

## R-A-D-E-C: A LEARNING LANGUAGE PERSPECTIVE IN ELEMENTARY SCHOOL

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**Abstract:** The goal of the study was to investigate how R-A-D-E-C step (Reading-Answer-Discuss-Explain-Create) by Sopandi integrated with language learning in Elementary Education. This study was qualitative descriptive research with observation and interview as an instrument. It explained the R-A-D-E-C Step and the four-language ability which are Listening, Reading, Speaking, and Writing. Based on this study, R-A-D-E-C learning model gives the children an opportunity to develop the language ability. R-A-D-E-C also optimizes the function of the whole language learning approach in Elementary School.

**Keywords:** *Elementary School, Language Learning Model, and RADEC.*

## 1. Introduction

At the school, student not only learning language but also used language to learning something. Learning to express ourselves and interpret the communicative intentions of others through the tool of language is one of the major challenges facing the developing child [1]. Charter describe that learning language have to be seen in a language-as-skill viewpoint. Children are not learning a theory of which sentence are allowed, but building up a set of procedures for understanding and producing language. The language-as-skill framework challenges children to learn in practical ways not a theoretical. In this perspective, children also learn language from practicing conversational interaction. In elementary school of Indonesia, a children language acquisitions need to be developed as a skill because most of them learning Bahasa as a second language. Therefore, a fit learning model to developed it very needed to meet student achievement in learning.

R-A-D-E-C learning model introducing by Sopandi in early year of 2014 in a High School [2]. He mentioned R-A-D-E-C to four steps. There are Reading-Answer, Discuss, Explain, and Create. He implemented R-A-D-E-C in a chemistry subject and succeed to improving student achievement in learning chemistry [3]. Two years later, Sopandi found that in elementary school, the R-A-D-E-C step in Problem-Based Learning (PBL) approach improved student achievement in learning [4]. Based on all this research, R-A-D-E-C gives an opportunity for student to improve their learning achievement.

## 2. Literature Review

### *Learning Language in Elementary School of Indonesia*

In Indonesia's elementary school curriculum structure [5], subjects consist of three group. There are (1) Group A subjects which content is developed by government and it must be given to all students, (2) group B subjects which content is developed by government and it can be supplemented/enriched with local/regional content and education unit contents as needed and it must be given to all students, and (3) group C subjects which substance is developed by government and it elective subjects of academic specialization and/or deepening of academic interests, choices of vocational specialization for students, especially secondary education level. Subject groups A and B (Required) are part of general education, namely education for all citizens, aiming at providing knowledge about the nation, attitudes as a nation, and the ability to develop the personal lives of students, communities, and nation.

The allocation of course time at elementary school are stated in learning hours per week. The duration of each learning hour is 35 minutes. The burden of studying in Class I, II, III, IV and V in one semester is at least 18 weeks and at most 20 weeks. The burden of studying in class VI in odd semester is at least 18 weeks and at most 20 weeks. The allocation of study time in class VI in even semester are at least 14 weeks and at most 16 weeks. The allocation of study time in one school year are at least 36 weeks and at most 40 weeks. In the structure of the elementary school curriculum, the number of class hours for each subject is relative because in elementary schools apply a thematic-integrated learning approach. Teachers can adjust it according to the needs of students in achieving the expected competencies. The education unit can add lesson hours per week according to the needs of the education unit. Based on the time location, Bahasa Subjects spend more course time than other subject. The Allocation of course time in a class per week can be seen as a Table 1 below.

**Table 1. The Elementary School Curriculums Structures**

Subject		Learning Hour per Week					
Group A Subject		I	II	III	IV	V	VI
1	Religion and Character Education	4	4	4	4	4	4
2	Pancasila and Citizenship Education	5	5	6	5	5	5
3	Bahasa Indonesia (Indonesia's Language/Bahasa)	8	9	10	7	7	7
4	Mathematics	5	6	6	6	6	6
5	Science	-	-	-	3	3	3

<b>6</b>	Social Study	-	-	-	3	3	3
<b>Group B Subject</b>							
<b>1</b>	Art, Culture and Crafts	4	4	4	5	5	5
<b>2</b>	Sports, Physical and Health Education	4	4	4	4	4	4
TOTAL		30	32	34			37
							37

Language is a system of communicating that offers countless possibilities for representation, expression, and construction of meaning. The Language in elementary teaching defined as “Listening, Speaking, Reading, and Writing skills.” These skills or competencies must be integrated across the curriculum. In whatever subject or grade, the medium of communication used by teacher will be language, in any one of its forms. Language not only learn as a theory but also as a vehicle to learn other subject matter. It means that the teacher must be teaching the language including its skills and competencies (Reading, Writing, Listening, Speaking) within the context of the contents area, such as social studies, science, mathematics, and others subject. Specifically, children will learn to use language as they use language to learn in another subject. The implication of these ways of learning is by using a project approach in the learning process.

#### **R-A-D-E-C Learning Model**

R-A-D-E-C is the learning model, that introduced by Sopiandi in 1994. RADEC is short for the learning process, which have four steps. There are Reading-Answer, Discuss, Explain, and Create. The steps are described below. Sopandi (2017) described R-A-D-E-C as following explanations.

The first step is *Reading-Answer*. In this step, student explore their knowledge by reading information, which has related with the themes/topic/subject matter, from various sources. The sources can be provided by teacher or teacher gives some clues how to find the information. It can be print or non-print (digital) information. They search information independently but also allowed to asking someone else including their peer. Besides the clues, teacher also provide student a list of *pre-learning question's*, which have to be answer after they reading the information. The questions should be required vary level thinking, from low level thinking (LOT) to high level thinking (HOT). From just memorizing information to formulating examples of productive questions, formulating problems, and project plans that can be made that are in accordance with the material being studied. The teacher also looks at the work of the student's work on the Student Worksheet. Based on this data the teacher can provide appropriate assistance for each student. Most likely the teacher will find out about the needs of students who are different from each other.

The second step is *Discuss*. After Reading and Answer the questions, the next step is discussing what have read and answered. The discuss is not in a class. At this step, students discuss the answers of the questions they made independently in groups before the class meeting. Teacher motivates students who are successful in doing certain tasks from worksheet (Lembar Kerja Siswa/LKS) to guide and help their friends who have not mastered on it. Students who have not mastered are motivated by the teacher to ask and discuss with their friends. This step can also be filled with activities to discuss of their work with other work in one group. Thus, at this step the teacher ensuring that communication occurs between students in order to obtain the correct answer. By looking at the activities of the whole group of teachers it can also determine which groups or who have mastered the concepts. Based on the results of this observation, the teacher can determine about who can be a presenter in the next step, (Explain (E)). In addition to ensuring communication between students in each group and identifying a presenter from students for the next step, at this step the teacher can also identify the part of the task where all students or groups have difficulties. The difficulty will then be explained by the teacher classically for all groups in the explain (E) step. The discussion step (D) ends when students finish discussing their assignments, or students can no longer continue their work due to difficulties.

The third step is *Explain*. In this step, classical presentation activities are carried out. The material presented covered all indicators of learning the cognitive aspects that had been formulated in the learning objectives. The sequence of presentations is adjusted to the order of the formulation of these indicators in the learning plan. At this step the presenter asked to explain the essential concepts they have mastered in front of the class. Teacher ensures that what the student describes is scientifically correct and all students understand the explanation. In this activity the teacher also encouraged other students to ask questions, refute, or add to what was presented by their friends from the other groups. At this step can also be used as an opportunity for teachers to explain the essential concepts that all students cannot master based on the results of observations at the discussion step (D). When explaining this section, the teacher might give an explanation in the form of lectures, demonstrations or other things that are expected to overcome the difficulties of all students. The last step is *Create*. In this step, Teacher inspires students to learn how to use the knowledge for creative ideas or thoughts. Creative thinking delivered by a productive question, problems in the surrounding environment that require solutions, or thoughts to make other works. As previously explained, the task of creating creative ideas or thoughts is already listed in the pre-learning question. So, at this step just discuss it classically. Because students have previously been assigned to work on it independently and also have discussed it in step D. If the teacher finds all students have difficulty to initiated creative ideas, the teacher needs to inspire students. The source of inspiration provided by the teacher can be in the form of examples of research, problem solving or other work that has been done by people. As another inspiration for students, teachers can provide examples of creative plans that have never been realized by themselves or others. In a situation where students do not have their own ideas then they can work on the teacher's idea. This phase that stands out is the step of training students to think, cooperate, communicate from starting to find creative ideas, to take ideas that will realized, planned, implemented, reported and presented the results of the realization of creative ideas in various forms.

### 3. Methodology

This study is intended to describe the engagement between R-A-D-E-C with learning language in elementary school. Therefore, this study using explorative research Maleong [6]. Using the explorative research is conducted focus to discovery of ideas and insights about R-A-D-E-C learning model of learning process in developing language skill. This research was conducted in Surialaya, Tasikmalaya City, West Java, Indonesia. Data obtained from the results of the final evaluation was analyzed qualitatively by breaking, compare, categorize and develop a systematic manner. The development of research instruments in this research are observation, interview and documentation study.

### 4. Discussion

Language skills in elementary school thought in four competencies, which are listening, reading, speaking, and writing. These competencies were often viewed as separate subjects. Today, in elementary education, this paradigm changes into an integrated learning with whole language approach. It means that teacher should create a rich context to enhance the development of all competencies simultaneously. Students should have many experiences all competencies across curriculum.

The integrated and whole language approach to teaching language-initiated student inquiry to the topic. They asked question, identify and solve the problems, use research and study skill, and discover the interconnectedness of subject matter [7]. This learning approach also involve with the project approach to gives student opportunities to collaborative and developed values with peer and others [8,9,10]. As R-A-D-E-C implementation in Tasikmalaya, Indonesia Elementary school, all the inquiry activities were accrued. In addition, the student also gives a creative thought about how to plant the trees after they read the text about Healthy Environment. It means that, thinking skills are closely related to language development [11,12], and it is highly possible that creative thinking has a certain connection with reading and writing abilities [13].

Reading-Answer as a first steps of R-A-D-E-C, often require critical, analytical, and self-expressive abilities, as well as a sense of self-discovery. By the Discuss and Explain steps, student practice to thinking, remembering, reasoning, feeling curious, exploring, and freedom of expression.

In the Create steps, Teacher encourage student to have many possibilities to solve one problem. There might be a failure conception in explaining to creating something, but teacher do not give up for this. The naïve conception can play productive role in learning as a raw material to shape the student scientific knowledge [14,15]. By R-A-D-E-C learning model, student practice language skill and fostering their critical and creative thinking.

## 5. Conclusion

4C (Critical thinking, Creative, Collaborative, and Communications skill) as a 21<sup>st</sup> Century learning skill has been adopted in Indonesian Elementary School by using R-A-D-E-C learning model. By this learning model, the children language development optimized and language as a skill point of view are implemented. R-A-D-E-C as a learning model connected children in elementary school of Indonesia in understanding and producing language. On surface, in the R-A-D-E-C steps involves a language skill. *Reading-Answer* step connected with Reading skill. *Discuss* step connected with Listening and Speaking skill. *Explain* connected with speaking skill, and *Create* could be connected with writing and speaking skill as a language product to create. R-A-D-E-C also gives the opportunity for children to thinking creatively and critically. Therefore, a further R-A-D-E-C Research to improve critical and creative thinking skill should be analyzing more deeply.

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