behaviors such as foraging, reproduction, and offspring, as well as the fight or flight response when faced with negative or stressful situations.

#### 1.6.2.2 Speaking Fluency in the 21<sup>st</sup> Century

In addition, Baily (2017) defines fluency as the use of language quickly and confidently, with limited doubts and unnatural pauses. Fluency is the flow and efficiency of expressing ideas, especially when speaking. Grammar errors may appear here and there in the description, but they should be easy to understand and presented in a way that demonstrates how well you handle the language.

It is best to combine them in different sequences while studying as developing fluency and accuracy is important. Fluency is often considered

a contradiction in terms of accuracy, but at the same time giving Students' ample opportunities to grow freely and confidently is the main goal of many practitioners (Hughes & Reed, 2016). The components of fluency are to maximize understanding and engagement, such as vocabulary, speech speed, and complexity of grammatical structures. Accuracy involves improving the vocabulary you learn in class and trying again with new terms to make them easier to recall. Try another word you know if you don't know the exact word. Listen to what you say and record it. Correct your errors and keep positive terms in your mind for future use. The capacity of a person to automatically read words in a text is referred to as automatic reading ability. Rate is speed in reading each text. Prosody refers to stress, intonation, and pauses (Hughes & Reed 2016).

Fiction is an excellent way to enter the emotional lives of a wide range of people. The speaking can take information or ideas from what has been read and develop new ideas from them at the creative level. According to Gorham (2009) the creative level stimulates the reader to new and original thinking. A better way might be to talk to the storyteller. Every human culture that has ever existed has required stories and narratives to provide meaning and coherence to its members' lives. They explain our position and purpose in the universe. Just a story can elicit emotions and draw the readers out of the narrow sphere of themselves and into interaction with others. Each person's emotional make-up is as unique and personal as a gene pattern, but people spend their entire lives trying to match them with others, and people draw strength and comfort from both the similarities and differences discovered. Learning at a creative level by using fictional stories will undoubtedly build a higher level of fluency.

A teacher makes thousands of decisions about curricular planning. According to the content view, the primary function of teaching is to enable students to access the content knowledge available in the given field. This is a sender-oriented perspective. The teacher chooses what the

students should know and ensures that it is presented to the student in a variety of formats (Rennison 2009).

According to Schumm and Schumm (1999), the experiences that young children have during the emergent reading stage should result in the following acquisitions. Story awareness is the recognition that a story has a beginning, middle, and end; that it has characters; and that the events in the story take place in specific times and places. Phonological awareness is the ability to detect similarities and differences in speech sounds, as well as alliteration and rhyme in speech; the ability to break spoken words down into separate sounds; and the ability to blend sounds into words.

When the spoken language is the focus of classroom activity, the teacher may have other goals. For example, a task may be completed to assist the student in becoming aware of, or practicing, some aspect of linguistic knowledge (whether a grammatical rule or application of a phonemic regularity to which they have been introduced), or to develop productive skills (such as rhythm, intonation, or vowel-to-vowel linking), or to raise awareness of some sociolinguistic or pragmatic point (for instance how to interrupt politely, respond to a compliment appropriately, or show that one has understood). In general, linguistic theory places little emphasis on the act of speaking (Hughes & Reed 2016).

### **1.6.2.3 Speech Intelligibility**

According to (Coppens-Hofmanet al. 2016) in natural communication situations, speech intelligibility is often treated as word or utterance recognition. A lot of elements impact the intelligibility of spoken communication. Above all, intelligibility is a collaborative effort between the speaker and the listener. Listener considerations include familiarity with the speaker and the topic of discussion. When communication is disorganized or understandable owing to speech problems, familiarity with the speaker is extremely beneficial. Furthermore, intelligibility varies with the nature of the spoken content (e.g., linguistic structure and duration of

utterance) as well as the communication environment (e.g., the quality of the acoustic transmission of the speech signal, the availability of visual cues from the speaker, and contextual support for the message to be transmitted).

### **1.6.3 Reading for Emotions**

In 2017, Ania Lian introduced Reading for Emotion, an innovative learning model. Students can explore reading in the literacy process by including emotions in the model of six emotion structures: focus, disturbance, dialogue, development, resolution, and moral. The development of predictive mechanisms encourages students to use textual details and clues to predict what will happen next in the story (Anil, 2014). Using this model, students can be self-reflective during the learning process. This approach encourages student-centered learning. Students require assistance that is focused on learning rather than teaching (Lian et al. 2017). Stages are as follows:

- 1) Focus is concerned with the text's main point. Focus will usually appear first in a canonical text structure, but this is not always the case.
- 2) The Disturbance stage introduces "complication," an event that causes an emotional shift. It does not have to be negative; it could be unexpected.
- 3) Dialogue is a section in which various perspectives on the Disturbance are presented.
- 4) The development stage discusses what happened because of the Disturbance.
- 5) Resolution refers to the way the problem was resolved.
- 6) Moral is a take-away message addressing the contrast between the Focus and the Disturbance.

The Reading for Emotion model combines emotions with its canonical text structure model, provoking students to discuss how texts develop as a sequence of emotions (Lian et al. 2017). This is clearly an experimental



model, and the current and future studies, which are currently underway, are to provide evidence of its value to literacy, including academic literacy.

## **1.7 The Methodology of Research**

The purpose of this research was to create a digital learning resource based on Technology Enhanced Learning Language compatible with the 21<sup>st</sup> century framework at a junior high school in Kuningan, West Java. This part of this chapter will discuss the research method and steps of the research, source and type of data, data collection techniques and instruments, and data analysis technique.

### **1.7.1 Research Method**

The research type was qualitative with the design of Research & Development (R&D). R&D research is a research process that is carried out while innovating to produce a product Taylor (2004). Alwasilah as cited in Nurhamida (2018) stated that there are some characteristics of qualitative research. First, the focus of the research is quality. Second, the aim is to give a description, findings, and understanding. Third, the setting is natural. Fourth, the sample is small and purposive. Fifth, the collections consist of a researcher as the main interview, documentation, and classroom observation.

#### **1.7.1.1 Steps in Developing Digital Resources**

The process of developing digital learning resources in this research followed the ADDIE (2004) model developed by Florida State University consisting of A (Analysis), D (Design), D (Development), I (Implementation), and E (Evaluation). The ADDIE Model is presented in this figure.

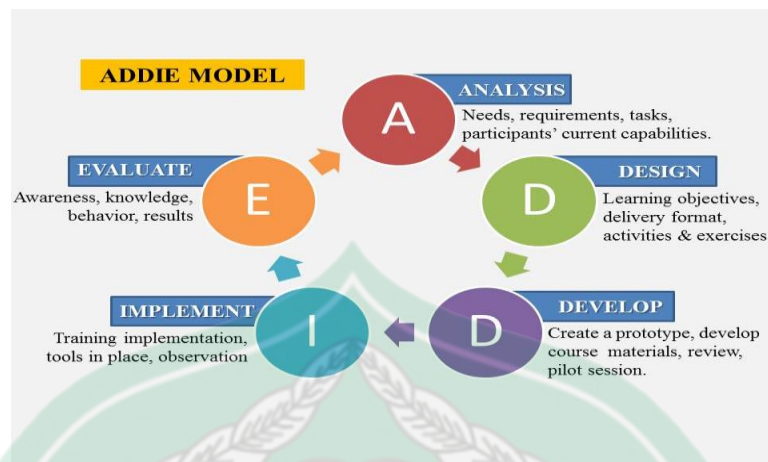


Figure 1.6 ADDIE Model

From the figure above, the steps in ADDIE models form a cycle. Here is the description of each of the stages in the model.

#### 1.7.1.1.1 Analysis (Needs Analysis)

The analysis was the first step in the R&D research. The purpose of need analysis was to find information about students' needs and interests during the teaching and learning process in class VII. Needs analysis is the first developed digital learning resource in developing digital learning resources for spoken fluency. Need analysis is from the results of several analyzes of the use of appropriate applications, analysis of diagnostic tests used according to the abilities of junior high school students, analysis of several spoken fluency levels adopted from Cambridge <https://www.cambridgeenglish.org/> and Oxford <https://www.conted.ox.ac.uk/about/find-your-language-level>, analysis of good stories <https://read.gov/aesop/001.html> using structure reading for emotion. From the results of the research, it can be concluded and used on the needs of students to help improve their spoken fluency in story-based development.

#### 1.7.1.1.2 Design

Design is the second stage in R&D. The researcher designed the process that will be carried out in the development of the prototype on

Monday, 24 January 2022. After doing some analyses according to the needs of the students, the researcher made several processes according to the design. The coarse grid was used as a guide in developing digital resources for speaking skills. Digital learning resources contain fluency level learning in which there are pedagogical principles including student-centered learning, exploratory learning, reflective learning, and inquiry learning.

#### **1.7.1.1.3 Development**

In this stage of development, researchers develop and design flowcharts and storyboards before developing the first draft of the media. This section is the development process of digital resources for students' speaking skills. The researcher certainly started the development process using Word press which was accessible. In this case, there are several devices that can be used. The main screen of the website contains an explanation of the project mission that will be developed by the researcher, and there are *home menu*, *how to use*, *learning materials*, and **profile resources**.

Furthermore, in the *how to use menu*, users can find out how to use this prototype. The goal is to make it easier for users to use the prototype that is being used, so that it is more focused in its use. In *how to use the diagnostic* test section, which is an application that can be accessed for free by users. The aim is to find out the fluency level of students and help improve students' speaking skills.

In the *learning materials* section, there is differentiated learning with the aim that students can choose the learning they will use. They can choose music, movies, and reading features. In this section, the material is suited to the abilities of class VII students. In the *assessment*, students can find out that they are already at the fluency level that they have mastered. The teacher can also assess from the fluency level rubric that has been developed and adapted for the assessment of junior high

school students. Finally, there is a *profile feature* that aims to find out profile resources and the supervisor from the prototype development.

#### **1.7.1.1.4 Implementation**

The implementation phase is carried out through activities using the prototype of digital learning resources that have been previously developed by researchers. This activity is carried out to find the material in the prototype of digital learning resources that can be understood and applied by students to practice speaking skills and increase their fluency level. This activity was carried out in grades VII on 2 and 8 March, 2022. Overall, in using the prototype of digital learning resources, students were able to take lessons and understand the material well and thoroughly, and they were able to complete several levels of fluency that had been developed in the prototype well.

#### **1.7.1.1.5 Evaluation**

The last step of R&D is evaluation. The researcher evaluated the prototype after the implementation process. At this stage, validation will be carried out through feedback provided by users (teachers and students) and revisions if necessary. The researchers conducted validation for teachers and students to get their responses on the digital learning resources as an evaluation material, which was carried out on 8 March 2022. The researcher took 2 English teachers in one of the junior high schools in Kuningan, West Java for teachers' validation. It is used to evaluate the prototype developed by the researcher. They were Mrs. M as the first respondent and Mr. A as the second respondent.

### **1.7.2 Source and Type of Data**

The type of this study was qualitative research. The researcher used data triangulation or combined some techniques of collecting data (Suryana, 2010). A data source is a source of collected data, such as a person, event, activity, document, file, or other item Maryadi, et al. (2011). The term "data source" refers to various types of information, such as events and real-world



objects. According to Sukandarmudi (2006), data sources that are qualitative in research are not subjective, thus they must provide quality.

Data sources used in qualitative research are:

#### **1.7.2.1 Primary Source**

The data obtained directly from a research site and observed the behavior of people are primary data. The primary sources used in this study are students and teachers.

#### **1.7.2.1 Secondary Source**

Secondary source is data from reading sources of journals, books, and articles.

#### **1.7.3 Instrument of the Research**

The instrument is an important thing in research. The function of an instrument is to collect the data of research. The instrument of descriptive qualitative research is the researcher herself (Nurhamida, 2018).

#### **1.7.4 The Technique of Data Collection**

- 1) The interview is a method of collecting data or information from someone spoken to get data that the researcher needs. The researcher interviewed the teacher who was directly involved in the learning process. The researcher made a joyful situation to avoid a strain from the informant when answering the question from the researcher. The details of the interview are attached in the appendix.
- 2) Documentation is one of the data collection techniques in qualitative research. In this research the teacher learned the learning process of the teacher when used in digital resources for speaking.
- 3) Classroom observation is a method of collecting data by watching the real application of something in the learning process. This method was conducted by the researcher as the last method of collecting data to check the validity from previous data and the teacher which got it from the previous method.

### **1.7.5 The Technique of Data Analysis**

The description of the data analysis technique by collecting data from several analyzes from students regarding pedagogic digital learning resources in development and data analysis techniques, namely the types of digital learning resources suitable for use in the related development process.

#### **1.7.5.1 Data on Pedagogical Principles of Digital Resources**

After conducting the series of methods for collecting the data, the researcher processed it to interpret the data and get the result of the research. The researcher analyzed the data from the interview. The results of the interview with students were transcribed into written form. The data that were taken to the researcher in the interviewing process were related to the student's pedagogical principle of digital resources. Then the researcher also interviewed the teacher about their way of developing digital resources.

While the researcher will take note during the interview, observe the classroom, and combine the result with another result of another instrument. The researcher also tries to gain the lesson plan of the teacher as document data to strengthen the teacher's statement about what the teachers said in the interview section. For the last, the researcher will combine all the results of each instrument and make the result of this research.

#### **1.7.5.2 Data of Types of Compatible Digital in English Speaking**

The data obtained in this study came in the form of a second interview. Descriptive statistics are used to analyze the data from interviews, observation, and documentation. The information is used to examine every aspect of digital resources for English Speaking.

### Research Timeline

No	Activities	Months/2022																											
		January				February				March				April				May				June							
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4				
1	Research proposal	█	█																										
2	Revision of research proposal			█	█																								
3	Collecting the data							█	█																				
4	Analyzing the data											█	█																
5	Interpreting the data using interview																												
6	Concluding the data																												
7	Finalization of research																												

Table 1.1 Research Timeline