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Radec Learning and Literacy: Enhancing Students' Literacy through the Development of Radec Learning Model at Madrasah

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ABSTRACT

Literacy is one of the important things to be cultivated from an early age, because with literacy the window of the world will open. This research was an effort to foster literacy from an early age through the development of the Radec Learning model at Madrasah Ibtidaiyah. The purpose of this research was to produce a product in the form of developing a learning model using the Radec Learning model. The method used was Research and Development (RnD) to produce certain products and test the effectiveness of these products by adapting the McKenny Model as a stage consisting of preliminary research, prototyping phase, and assessment stage. The results of this study included: 1) The development of the Radec Learning model was significantly proven to be able to develop students' learning outcomes at MIN 1 Pasaman; 2) This Radec Learning model was declared valid after being validated by the validator; and 3) There was a practical level of practical application of the Radec Learning model, with evidence of its development and increasing student creativity in learning. Thus, the application of the Radec Learning model of learning could develop literacy from an early age and as an alternative in the selection of learning models that would be applied in Madrasah Ibtidaiyah.

Keywords: *Radec Learning Model, Radec Learning, Students Literacy*

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INTRODUCTION

The Ministry of Education and Culture published Ministerial Regulation number 23 of 2013 to launch a literacy movement at schools, as literacy has become one of the most talked-about issues of the twenty-first century. Children who receive literacy instruction from an early age will benefit much from it and will be more likely to become lifelong learners (Bruns & Pierce, 2007; Ismaniati, C., & Iskhamdhanah, B. 2023; Rulviana, V., et al., 2023). Perry et.al. (2010), based on PISA research, found that a child's motivation will increase when they have strong reading skills because they will feel better about themselves.

Data from surveys on literacy reveal that Indonesia is ranked below average across a range of literacy levels and categories. According to the 2012 Progress International Reading Literacy Study test results, Indonesian primary school students

still possess low reading proficiency, which was showed by the rank of 44th out of 45 countries in the survey (Patria, 2019). Furthermore, Indonesia was placed 64th out of 65 countries in a survey carried out by the Programme for International Student Assessment (PISA) in 2012 (Prakoso et al., 2019).

Madrasah Ibtidaiyah (SD/MI), or elementary schools, is one of the educational institutions that the literacy movement centers around. It is the initial foundation to be used as a basis for teaching values and as a gauge of students' progress to the next level. Based on observations conducted at several Madrasah Ibtidaiyah in West Sumatra, it was found that several MINs attempted to carry out literacy campaigns. Nonetheless, it was shown that students were less attentive when completing literacy-related tasks and that the literacy movements had not been successful. It was discovered that the learning model utilized to promote literacy was still not optimal. This theoretically contradicts the concept of education taught by Islam (Muliati & Rezi, 2018; Deda, Y. N., et al., 2023; Ritonga, 2023).

Then, research revealed that learning problems typically surfaced when instructional procedures failed to stimulate students' interest as well as to implement effective learning models that may enhance students' social skills. as a result, students lost their motivation in participating in literacy-related activities. Furthermore, student was unable to respond to questions on reading texts. There were moments when it was said that students had trouble identifying the main idea of the reading passage. It was therefore possible to conclude that the literacy exercises conducted during the learning process had not been carried out efficiently and had not produced the best possible outcomes.

Developing an appropriate learning model was one of the solutions for the learning problems mentioned above. In this study, The RADEC learning model was designed as an effort to raise students' achievement in the necessary 21st century competencies and skills while also improving the quality of instruction, particularly in literacy. This model had been modified to fit the circumstances in Indonesia. Numerous learning processes in this paradigm might motivate students to engage in active and fruitful learning.

As a learning model, RADEC Learning undoubtedly has several benefits but also some drawbacks. However, compared to its drawbacks and shortcomings, its benefits outweigh them by a wide margin. One of benefits that the RADEC Learning model has been that it promotes students' life skills, particularly those that are relevant to the twenty-first century skills. Since the 21st century is perceived as a time of intense life competition, competent individuals are in great demand. The RADEC Learning model includes a number of indicators of skills or competencies that students need to possess in order to meet the demands of 21st century learning, such as conceptual understanding, critical thinking, collaboration and communication, and creative thinking (Hadano et al., 2019; Lestari et al., 2021, 2022;Morocco, et al., 2008). Another benefit of the RADEC Learning Model is that it can assist students in developing their character, enhance their conceptual understanding, and motivate them to acquire the competencies necessary to succeed in the competitive and competency-driven 21st century.

Furthermore, there are undoubtedly a few syntax or processes that define RADEC Learning as a learning model, and Read, Answer, Discuss, Explain, and Create comprise the RADEC Learning syntax (Pratama et al., 2019; Rohmawatiningsih et al., 2021; Sukardi et al., 2021; Sopandi, 2017). Read, Answer, Discuss, Explain, and Create (RADEC) is an acronym for the RADEC learning model, which is sometimes referred

to as RADEC Learning. This model, which is still relatively new and is regarded as one of the innovative learning sections, has been the subject of numerous research by educators and observers. For example, Pratama et.al. (2020) conducted a study on socialization and workshop on the implementation of the RADEC learning model for primary and secondary education teachers. This study found that teachers in elementary schools and Madrasah Ibtidaiyah were not acquainted with all learning models. Most of the teachers, in fact, were more likely to employ traditional teaching techniques like lecturing and the question-and-answer format because they were unaware of creative learning approaches. Teachers are more likely to use innovative learning models like task-based learning or cooperative learning, which are somewhat more well-known to them, because they often receive training and suggestions from the Ministry of Education and Culture. The learning models that align with the 2013 curriculum and are suggested by the Ministry of Education and Culture are typically the only ones that instructors are familiar with. Though they are familiar with the creative learning models, Sopandi (2019) discovered in his study that teachers appeared to lack an understanding of their syntax. The infrequent application of the learning model during the learning process is the reason for their ignorance of the learning syntax (Setiawan et al., 2019).

Additionally, Jusuf et al. (2019) go into greater detail to clarify that while studies and research have been conducted on innovative constructive learning to increase the significance of learning and encourage students to participate actively and creatively in the process, it sometimes fails to turn into an improvement in the standard of education in Indonesia. This is due to the new learning models' improper use, and instructors continue to face several difficulties when incorporating these models—like RADEC Learning—into the teaching and learning process.

The research results from Rahman et.al. (2019) indicates that there is still a need for further studies and research regarding innovative constructive learning models, considering that in the 21st century education is increasingly challenging. Life demands and the influence of globalization will have a tremendous influence on the students' development. For the learning process to answer the challenges and the needs of the 21st century, constructive and innovative learning models are required in accordance with current developments and the needs of the students. Research on RADEC Learning also inspired Dadan Setiawan, Tatat Hartati, and Wahyu Sopandi to study this model in further detail. According to the findings of their study entitled "Students' Ability in Writing Explanatory Texts at Grade 5 Elementary School through the RADEC Learning Model," students' ability in writing explanatory text were initially classified as poor. This study showed that students' ability significantly increased when the RADEC Learning model was implemented in the learning process; pre-test results showed an average score of 48.1, while post-test findings showed an average score of 68.9. Furthermore, research on students' capacity to compose explanatory texts using the RADEC Learning model conducted by Dadan Setiawan et al. revealed that RADEC Learning model considerably improved students' writing skills. This finding is consistent with the findings of a study conducted by Akkaya and Kirmizi (2010), which was published in the Procedia Social and Behavior Journal under the title "Relationship between Attitude to Reading and Time Allotted to Writing in Primary Education". They suggested that RADEC Learning had a beneficial effect on students' comprehension as well as their ability to write because writing was a component of higher-level thinking exercises involving complex systems. Strong reading

comprehension abilities must go hand in hand with proficient writing abilities. For this reason, students need to read a lot if they wish to write successfully.

In addition, experimental research on RADEC Learning in Science was carried out by Handayani et.al. (2019). According to their research, there was a substantial improvement in students' conceptual knowledge, particularly in explaining natural events, which was found to be facilitated by the RADEC Learning model. Next, according to Alexander, De Palma, and Ringer (2016), students who have an excellent understanding of the reading materials they study and read will be better able to articulate their ideas and opinions in writing. They continue by saying that avid readers will have a wider knowledge base, making it easier for them to express their ideas in writing. It is believed that the RADEC learning approach inspires students to participate in literacy-related activities.

RADEC Learning has a significant influence on the learning process and results as a learning model with all its benefits and drawbacks (Alimatus et al., 2023; Penelitian et al., 2021; Suryana et al., 2021; Yanuar et al., 2022). In addition to promoting constructive and active learning, this learning model has the potential to improve students' conceptual understanding of the material they are studying. Handayani et.al. (2019) demonstrated a deeper conceptual knowledge of the subject utilizing the RADEC Learning model in their research, which was published in the proceedings of the International Conference on Innovation in Education (ICoIE).

The research design employed in this study was the aspect that distinguished this study from the research previously mentioned. It was described earlier that previous studies examined how the RADEC Learning model affected the learning process and sought to reveal the results of disseminating this model to elementary school teachers. In the meantime, this study utilized a development research method, which is expected to produce a learning model. This new learning model integrated RADIC Learning with the character education program in Madrasah Ibtidaiyah. In other words, there would be one aspect integrated into the RADIC Learning model, namely character education. Subsequently, the product would be examined through multiple testing such as a validity test by experts, practicality test by teachers, and effectiveness test for students by conducting field trial.

The new learning model, the RADEC Learning, which was integrated with character education, was adapted to the Indonesian context. It was hoped that the RADEC Learning model could improve the quality of learning process and outcomes based on the Indonesian situation and conditions. The RADEC Learning model, which was integrated with character education, was seen as an answer to educational problems, especially about learning models and methods to answer the challenges of the 21st century

METHOD

This study utilized a development research design. Sugiyono (2012) states that development research is used to produce certain products and test the effectiveness of these products. The model of development used in this research was adapted from the McKenny Model, which consisted of three main stages, namely: (1) preliminary research (preliminary analysis), (2) prototyping phase (planning phase), and (3) assessment stage (Plomp.T & Nieveen, 2007). This development model was selected to adapt the characteristics encountered in the field. In addition, this model was chosen due to several advantages. This model was considered to be more appropriate for developing learning tools because its description was complete and systematic. Then,

in this model of development, the materials being were revised independently and initially consulted with experts before being tested in the field. Lastly, there was a person-to-person and small group evaluation.

Product testing seeks to gather information that will help determine the product's weaknesses, shortcomings, level of validity, practicality, and effectiveness. According to Nieveen (1999), in order to create a feasible product that can demonstrate both its benefits and drawbacks, a product evaluation must be completed. Furthermore, Nieveen (1999) put forth four broad standards for a high-quality product (intervention): 1) the product's elements must be grounded in the state of knowledge (content validity); 2) every element must be consistent with the others (construct validity); 3) the product must be user-friendly (practical); and 4) it must produce the intended outcomes (effective).

After that, the data generated from the trial were in the form of a product assessment, which was collected through evaluation instruments of the integrated learning model At this point, two different kinds of data were used: qualitative and quantitative data. While qualitative data were gathered from discussions, observations, interviews with teachers or students, and field notes, quantitative data were obtained from the results of questionnaires, observation sheets, and observations of the students. In order to collect the data, researchers employed validation sheets, observation sheets, interview guidelines, assessment sheets, student response questionnaires, and evaluation sheets as the research instruments.

The validity of this teaching material was examined through an expert judgment process, in which the opinions of the validators/experts were sought regarding the model being developed. The validation included construct validity and content validity. Construct validity is defined as the suitability of the components of the teaching materials with the elements that had been determined in the model development. On the other hand, content validity implies whether the teaching materials being developed adhered to the predetermined learning objectives and components. Following the procedures taken from Muliadi et.al. (2019), the average score was calculated using the following formula to interpret the findings of the validator's assessment of the learning tools.

$$R = \frac{\sum_{i=1}^{n} V_i}{n}$$

R = the average score of the validators' assessment
V_i = score from the the ith validator
n = number of validators

The degree to which the learning model might be easily applied and comprehended in practice provided the basis for determining practicality values. In this study, the simplicity of understanding and implementing this model was evaluated by teachers and students while practitioners evaluated its practicality, and observers evaluated how well this learning model was implemented in the learning process. The practical analysis was completed using procedures adapted from Creswell (2017). Specifically, the average score was calculated using the following formula:

$$R = \frac{\sum_{i=1}^{n} V_i}{n}$$

R = the average score of the validators' assessment
V_i = score from the the ith validator
N = number of validators

Finally, the effectiveness of the integrated RADEC Learning model was examined based on the findings of the student activity observations. These students' evaluations were obtained from the results of previously approved observation sheets

RESULTS AND DISCUSSION

1. Needs Analysis

The needs analysis was initiated the analysis of problems found in the field as in the following findings:

a. The learning process placed a strong emphasis on content mastery and paid little attention to students' interests. It was believed that education was not fun since the teacher failed to implement a suitable learning model to meet the needs and preferences of the students. Additionally, this learning approach did not adjust to the social changes that took place in the students' environment.
b. The learning performed by teachers at school tended to being passive and rigid; as a result, students were demotivated when learning.
c. The government had attempted to encourage learning by, for example, offering various trainings, so that the curriculum creation and innovations in learning made the learning itself a priority. However, because teachers continued to prioritize students' learning outcomes through material mastery as a measure of learning success, the innovation had not been widely applied in school instruction.
d. Students were taught that a variety of topics related to science, technology, the social life, and the environment might become a source of learning, but they were not encouraged to develop an interest in observing and investigating their immediate surroundings. Students were not provided with guidance on how to approach the topic of the environment's significance as a learning resource. Although it was taught to them as a fundamental social skill, students were not taught how to apply the knowledge they learned or how to enjoy these activities.
e. It was discovered that the way the students learned at school was typically defined by the the teachers; without paying attention to the students' preferences, the teachers would implement their plans, and students were expected to follow them. As a result, students did not like the lesson and did not feel joyful to learn, and they felt uncomfortable and did not appreciate the learning process. There was little doubt that all of this had an effect on the students' ability and the learning process.
f. Technically, teachers typically focused solely on completing curriculum objectives. Since the ability to master as much content as possible was generally seen as the measure of a successful learning process, students were only allowed to memorize lessons during exams.

The RADEC Learning model's indicators did not yet adequately reflect the completion of its learning stages. The ABCD (audience, behavior, condition, and degree) – the primary prerequisite for a successful learning goal – was not yet included in the developed learning objectives. Moreover, the elements of RADEC Learning were not yet reflected in the learning materials. The learning activities' stages were also overly simplified, which prevented them from being properly arranged in accordance with the learning process' stages.

It was suggested by the previously mentioned findings that the lesson plan (RPP) under development needed to be updated, expanded upon, and finished in accordance with the requirements of the learning process as outlined in the RADEC Learning model. To align with the learning stages of the RADEC Learning model, the developed indicators had to be adjusted. The instructional materials, in addition to the lesson plan (RPP), also needed to be examined for students to comprehend the reading contents more easily and thoroughly. The components of the RADEC Learning Model in the students' learning materials also required to be taken into account. In general, most of the examined instructional materials did not completely align with students' comprehension.

The analysis's findings led to the conclusion that the students' instructional materials lacked any RADEC Learning model components. In other words, the elements of RADEC Learning model were not demonstrated by the examples provided. Therefore, it was possible to draw the conclusion that the learning process still needed a number of adjustments and additional development and had not been effectively enhanced. The RADEC Learning paradigm needs to be added to the way the current learning materials were presented.

The curriculum analysis process, which examined the Core Competencies (KI) and Basic Competencies (KD), came next. Subsequently, several concepts that required additional analysis in relation to the material being developed were produced by the outcomes of the KI and KD analysis. Various assignments that students had to finish in order to meet the predetermined KI and KD then needed to be examined. It was practically necessary for students' experiences to be developed in order to support learning activities. This can be accomplished by actively integrating students in the content or learning materials in order to fully grasp them using the RADEC Learning paradigm. Learning meant doing, and achieving specific experiences in accordance with predetermined objectives was undoubtedly a straightforward example of the learning concept.

The age range of 11 to 12 years was used to define the students in grade VI of Madrasah Ibtidaiyah Negeri (MIN) 1 Pasaman. This age marked the shift from childhood to the early stages of adolescent, during which the earlier stage was still predominant. throughout this time, individuals may experience extremely erratic internal upheavals. Curiosity also started to grow throughout this time, and students frequently desired to explore new things. It was also explained that during this time, a tendency toward ambivalence between the need for parental direction and support and the freedom from dominance, as well as between the desires to be alone and to interact with plenty of people, started to manifest Another characteristic was the willingness to compare rules, ethical values, or norms with the reality that occurs in adult life. Students' personality had begun to display a pattern, although one that was still unintegrated, even though their emotions and expressions were still inconsistent.
Subsequently, in-person interviews were carried out to corroborate the information gathered from MIN 1 Pasaman students in grade VI. Because they were conducted without following interview guidelines, the interviews were unstructured. Based on the students' responses, the interviews were modified and new questions were posed so that researchers could gather more data.

2. Planning Stage

In order to enable RPP to define the stages that were methodically structured, the indicators applied in each lesson were declared based on the integrated RADEC

Learning model. These steps made a significant difference in the way the students understood the content. When teachers and students used the created lesson plans in the classroom, they were more appreciative of them. It might help improve knowledge of the RADEC Learning paradigm.

The following steps were involved when designing the RPP: (a) filling out the identity column; (b) calculating the amount of time needed for learning; (c) figuring out the basic competencies and competency standards, as well as the indicators to be used, in the prepared syllabus; (d) formulating learning objectives based on the basic competencies and competency standards, as well as predetermined indicators; (e) identifying standard materials to be achieved based on the existing main/learning material stated in the syllabus; (f) determining learning methods; (g) creating learning stages including initial activities, core activities, and final activities; (h) calculating the learning resources; and (i) creating assessment criteria for observation sheets, sample questions, and scoring techniques.

The procedures mentioned above were described one by one based on the design that had been completed for each component. The achievement students hoped to accomplish following the learning process were outlined in the learning objectives. The guidelines for creating effective learning objectives were followed when organizing the objectives, one of which was that they should include the ABCD (Audience, Behavior, Condition, and Degree). Learning techniques, methods, and approaches refer to ways of carrying out a successful learning process that lead to the desired outcomes. There were various methods to learn, such as practice, question-and-answer, and lecturing sessions while the strategies comprised independent, organized, and face-to-face. Strategies. In the meantime, the syntax of RADEC Learning Model comprised a number of learning phases that teachers could readily acquire and comprehend because the model's name represented those phases. Five steps made up the syntax of RADEC Learning model according to Sopandi (2017) included reading, responding, debating, elaborating, and producing output.

3. Development Stage

The development stage involved validating learning tools and product testing in order to see the practicality and effectiveness of the learning model being developed. Validity testing was employed when experts and practitioners validated the learning materials, and those materials were then revised in response to the experts' feedback. Five persons who were thought to be experts in the subject evaluated this instrument; they were:

No	Names	Expertise
1	Prof. Jalius Jama, M.Ed., Ph.D	Education
2	Dr. Hendrizal, M.Pd.	Education
3	Dr. Jenriadi, M.Pd	Language
4	Ermiyati, S.Pd.	Practitioner
5	Hermidawati, S.Pd	Practitioner

RADEC Learning model which was integrated with characters developed in this study was only declared valid after going through some revisions. Practicality and effectiveness revisions meant testing the learning model that had been developed in

the classroom. The series of activities were taken following the developments carried out until they were declared valid, and limited trials were carried out.

4. The Validity, Practicality, dan Effectivness of the Model

a. The Validity

Following the completion of the RADEC Learning model's design in this study, educational experts and practitioners validated this model in accordance with their areas of expertise. Two practitioner validators and three expert validators were present as validators in this study. The learning resources were updated in light of the conclusions of the discussions and recommendations made by validators. Revisions were made twice, mostly pertaining to the language and content editing of the learning resources that were being designed. The learning resources were enhanced with the help of the revision's outcomes. To determine whether the learning model needed to be revised, the validators' suggestions were assessed and the outcomes of the conversations were taken into account. These results indicated a number of factors and components that should have been taken into account and adjusted in order to create a valid model.

Based on the results of the RPP validation assessed by experts as displayed in the table, it was revealed that the average validation score was 3.51 with a very valid category. Based on the evaluated elements, it was discovered that the following scores were obtained: 3.60 for identity inclusion; 3.60 for learning objective formulation; 3.60 for learning material selection; 3.50 for methods and specifics of learning steps; 3.40 for learning resource selection; and 3.40 for assessment. Furthermore, results of RPP validation performed by education practitioners obtained an average score of 3.53 with a very valid category. An overview of each aspect being assessed included: (1) inclusion of identity for 3.60, (2) formulation of learning objectives for 3.60, (3) selection of learning materials for 3.50, (4) methods and details of learning steps for 3.50, (5) selection of learning resources for 3.50, and (6) assessment results for 3.50.

It was suggested by the explanation of the two evaluations above that the RPP was feasible for use as a guide to implement the learning process using the integrated RADEC Learning model. The stages could serve as a roadmap for teachers in helping students complete different learning tasks.

b. The Practicality

The degree of practicality in the application of learning resources that had been deemed valid was then assessed. Class VI of MIN 1 Pasaman was selected as the site of the trial. To be more precise, the purpose of the practicality test was to determine how practical the lesson plans and the integrated RADEC learning model would be. Then, in order to assess the practicality of the syllabus being prepared, several interviews were undertaken with teachers who had used this syllabus. Filling out the observation sheet that was provided allowed for the purpose of observing the RPP's implementation, allowing one to assess the practicality of the plan. Meanwhile, the practicality of teaching materials was carried out by filling in the teacher response and student responses questionnaires, which was also reinforced with direct interviews with the teachers after learning was completed.

The next step was testing the implementation of the lesson plan designed for the RADEC Learning model which was integrated with characters. This was conducted in class VI of MIN 1 Pasaman through an observation using the observation instrument for the implementation of RPP as seen in the attachment. The results of observations obtained that the average value was in the very practical category with the score of

3.50. The findings demonstrated that teachers believed the RADEC Learning model, which was developed in this study, was very beneficial for learning in general. In the context of education in general and the learning process in particular, this learning model was seen as a novel innovation.

After that, data obtained from the instruments provided in the attachment was derived from students' answers regarding the practicality of the RADEC Learning model. Both the responses from the students and their results were available in the attachment. The analytical findings from the sixth-grade students in MIN 1 Pasaman, who studied following the RADEC Learning model, came to the conclusion that, overall, students were inspired and assisted in grasping what they were learning; also, their character and motivation in literacy rose. Additionally, because it was different from what they had previously learned, students felt that they had obtained fresh experiences in learning

c. The Effectiveness RADEC Learning model

The interviews conducted in this study were unstructured, wherein the questions were formulated based on the responses provided by the participants – in this case, the teachers – in the interviews. The RADEC Learning model was being field tested at the same time that researchers conducted this interview. The topics of interviews were related to the integrated RADEC Learning model and the lesson plans used in the field trial. In addition, teachers who performed the field trial were interviewed to ascertain the practicality of the RPP. In a similar vein, this part of the interview was unstructured.

Following that, several students were interviewed in order to gather data on their interest in and the usage of the character integrated RADEC Learning model that was being developed. According to the findings, students were generally pleased and content with how the RADEC Learning model was being used in the classroom. Students found the instruction provided by teachers utilizing the integrated RADEC learning model to be enjoyable and fulfilling. The development of the RADEC Learning model, which was integrated with characters, as an effort to foster literacy and character values that must be instilled in students had been successfully implemented. A lesson plan was also designed during the process of developing this model. Teachers could utilized this lesson plan as a guide in implementing this model during learning process in the classroom. The development of the RADEC Learning model has been tested on class VI students of MIN 1 Pasaman in Bonjol, Kabupaten Pasaman.

The discussion regarding the results of this development research was explained further, especially those related to the validity, practicality, and effectiveness of the learning tools being developed. For more details, it is explained as follows.

1) The Validity of the Integrated RADEC Learning Model

The integrated RADEC Learning model that had been developed was declared to be valid when it met certain criteria. According to Plomp (2007), the characteristic of a product is said to be valid when it reflects the state-of-the-art knowledge, which is known as content validity. Then, the components of the product must be consistent with each other; this is known as construct validity. In this study, validation carried out in the process of developing the integrated RADEC Learning model was emphasized on the content validity and construct validity. It was considered as an effort to foster students' literacy and to instill their character values from an early age.

First, the integrated RADEC Learning model was declared valid in terms of content validity since this learning model already achieved one of the learning objectives, which was instill students' literacy in class VI of MIN 1 Pasaman in Bonjol, Kabupaten Pasaman. In addition to content validity, the validators also declared that this learning model was also valid in terms of its construct validity. This was due to the fact that the development of this model reached the terms and conditions for developing learning models. Therefore, the integrated RADEC Learning model was classified as very valid.

2) The Practicality of the Integrated RADEC Learning Model

The level of practicality examined at the extent to which teachers and students could use the integrated RADEC Learning model well. According to Plomp (Plomp & Nieveen, 2007), a learning model which is being developed is said to be practical if it can be used easily by teachers and students in learning. To see whether the learning tools that had been developed were practical or not, a trial was carried out in class VI MIN 1 Pasaman in Bonjol, Kabupaten Pasaman.

Referring to the lesson plan that was developed previously, the learning process was conducted in one meeting with a time allocation of 2 x 45 minutes. The indicators of practicality being observed included the level of implementation of the lesson plan, teacher response questionnaires, student response questionnaires, and interview results regarding the practicality of learning tools. The observation results of the implementation of the RPP demonstrated that learning was carried out following the plans that had been made. It was seen from the observation data that the implementation of the RPP was very good. It implied that the RPP was very practical to use in implementing the integrated RADEC Learning model. It was found that no significant obstacles were found by the teacher in carrying out the learning process during the trial although there was a slight lack of time, but this could be overcome by conditioning more optimal class.

Moreover, the analysis results of the teacher response questionnaire concluded that the integrated RADEC Learning model was very practical to be implemented in the learning process. This finding was supported by the distribution of teachers' answers. The teacher stated that this newly developed learning model was different from previous learning models and was easy to be applied in the learning process. Thus, data obtained at this stage confirmed that the learning tools developed were very practical to be used along with the integrated RADEC Learning model in class VI of MIN 1 Pasaman in Bonjol, Kabupaten Pasaman.

3) The Effectiveness of of the Integrated RADEC Learning Model

The analysis results of the student responses showed that students' learning creativity was increased after the implementation of the integrated RADEC Learning model. The learning process was loaded with various activities and skills. This can be seen from the results of student responses stating that the learning model was practically used in the learning process.

DISCUSSIONS

The practicality of the integrated RADEC Learning model was declared very practical. It was confirmed by the result of observations when teachers implemented the RPP, teachers' and students' responses, as well as the interviews that had been conducted. These results suggested that the learning tools were practically used by teachers, and they helped teachers in implementing the integrated RADEC Learning model in the classroom. Based on the perspective of teachers, the integrated RADEC

Learning model had given them motivation to implement this model in the classroom. It was seen that teachers performed the learning process better after implementing the integrated RADEC Learning model in teaching. The results of interviews with teachers also revealed that teachers felt happier and more challenged in managing learning. When teachers became more creative, students would certainly be more motivated in the learning process.

The effectiveness of the integrated RADEC Learning model was measured by observing students' activities. The students were observed to be more enthusiastic to work on literacy and creativity because the activities were directly related to literacy and character education. In the learning process, students were actively participating, so that they could achieve the target knowledge. This indicated that their learning motivation was getting better. Students' performances such as self-confidence, reasoning, activity, creativity, and motivation were generally better after learning through the integrated RADEC Learning model. This indicated that the new learning model was effective to be implemented in the class, meaning that it had high effectiveness.

The experiment's results showed a number of circumstances. In general, students' performance was satisfactory; they had completed a number of tasks in the learning process. They engaged in autonomous, participatory learning. Students completed the learning activities following the steps provided in the integrated RADEC Learning model. It was suggested that students were having high motivation to participate in the learning process.

In this study, the integrated RADEC Learning model was successfully developed and implemented. This model was developed by using the McKenny Model, which included three primary stages: (1) preliminary research (preliminary analysis), (2) prototype phase (planning phase), and (3) assessment stage. The goal of this model was to promote students' literacy and character values. Along with the development of the learning model, the lesson plan (RPP) was also created for this study. Following then, class VI of MIN 1 Pasaman in Bonjol, Kabupaten Pasaman, saw the implementation and testing of this learning paradigm.

The discussion regarding the results of this research was explained further, especially those related to the validity, practicality, and effectiveness of the learning model being developed. The integrated RADEC Learning model was declared valid since it fulfilled certain criteria. According to Plomp (Plomp & Nieveen, 2007) a product is said to be valid when it reflects the state-of-the-art knowledge (content validity). Then, the product components must be consistent with each other (construct validity). Therefore, the validation is conducted in this study emphasized on the content validity and construct validity.

Findings in this study suggested that the content validity of the integrated RADEC Learning model was declared valid since it had already achieved one of the learning objectives that was to instill students' literacy in class VI MIN 1 Pasaman from the early age. Similarly, the construct validity was also declared valid by the validator. This was due to the construct for developing the learning model met the terms and conditions of developing learning models. Based on these analysis data, the integrated RADEC Learning model was classified as very valid.

The practicality of the integrated RADEC Learning model was another area of investigation in this study. The level of practicality sought the extent to which teachers and students were able to implement the integrated RADEC Learning model in the classroom. According to Plomp (Plomp & Nieveen, 2007), a learning model is

considered practical if instructors and students can use it with ease during the teaching and learning process. After that, a trial was carried out on class VI MIN 1 Pasaman in Bonjol, Kabupaten Pasaman to see whether the learning tools that had been developed were practical or not.

The indicators of practicality being observed included the level of implementation of the lesson plan, teacher response questionnaires, student response questionnaires, and interview results regarding the practicality of learning tools. The results revealed that the learning process was performed following the steps that had been planned and stated in the lesson plan. This finding emphasized that RPP developed in this study was very practical to be used in implementing the integrated RADEC Learning model in the classroom. It was found that there was no significant constraint found by the teacher during the field trial. However, the teacher admitted that she ran out of time; luckily, this problem was solved by managing the class more optimally.

In addition, the analysis results of the teacher response questionnaire showed that the integrated RADEC Learning model was very practical to be applied in the learning process. It was confirmed by the distribution of teachers' answers. The teacher asserted that this new learning model was different from previous learning models and was easy to be used in the learning process. Thus, based on the data obtained, the integrated RADEC Learning model was declared to be very practical to be implemented in class VI MIN 1 Pasaman in Bonjol, Kabupaten Pasaman. Meanwhile, the analysis results of students' responses suggested that students' learning creativity was increased after the implementation of the integrated RADEC Learning model, which was loaded with various activities and skills. It was evidenced to the results of students' responses stating that the learning model was practically used in the learning process.

CONCLUSION

A learning model known as the integrated RADEC Learning was produced in this study. This model contained a model guide and a lesson plan. It was declared that the model and its lesson plan were very valid. The findings of the validation conducted by experts and practitioners in education served as evidence for this result. These results illustrated that the integrated RADEC Learning model was proven to be valid and feasible to apply in the learning process. Reading, answering, discussing, explaining, and creating or being creative were the learning phases in this model. These instructional procedures were intended to increase students' motivation to master literacy skills and to help them build the kind of characters that would allow them to collaborate with one another to solve difficulties and think critically while solving challenges. These learning steps were developed referring to the main principles of learning (Kosasih, 1985: 3), such as cooperative group learning, student based, democratic-humanistic and transparent, factual based, multidimensional, multi-functional, and multi-place (classrooms, schools, and outside schools). The integrated RADEC Learning model was then investigated at the following research stage as the results of the product validity test suggested that it was appropriate for use in the classroom. There were several justifications offered for the validity test in this investigation, including: (1) The results of this study showed that the product had satisfied the essential evaluation criteria, specifically the logical consistency between the predicted product (expert results) and the real product (field test results). Nieveen's (2013) judgment in Plomp reinforced this result by arguing that a product's design

must demonstrate logical consistency between expectations and reality. While actual and reality demonstrated that the product could be utilized, expectation implied that it would be possible to use.

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