

## The Application of the RADEC Learning Model to the Speaking Skills of V Grade Elementary School Students with Audiovisual Media on the Theme of Humans and the Environment

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**Abstract.** Communicating is used to build and maintain relationships with other people. The 2013 curriculum emphasizes the importance of 21st century skills, namely 4C: communication, collaboration, critical thinking and problem solving, and creativity and innovation. The Read, Answer, Discuss, Explain, and Create (RADEC) learning model is a learning model that is capable of encouraging students to develop 21st century skills and to master the learning concepts which are being learnt. The formulation of the research problem is how to apply the read answer discuss explain and create learning model to the speaking skills of fifth grade elementary school students using audiovisual media on the theme of humans and the environment. The purpose of the study is to find out how to apply the read answer discuss explain and create learning model to the speaking skills of fifth grade elementary school students with audiovisual media on the theme of humans and the environment. The research was conducted at Pasindangan Elementary School, Gunung Jati District, Cirebon Regency. The number of students was 13 people. The construction of the research results is analyzed using a qualitative descriptive approach. The data was obtained from rubric assessment and observation. The results of the study are based on six aspects of speaking, namely: pronunciation; 31%, language structure; 46%, vocabulary; 38%, fluency; 38%, the content of the conversation; 31%, understanding; 15%. Hence from these results, it is established that learning with the application of the RADEC model using audiovisual media on the theme of humans and the environment can improve students' speaking skills.

**Keywords:** RADEC Learning Model, Speaking Skills, Audiovisual.

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**INTRODUCTION** ~ Communicating is used to build and maintain relationships with other people. Communication is an instrument of human social interaction that is used to know and predict the attitudes of others, to recognize one's existence, to obtain education, to be happy, to avoid difficulties, and to achieve what one aspires to be. The 2013 curriculum emphasizes the importance of 21st century skills, namely 4C: communication, collaboration, critical thinking and problem solving, and creativity and innovation. One of these skills is 21st century communication which is marked by the occurrence of communication that can be done from

anywhere and anytime. (Rahman et al., 2019). The ability to speak according to Tarigan (1998, 15) in (Rahman, 2020) is the ability to pronounce spelling pronunciations or sentences to express, inform and channel ideas, plan, and feelings. The more knowledge a person has, the more vocabulary he has and this affects the person's speaking ability (Prawiyogi et al., 2020). So it can be concluded that a person's speaking ability is a reflection of thoughts and ideas.

Another opinion was expressed by Abidin, et al (2015) in (Prawiyogi et al., 2020) that speaking ability is the ability to pronounce articulation sounds or pronounce words to express, state,

convey thoughts, ideas, and feelings. According to Fazari (2012: 22-24) in (Prawiyogi et al., 2020) listeners receive information through a series of tones, stresses, and joint placement (junctures). Speaking ability can be said to be successful if 1) The pronunciation is clear, 2) The grammar is good, 3) The vocabulary is structured, 4) There is fluency in speaking (ease and accuracy in speaking), and 5) There is understanding of what is being spoken about. Thus, a person can be said to be able to speak in public if he masters the five indicators.

Language is not just a language, custom and culture as a language that grows traditionally and to communicate. In line with the opinion of Michelson & Dupuy in (Rahman, 2020) it explains that the skills that must be mastered in order to create multiliteracy learning are high reading comprehension skills, good writing skills, and speaking skills. In the 21st century, education has a major influence on human research. By improving education, it is expected that the Indonesian people can compete at the national and international levels. Providing competition guidance can indirectly raise awareness of the importance of education for the nation (Nurwaeni and Cahyani, 2020). Increased skills and competencies will help raise awareness of the importance of education for the nation. Speaking has an important role in giving birth to a new generation that is intelligent, creative, critical and cultured. Students who can master speaking skills, it will be easy to express their thoughts and feelings skillfully according to the problems and conditions while talking. Speaking skills can also create creative future generations in order that they can speak communicatively, clearly,

coherently, and easily understood. Speaking skills can also produce future generations who are critical because they have the ability to express ideas, thoughts, or feelings to others in a coherent and systematic manner (Rahman et al., 2019). After mastering speaking skills, students can cleverly express their thoughts and feelings according to the material and situation when speaking. According to Natalie & Crowe, speaking and listening skills are important components in achieving more precise and effective communication skills (Sudrajat, Sujana and Sopandi, 2020). Speaking skills are closely related to listening skills so that the information conveyed can be accepted by listeners. To become a speaker, one must have the perseverance to read and seek information so that they can develop their ideas, thus the knowledge that will be conveyed can be in accordance with the specified topic.

The success of learning to speak to the naked eye can be seen from the performance of students when practicing in front of the class. In one class, there will be many results that can be seen. There are some students who are fluent in conveying ideas, but there are not few students who still show signs of not being ready to appear in front of classmates. These signs include nervousness, cold sweats, standing stiffly, loss of speech, pale face, or lowering of the head. Students need intensive direction and guidance from the teacher. Students need speaking skills as part of language skills that will be applied in communication in everyday life. Therefore, teachers as facilitators and motivators in the learning process need to plan appropriate learning strategies in order that students acquire speaking skills optimally (Uliyani, 2016)

in (Rahman, 2020). Based on this explanation, in order for students to be able to express ideas and master the content of the conversation by using the RADEC model, it is expected that it can foster students' confidence.

The basic principle of this RADEC model is that all students have the capacity to learn independently and learn more about knowledge and skills (Sopandi, 2017). The steps of the RADEC model emphasize students to carry out various activities in learning such as reading, discussing, explaining, exploring, solving problems, and creating works. Learning that encourages students to do various activities within the learning process will give students a sense of ownership, responsibility, and involvement in education. Learning that uses the learning stages of the RADEC Model has been proven to be able to increase students' mastery of concepts (Sopandi and Handayani, 2019). In the implementation of the theme of humans and the environment with video media, it is one type of learning media that uses images, sounds, and some animations as illustrations of events from the material being studied, in the hope of providing a real picture of what students are learning (Rozie, 2013). Video is considered effective for improving students' conflict resolution skills, namely orientation skills, perception skills, emotional abilities, communication skills, creative thinking skills and critical thinking in finding conflict solutions constructively (Dewi, Maftuh and Wulan, 2021). However, it is still necessary to test how to improve students' speaking skills and understanding of concepts in the subject matter. Students' speaking skills in the learning process must be addressed

immediately so that the learning process can take place actively, not just one or two-way communication. The formulation of the problem in this problem is how to apply the read answer discuss explain and create learning model to the speaking skills of fifth grade elementary school students with audiovisual media on the theme of humans and the environment. With the aim of knowing how to apply the read answer discuss explain and create learning model to the speaking skills of fifth grade elementary school students with audiovisual media on the theme of humans and the environment. Improved speaking skills can also affect the social life of students at home and in the environment in the hope that students can express their ideas or thoughts.

## RESEARCH METHODS

The research method used in this study is a qualitative descriptive method. This study aims to find out how to apply the RADEC learning model to speaking skills using audiovisual media in fifth grade elementary school students with the theme of humans and the environment. This study involved 13 participants consisting of 6 male students, 7 female students. From Pasindangan Elementary School, Gunung Jati District, Cirebon Regency, West Java.

Measuring tools and instruments that can be used for speaking skills are observation sheets, tests, rubric assessments. An assessment rubric in which there are aspects of assessment and assessment criteria that are tailored to the characteristics of students' speaking skills based on Suhendar in (Cahyani and Hodijah, 2007:64). According to Creswell, 2010: 271 in

(Kuraesin et al., 2020) The data obtained from the results of the speaking ability test were collected, processed, and then analyzed using a qualitative descriptive approach. using a Likert scale (Nazir, 2003:338) and the results are used to draw research conclusions.

## RESULTS AND DISCUSSION

### The essence of speaking

According to Vygotsky in (Rahman, 2020), he explained that speaking skills develop in students' lives when preceded by listening skills. Speaking plays a central role in the learning process. Speaking skills are also categorized as mechanistic skills. Students can be skilled in speaking if they go through the process of practicing. Vygotsky's view of speech development is directly related to cognitive development. Talk is necessary for individuals to manage their thoughts. According to Vygotsky, every human being symbolizes and describes the world through speech so that speech is a symbolic system in communicating or speaking acts as a cultural tool (Santrock, 2013) in (Rahman, 2020). Based on the explanation above, speaking skills can be developed by training students in the learning process. The improvement of students' speaking skills is also marked by an increase in listening skills.

Speaking is a skill that is needed by every individual because through speaking each individual can communicate what he wants. Speaking skills are one of the four language skills that need to be instilled so that students' communication skills can be developed to the maximum. Speaking skills in this case are not just students' skills in conveying simple things in ordinary conversation, but also speaking skills in formal situations. Formal

speaking skills are not instantly obtained by individuals. According to Goh & Burns, 2012 good speaking skills are obtained through all forms of exams in the form of training and intensive direction or guidance (Rahman, 2020). Speaking skills that need to be developed are not only related to appearance, but also students' creativity to develop ideas during speaking practice.

Speaking is the ability to pronounce articulation sounds or words to express, state, and convey thoughts, ideas, and feelings. According to Tuan & Mai (2015) in (Rahman, 2020) The factors that influence speaking are the first, the appearance factor here does not mean how the speaker physically appears; however, the speaker needs to prepare the right topic of conversation, adjust the time, and the type of audience. Preparing the topic of conversation includes selecting the right language so the information can be conveyed accurately. The second affective factor is related to the mental state that must be prepared and exercised by the speaker. Affective factors greatly influence speaking skills, namely motivation, confidence, and enthusiasm. The third factor is listening skills as a factor that influences the development of speaking. Speakers need to understand various issues as a source of conversation topics. The fourth factor is feedback during the conversation. Listeners need feedback from the speaker in order to feel spoken to. Feedback is useful for motivating students so that their self-confidence can be developed. According to Mahardika, (2015) in (Rahman, 2020) self-confidence is one of the assets for students to speak fluently.

### RADEC Learning Model

The RADEC learning model is inspired by the scaffolding learning method. The scaffolding method is based on Vygotsky's theory, scaffolding is help, support for students from people who are more mature or more competent, especially teachers who allow the use of higher cognitive functions and allow the development of learning abilities so that there is a higher level of command of the shown material by giving solutions to more complicated questions (Mamin, 2008). Sopandi (2017) develops a learning model that takes maximum account of the typical conditions that exist in Indonesia. The learning model in question is the Read-Answer-Discuss-Explain-and Create learning model or abbreviated as RADEC. The RADEC model was inspired and developed from the learning model above, there were several adjustments and modifications so as to create a learning model that is deemed suitable and appropriate to be applied in learning in Indonesia, namely RADEC. According to (Sopandi, 2017) the RADEC (Read, Answer, Discuss, Explain, Create) learning model is a learning model that requires human resources to have high skills. As a learning model, RADEC has steps (syntax) in the implementation process

RADEC learning steps, as follows:

- a. Read (R): First, students read source books and other sources of information related to the material to be studied in class. The supports to this activity are learning resources in the form of textbooks or electronics, then students are given pre-learning questions. Questions whose answers are essential cognitive aspects that students must master after completing a particular subject matter. Questions from low order thinking (LOT) to high order thinking (HOT) skills. Pre-learning questions are given to students before face-to-face learning in class.
- b. Answer (A): Students answer pre-learning questions. This activity is carried out independently outside the classroom or at home based on the results of the learning activities in the reading,
- c. Read (R) stage before face-to-face activities in class formally.
- d. Discuss (D): Students study in groups (2-4 people) to discuss answers to pre-learning questions. At this stage, educators can identify the various needs of students.
- e. Explain (E): Presentation of an explanation of the material that has been discussed. Source persons can be selected from student representatives. In this case, the teacher acts to ensure that the student's explanation is correct and that other students can understand the explanation. Source persons can also be students but this is only done when it is confirmed that none of the students are capable of being source persons.
- f. Create (C): Students formulate creative ideas in the form of formulation of research questions, problem solving or projects that can be made and executed. Creative ideas are in accordance with the material that has been mastered and in accordance with everyday life. Educators are tasked with inspiring students to get creative ideas through providing examples of creativity results related to the



material that has been learnt or giving examples.

Through this RADEC model, it is expected that students have the desire and explore various teaching materials and sources of information so that students have the knowledge and understanding as expected. RADEC is a learning model that can improve students' reading comprehension and speaking skills. With the application of the RADEC learning model in the learning carried out, it is expected that students have mastery of concepts and students' speaking skills. Through the application of the RADEC learning model, students can be creative in creating new ideas, solving problems, and increasing creative work. All of that is expected to be achieved within the time allocation available in the curriculum.

#### **Audiovisual Media**

Video as an audio-visual medium that displays motion (Rahman, 2018). Video media is a collection of components or media that can display images and sound simultaneously. Video is a medium that can display image (visual) and audio (audio) elements simultaneously when communicating messages or information. Video is a technology that offers instructors a variety of sources of material for use in the classroom, Woottipong (2014: 201) in (Alivi and Suharyono, 2016). Video is one of the results of technology that offers teachers a variety of learning resources for use in the classroom.

The benefits of video media (Aqib, 2013: 51) are:

- a. Learning is more comprehensible and more interesting;
- b. The learning process has more interaction;
- c. Time and energy efficiency;

- d. Improving the quality of learning outcomes;
- e. Learning can be done anywhere and anytime;
- f. Fostering a positive learning attitude towards the learning process and material;
- g. Improving the role of teachers in a more positive and productive direction.

The advantages of video media (Rusman, 2012: 220) are:

- a. Videos can provide messages that can be received more evenly by students;
- b. Videos are great for explaining a process;
- c. Overcomes the limitations of space and time, is more realistic and can be repeated or paused as needed;
- d. Gives a deep impression that can influence student attitudes.

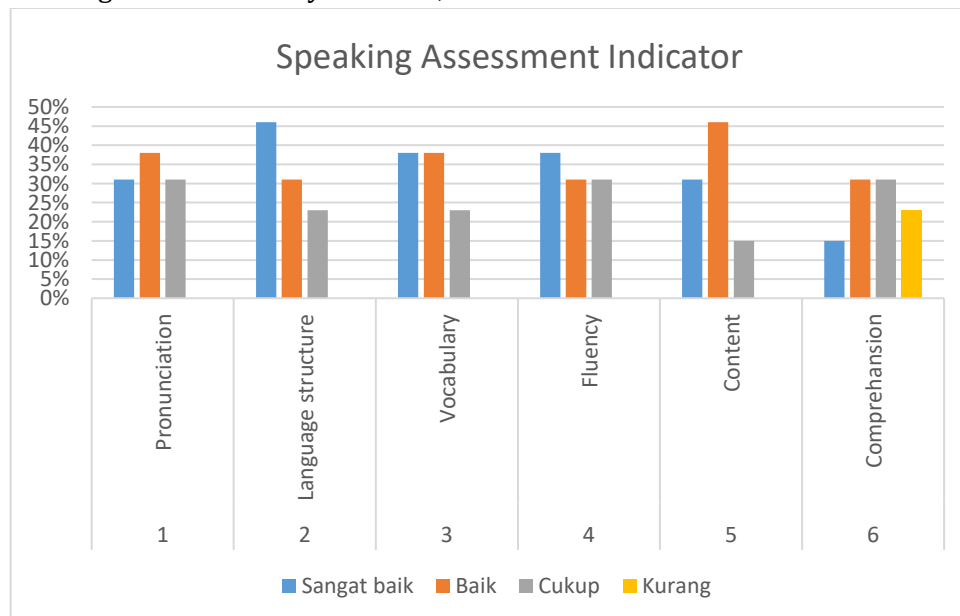
Video media is a collection of components or media that can display images and sound simultaneously. Video is a medium that can display image (visual) and audio (audio) elements simultaneously when conveying messages or information (Kuraesin et al., 2020). Video is one of the results of technology that offers teachers a variety of learning resources for use in the classroom. According to Hadi (2017) in (Dewi, Maftuh and Wulan, 2021) animated videos have advantages which include being fun for students, able to provide concrete information, and being able to present learning experiences that are impossible for students to get outside the school environment, such as learning in solving problems/conflicts, for example. These three advantages make videos considered effective for improving students' conflict resolution skills, namely orientation skills, perception skills,

emotional abilities, communication skills, creative thinking skills and critical thinking in finding conflict solutions constructively (Dewi, Maftuh and Wulan, 2021). Therefore, the use of video as a learning medium can improve each student's ability as well as provide concrete learning meanings, and present new learning experiences in improving students' speaking skills.

### 1) Results

The implementation of this research was carried out directly by the researcher. The research was conducted at Pasindangan Elementary School,

Gunung Jati District, Cirebon Regency. With the number of students of 13 people. Consisting of 6 male students and 7 female students. Based on Suhendar in (Cahyani and Hodijah, 2007:64), which suggests that in assessing a person's speaking ability there are at least six things that must be considered. The six things are: pronunciation; language structure; vocabulary; fluency; the content of the conversation; understanding. The following are the results of the data processing obtained during the study to improve speaking skills.



**Picture 1. Speaking Assesment Result**

Based on the data obtained, 30% of students experienced an increase in pronunciation, 45% of students experienced an increase in the use of language structures, 38% of students increased in vocabulary use, 38% of students' speaking fluency increased, 31% of students who could speak according to the topic, for understanding the topic of conversation, students reached 15%. Based on the observation

data, 81% of students can participate actively during lessons. After being given 100% motivation, students can answer questions verbally based on the readings that have been studied. For the work of making video recordings or sound recordings related to the theme of humans and the environment, the results show 38% very good, 46% good, 15% sufficient. Students show that they can achieve the assessed aspects. Hence from

the above results, it can be concluded that the effectiveness of learning by applying the RADEC learning model using audiovisual media on the theme of humans and the environment can improve students' speaking skills.

### CLOSING

The conclusion that can be drawn is that the RADEC learning model is effective in the implementation of learning with audiovisual media at Pasindangan Elementary School in class V. The results show that students have increased speaking skills on human and environmental themes.

### REFERENCES

- Alivi, J.S. and Suharyono, S. (2016) 'OBTAINING LISTENING COMPREHENSION BY USING VIDEO MATERIALS', *EXPOSURE: JOURNAL OF ENGLISH LANGUAGE AND LITERATURE EDUCATION*, 5(1), p. 14. doi:10.26618/ejpbiv5i1.811.
- Aqib, Z. (2013) *Models, Media, and Contextual (Innovative) Learning Strategies*. Bandung: Yrama Widya.
- Arikunto, S. (2006) *Qualitative Research Methods*. Jakarta: Earth Literacy.
- Cahyani, I. and Hodijah (2007) *Indonesian Language Ability in Elementary School*. Bandung: Upi Press.
- Dewi, S.M., Maftuh, B. and Wulan, E. (2021) 'The Effect of Animated Video Media on the Conflict Resolution Ability of Elementary School Students', 5(4), p. 4.
- Kuraesin, I. et al. (2020) 'Students' Speaking Skill Based on Video in Elementary School', 2, p. 8.
- Mamin, R. (2008) 'Application of Scaffolding Learning Methods on the Subject', p. 6.
- Nurwaeni, W. and Cahyani, I. (2020) 'Improved Speaking Skills through The Use of Models of Example Non Example in Students of Grade III Students Elementary School', 2, p. 12.
- Prawiyogi, A.G. et al. (2020) 'THE INFLUENCE OF THE SNOWBALL THROWING TYPE COOPERATIVE LEARNING MODEL ON THE SPEAKING ABILITY OF ELEMENTARY SCHOOL V CLASS STUDENTS', *JMIE (Journal of Madrasah Ibtidaiyah Education)*, 4(2), p. 272. doi:10.32934/jmie.v4i2.186.
- Rahman, et al (2020) *Listening & Speaking Theory and Practice*. Bandung: ALQAPRINT JATINANGOR.
- 'Rahman. (2018). 21st Century TEACHER SKILLS IN AUDIO VISUAL MEDIA PROFICIENCY VARIABLES.
- Rahman, R. et al. (2019) 'Elementary Education Literacy in the Era of Industrial Revolution 4.0', in *Proceedings of the Second Conference on Language, Literature, Education, and Culture (ICOLLITE 2018)*. *Proceedings of the Second Conference on Language, Literature, Education, and Culture (ICOLLITE 2018)*, Bandung, Indonesia: Atlantis Press. doi:10.2991/icollite-18.2019.41.
- Rusman (2012) *Computer-Based Learning and Learning Developing Professionalism of 21st Century Teachers*. Bandung: Alfabeta.



Sopandi, W. (2017) 'THE QUALITY IMPROVEMENT OF LEARNING PROCESSES AND ACHIEVEMENTS THROUGH THE READ-ANSWER-DISCUSS-EXPLAIN-AND CREATE LEARNING MODEL IMPLEMENTATION', p. 9.

Sopandi, W. and Handayani, H. (2019) 'The Impact of Workshop on Implementation of Read-Answer-Discuss-Explain-And-Crete (RADEC) Learning Model on Pedagogic Competency of Elementary School Teachers', in *Proceedings of the 1st International Conference on Innovation in Education (ICoIE 2018). Proceedings of the 1st International Conference on Innovation in Education (ICoIE 2018)*, Padang, Indonesia: Atlantis Press. doi:10.2991/icoie-18.2019.3.

Sudrajat, W.S., Sujana, A. and Sopandi, W. (2020) 'Primary School Storytelling Skills Based on Local Wisdom', 2, p. 6