Analysis of the Need for Development of Blended Learning Model in Early Childhood Education Programs in the Rejang Lebong Region

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ABSTRACT

This study aims to conduct a conditions analysis on developing a composite knowledge model in early nonage education programs in the Rejang Lebong area to grow character values and pupil literacy provocation. This disquisition is part of the R&D (Research and Development) disquisition with the ADDIE model (analysis, design, development, performance, and evaluation). However, this research is only limited to the analysis stage, which analyzes the need for the development of blended learning models in early childhood education programs education to grow character values and student learning motivation. The population in this study were all early childhood education programs teachers in the Rejang Lebong area. The samples taken were 75 people with the probability sampling technique. The study was conducted in October 2021. The instrument used in this study was a needs questionnaire made using a modified Likert scale with 4 answer choices, namely strongly agree, agree, disagree, and strongly disagree. The results of this study are that the blended learning model is needed by early childhood education programs teachers in the Rejang Lebong Regency area, especially during the covid-19 pandemic. This is evidenced by the percentage obtained from the teacher needs questionnaire analysis process, which reached 89.78%, which was categorized as strongly agree. For this reason, further research is needed to develop a blended learning model in early childhood education programs education in the Rejang Lebong area to grow character values and student learning motivation.

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1. INTRODUCTION

One of the school environments that can produce individuals educated from an early age is early childhood education. Early childhood education is the second environment after the home environment, known as the first environment (Sudarsana, 2017). One of the school environments that can produce individuals educated from an early age is early childhood education. Preschool education is a place where children in their golden age develop their basics because, according to psychologists, childhood only comes once and cannot be repeated. This is very decisive for the development of children and new human qualities (Huliyah, 2016). Decades of program evaluation research shows that the Center’s Early Childhood Education program can improve children’s social and cognitive development (Bowne et al., 2017). Therefore, the importance of early childhood education for children needs to be considered and involved by the government, educational institutions, parents, and the community (Irma et al., 2019). In developed countries such as the United States, public funding for early childhood programs has increased significantly (Grindal et al., 2016). This increase is partly driven by the recognition that development occurs rapidly during childhood when children are susceptible to experiences and responsive to interventions (Ansari et al., 2019).

In addition to the many benefits obtained through the early childhood education, various efforts are needed to avoid things that can interfere with the continuity of the teaching and learning process. As we all know, the COVID-19 pandemic is an obstacle for everyone globally and is also a human health crisis. In education, the COVID-19 pandemic has also had a significant impact. Many schools worldwide are closed to prevent the spread of COVID-19 (Mastura & Santaria, 2020). With so many Covid-19 cases in the world, especially in Indonesia today, the habit of communicating and interacting with each other by meeting physically is no longer a priority (Princess, 2020). In a situation like this, a learning model is needed that supports learning without being physically responsive so that the golden age of the child is not missed and remains well educated.

One of the learning models that can adapt to current conditions is the blended learning model. Blended learning is a term that comes from English and consists of two syllables, namely blended and learning (Risdianto et al., 2021). Blended learning is a learning solution in the 4.0 revolution era (Risdianto et al., 2019). Blended learning is considered a combination of face-to-face and online learning (Poon, 2013). In this model, a teacher can teach several classes. Once students have an overview of their learning, they can move on to online learning and interaction. Blended learning is effective, and students often see the benefits of using blended learning (Margolis et al., 2017). Research on associative learning has been carried out by Wardani et al. (2018) about the attractiveness of learning in the 21st century with blended learning. This study found that blended learning is a learning model that can increase the attractiveness of face-to-face learning and is very suitable to be applied in the 21st century. Blended learning can accommodate extensive technological developments without leaving face-to-face learning in class by combining face-to-face learning with online learning. Mixed learning allows students to continue learning and track their progress. This can be an opportunity for both teachers and students to succeed academically. Blended learning helps teachers prepare students to create a learning environment that is based on each student's learning style and can help students face the challenges of the future. Usman (2018) about associative learning communication. In this study it is said that the main focus of associative learning is on students. Learners must always be independent and responsible for their own learning. The blended learning environment will require students to take a more active role in their own learning. Students design and research materials on their own with their own efforts and initiatives. Blended learning is not intended to replace the conventional classroom learning model but to improve the learning model through the development of educational technology.

The selection of a good learning model can affect students' learning motivation. Motivation comes from the Latin "to move." Therefore, motivation can be considered a trigger (Ustun et al., 2013). Motivation describes why someone decides to do something, how long they are willing to maintain
an activity, and how strongly they will continue it (Daumiller et al., 2020). Motivation is a composite concept that classifies several related concepts such as involvement, persistence, self-interest, self-efficacy, and self-concept (Irvine, 2018). In expected value theory, motivation is a function of expected success and perceived value (Cook & Artino, 2016). Kurt Lewin argues that motivation acts as a force field in people and things (Teodor & Claudiu, 2013).

Motivation for sustainability is the motivation to pursue educational activities in different contexts, when there are no external pressures and when alternatives are available (Hagger & Chatzisarantis, 2016). Student learning motivation can range from extrinsic motivation to intrinsic motivation, the preferred motivational orientation for learning (Trenshaw et al., 2016). Learning motivation tends to seek relevant academic activities and obtain the desired benefits from them. Some researchers consider motivation a personality trait; however, this approach ignores that learners can be motivated depending on time or context (Barak et al., 2016). Motivation to learn refers to skills acquired through shared experiences, primarily motivated by modeling, communicating expectations, and direct instruction or socialization by key people (Koca, 2016). Motivation to learn in early childhood is very important because preschoolers, who are mostly Gen Z, have started to get to know various gadgets such as game applications and others. This condition is enough to affect the motivation to learn in the classroom, so we need a suitable model to combine fun learning with information technology.

A good education is an education that can shape students' personalities (Handayani et al., 2021). In Ancient Greek, the word character means “carving,” emphasizing that the engraved nature will influence us to behave in specific ways (Suhartini et al., 2019). Character education is a conscious effort by teachers to teach character values to students (Hilyana & Hakim, 2018). Students with good character can possess great faith and piety, responsibility, curiosity, skills, discipline, and perseverance (Astuti et al., 2020). His own emotions can influence a child’s personality. It can even hinder learning if the child develops negative emotions. Negative emotions such as feelings of dissatisfaction and disappointment interfere with learning (Nur et al., 2020). Schools have a significant role in forming values and character for optimal growth and development in the development of citizens, especially young citizens (Keraf & Kollo, 2019). The environment and nation are manifested in thoughts, words, and actions based on religious norms, laws, rituals, culture, customs, and aesthetics (Nurza et al., 2020). Previous research on personality development in children has been carried out by Perdana & Adha (2020). His research focuses on building integrity through blended learning. The study found that the application of blended learning can form students' independence, skills, perseverance, thoroughness, honesty, and responsibility, where these values are embodied in the values of integrity. Other research previously conducted by Rizal & Munip (2017) about classroom teaching strategies to develop personality values in students. In this study, it is stated that the strategies that teachers can apply in the classroom to develop personality values in students are as follows: 1) Integrating personality values in each subject (RPP), 2) learning in schools (experiential learning), 3) personal development or extracurricular learning, 4) culture or habits both inside and outside the classroom, and 5) cooperation between teachers in the classroom and all parties, both at school and with families and communities.

Based on the description above, research is needed to determine the need to develop a blended learning model in PAUD education to increase the personality values and learning motivation of students, especially for students dealing with learning conditions during the current pandemic. Blended learning at the PAUD level in Rejang Lebong has never been done before, so this research is something new.

2. METHODS

This research is part of the R&D (Research and Development) research with the ADDIE model (analysis, design, development, implementation, and evaluation). The ADDIE research model is an
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Instructional process consisting of five phases, namely, analysis (analysis), design (design), development (development and testing), implementation (use), and evaluation (evaluation) (Asyhar et al., 2018). However, this research is only limited to the analysis stage, which is to analyze the need to develop blended learning models in PAUD education to foster character values and student learning motivation. The population in this study were all PAUD teachers in the Rejang Lebong area. The samples taken were 75 people with the probability sampling technique. The study was conducted in October 2021. The data collection technique used a questionnaire. The measuring instrument was a questionnaire made with a modified Likert scale with 4 answer choices, namely strongly agree, agree, disagree, and strongly disagree, which were then analyzed quantitatively, and the results were described. The questionnaire was tested for validity and reliability with the following conditions:

- Valid: if $r_{count} > r_{table}$
- Invalid: if $r_{count} < r_{table}$
- Reliable if Cronbach’s alpha value > 0.60
- Not reliable if Cronbach’s alpha value < 0.60

(Budiwibowo & Nurhalim, 2016).

Analysis of the questionnaire results was carried out quantitatively using the following formula.

$$p = \frac{n}{N} \times 100\%$$

(1)

where P is the percentage of the results of the questionnaire analysis, n is the total score of the assessment, and N is the maximum possible score. For the Likert scale, the score interpretation model can be seen in table 1.

### Table 1. Likert Scale Interpretation

| Percentage (%) | Category         |
|----------------|------------------|
| 0% - 25%       | Strongly Disagree|
| 26% - 50%      | Do not agree     |
| 51% - 75%      | Agree            |
| 76% - 100%     | Strongly agree   |

(Hayati et al., 2015)

3. FINDINGS AND DISCUSSION

The COVID-19 pandemic that continues to attack the Indonesian people, especially the people of Rejang Lebong Regency, requires teachers to be able to adapt to the learning system that must be done. Teachers must be careful in choosing the learning model for golden-age children to develop a basic foundation and not lose the meaning of learning they should get at an early age. Therefore, the research was conducted by distributing a questionnaire on the needs of early childhood teachers for the blended learning model in PAUD education because we know that this model does not require learning to be carried out by meeting physically continuously but can also be done through an online system so that it is very suitable for situations what is happening now. The questionnaire used in this study is a needs questionnaire on developing a blended learning model in PAUD education in the Rejang Lebong area to grow character values and student learning motivation. Prior to further analysis, the statement items used in the questionnaire were tested for validity and reliability to determine whether the instrument was suitable for use to obtain the data needed by the researcher or not. The results of the calculation of the validity of the data can be seen in table 2.

### Table 2. Case Processing Summary

|        | N   | %   |
|--------|-----|-----|
| Cases  | Valid | 75  | 100.0 |
|        | Excluded | 0  | 0.0    |
|        | Total | 75  | 100.0  |
In table 2, it is known that 75 respondents answered that the statement (N) is valid. There is no data excluded (Exclude). A total of 72 data (N) were processed, or 100% of the data were processed. The results of the calculation of data reliability can be seen in table 3.

| Table 3. Reliability Statistics |
|---------------------------------|
| Cronbach’s Alpha                |
| N of Items                      |
| 0.941                           |
| 21                              |

Table 3 Reliability Statistics shows the results of the calculation of data reliability with 21 statement items using the Cronbach alpha method, a score of 0.941 is obtained. If the value obtained is more significant than 0.60, then according to the rules of determining reliability, the questionnaire used in this study is said to be reliable.

Find out the percentage of needs development of a blended learning model in PAUD education in the Rejang Lebong area to grow character values, and student learning motivation can be seen in table 4.

| Table 4. Percentage Level of Need development of blended learning models in PAUD |
|---------------------------------|
| Respondent                      |
| Total Score (n)                 |
| Maximum Score (N)               |
| Percentage $P = \frac{x}{N} \times 100\%$ |
| Category                        |
| 75 PAUD Teachers in Rejang Lebong Regency | 5656 | 6300 | 89.78% | Strongly agree |

Table 4 provides information that early childhood teachers in the Rejang Lebong area strongly agree to develop a blended learning model in PAUD education in the Rejang Lebong area to grow character values and student learning motivation. This is indicated by the large percentage obtained of 89.78% of the maximum percentage of 100%. Moreover, according to the Likert scale interpretation table for data with a percentage of 76%-100% in the category of strongly agree.

For more details on the number of respondents in each category, see Figure 2.

![Figure 2. Graph of Number of Respondents in Each Category](image)

The picture above shows that most respondents fall into the category of strongly agree with the number of respondents 67, then followed by respondents who enter the agree category as many as seven respondents, the rest there is one respondent who is categorized as disagree. Further research is needed to develop a blended learning model in PAUD education in the Rejang Lebong area based on these results.

Several studies are related to this research. The first one was conducted by Priono et al. (2018). This study indicates that student learning outcomes in drawing 2D documents after applying the associative learning model show good results. The blended learning model can improve academic
skills, with most students meeting the minimum proficiency criteria. Then the research was conducted by Estika (2017). This study indicates that the blended learning model is feasible, and there is a significant effect of the application of the blended learning model with the flipped classroom strategy on improving learning outcomes. In addition, there is also a study conducted by (Wardani et al. 2018) with the findings that associative learning is a learning model that can increase the attractiveness of face-to-face learning and is very suitable to be applied in the 21st century. Blended learning can adapt to broad technological developments without learning directly in class by combining face-to-face learning with online learning. Mixed learning allows students to continue learning and track their progress. This can be an opportunity for teachers and students to succeed academically.

From the description of previous relevant research, no one has examined the need for blended learning at the PAUD education level, so this is a novelty of research.

4. CONCLUSION

The blended learning model is needed by PAUD teachers in the Rejang Lebong Regency area, especially during the COVID-19 pandemic. This is evidenced by the percentage obtained from the teacher needs questionnaire analysis process, which reached 89.78%, which was categorized as strongly agrees. These results can be used as guidelines for conducting further research on the development of blended learning models in PAUD education in the Rejang Lebong area to foster character values and student learning motivation.

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