

# The Feasibility of Development of Multi Split Model Based Hands On-Mind on Approach as Reconstruction Basic Literature and Character Value

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## ARTICLE INFO

### *Keywords:*

Multi-split model;  
hands on-mind on approach;  
basic literature;  
character value

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### *Article history:*

Received 2022-11-30

Revised 2023-02-17

Accepted 2023-06-11

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## ABSTRACT

This study aims to determine the feasibility of developing a multi-split model based on a hands on-mind on approach in elementary schools. The research method used is a mixed method, combining quantitative and qualitative methods in a series of studies. This research also uses R&D (Research and Development), the Four-D development or 4-D models. The data source in this study was obtained from the results of the validation of the feasibility of developing a multi-split model based on a hands on-mind on approach which two experts in their fields validated. Product development in the form of a learning model, "Multi Split Model Based on Hands On-Mind On Approach" is valid or feasible. Validation was conducted to see the content validity, construct validity, and revision of the learning model. The results of the validation analysis of the feasibility of the development carried out show that the average content validity value of 4.06 is in the valid category, and the construct validity of 4.20 is in the "valid" category with a statement that it can be used with minor revisions. At the same time, the revision of the learning model is based on the value of content and construct validity and suggestions from validators. Based on the validation results, the feasibility level of developing a multi-split model based on a hands on-mind on approach is very good and suitable for use.

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## 1. INTRODUCTION

The state of Sarawak in East Malaysia forms the longest land border with any country other than Indonesia in the province of West Kalimantan. Because of its location, West Kalimantan is the province of Indonesia that shares the longest border with other nations and serves as the country's western entry point to the East Asia Region. Since students' comprehension, knowledge, and attitudes towards the pillars of national and state life are largely shaped by their educational experiences, it's crucial that educators in the region carefully consider how best to help their children learn and succeed.

The development of a multi-split model based on a hands-on-mind approach aims to see the feasibility of developing a multi-split model, which includes 4 phases of activity from the development of a model commonly known as the 4D model, which is define, design, development and disseminate. Mulyatiningsih, E. (2016) 4D research and development models are often used to research and develop teaching materials such as modules, LKS and textbooks. Rosyidah et.al. (2019), using the uriscrap media feasibility test based on the 4D development model assessment technique, shows that Uriscrap media is feasible to be tested as learning media based on aspects of material and language feasibility, media and design, and format aspects.

Literacy instruction in schools is the primary means by which students acquire skills and understanding. (Sari et al., 2021). According to Hartati (2017: 302), literacy is a term for the abilities and skills possessed by a person to understand, process, and use the information received for various situations stated by Labudasari, E. et al. (2019) that literacy can be defined as the ability to read and write. This needs to be done in order to overcome the problem of character in schools. Therefore, literacy is closely related to home, school, or community student life. So good literacy is used to cultivate noble character, as stated in the Regulation of the Minister of Education and Culture Number 23 of 2015 (Sari, 2018). According to Wiratsiwi (2020), several types and characteristics of literacy prioritized in efforts to develop students' multiliteracy skills are scientific literacy, numeracy literacy, reading and writing, financial literacy, digital literacy, and cultural and civic literacy. The school environment is an excellent educational place for the character growth of students (Purnama, 2019). According to Labudasari (2018), the government supports this literacy movement to build and improve the character and positively impact the nation's generation. The instilling of student character values through the literacy movement in elementary schools is a form of humanization of education and an effort to develop the character of students, thus making them lifelong learners with good character (Hendawan et al., 2017).

Provision of basic literacy skills by integrating the content of character values is very effective if given early (Supartinah& Adi, 2018). Character is the values contained in a person, such as personality, traits, and behavior. The students' basic literacy skills can strengthen their character. So the integration of character education into the learning process is one of the right ways to grow children's character as early as possible (Mahmud, Arba'i & Prasetyo: 2020). According to Annisa et al. (2020), character education is an effort to apply religious, moral, and ethical values to students through science, assisted by parents, teachers, and the community, who are very important in the formation and development of the character of students. Putri (2018) revealed that the application of these character education values can be applied both to oneself, family, fellow friends, to educators and the surrounding environment as well as to God Almighty. So that, character education is very important to put emphasis on certain values such as respect, responsibility, honesty, caring, fair and to help students to understand, pay attention to, and practice these values in their own lives to achieve life success (Sari, , 2017). In addition, the benefits of basic literacy skills for elementary school students include (1) increasing students' vocabulary; (2) making the brain work optimally; (3) broadening students' knowledge; (4) improving the ability to capture one piece of information from a reading; (5) develop verbal skills; (6) train the ability to think and analyze; and (7) train students' focus and concentration (Harahapet al., 2022). The development of the era in the midst of globalization that undermines the country's culture needs to be followed up with early preparation for the country's next generation (Harfiyani, 2018).

The learning model developed by Supartinah et al. (2018) consists of 4 learning activities: an exploration of information sources, application of balanced strategies, presentation of information, and reflection. Realizing a good education requires learning that is not just a transfer of knowledge but is also oriented towards strengthening basic literacy and student character values. In character education, the process of character building in a child must be instilled from childhood so that children can experience emotional, spiritual, and personality development that can have a positive impact (Pentianasari et al., 2022).

Strengthening basic literacy and character values for elementary school students located on the border of West Kalimantan and Malaysia must be carried out as an effort to deal with the COVID-19

pandemic conditions that affect all aspects. Development in educational research must have an impact on students, namely becoming students who are (1) educated, (2) educated (3) prosperous (4) cultured, and 5) civilized (Rahman, 2015). There are three learning objectives according to the constructivist paradigm, namely: (1) process, (2) transfer of learning, and (3) how to learn. Priasti, S. N., & Suyatno, S. (2021) explained that school literacy in elementary schools can be implemented through 3 phases: habituation, development and learning.

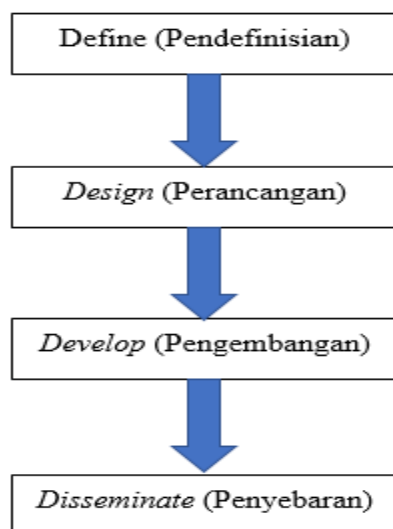
According to Anggaet al. (2022), learning is an educative interaction process to make students learn actively and be able to change their behaviour through learning experiences. These abilities are abilities that need to be developed in the 21st century. The 21st century is the age of knowledge, where information is widely spread, and technology is developing. The characteristics of the 21st century are marked by the development of the world of science, so that the synergies between them become faster (Umayah, U., & Riwanto, M. A. 2020). Dewi et al., (2021) revealed that character education is one of the things needed to face the challenges of the 21st century. Digital literacy in learning is an effort that can be made to grow student character. In addition, 21st-century learning is characterized by the integration of literacy skills, knowledge, skills, attitudes, and mastery of technology. In strengthening the character education of elementary school students in the 21st century, digital literacy plays an important role as a supporting medium because students tend to be more interested in technology, the internet, social media, and others. This digital literacy is also supported by thematic learning taught in elementary schools, which includes the integration of character values in each lesson. Thus, strengthening character education through the digital literacy movement in learning in the 21st century is very supportive because instilling character education values from an early age will improve students' mindsets and behaviour (Ulfah, 2020).

The multi-split model based on the hands-on-mind approach is a learning model developed by the research team. The learning model is a plan that is used as a guide in planning classroom learning or tutorial learning. The specific purpose of this model development research was to describe the feasibility of developing a multi-split model based on a hands-on-mind approach, which could be used to reconstruct basic literacy and character values at the borders of West Kalimantan and Malaysia during the COVID-19 pandemic, as well as could be immediately disseminated widely so that it could be practiced in the process of teaching and learning activities.

## 2. METHODS

This study used a Research and Development (R&D) research design (Kosassy, Siti Osa., 2019; Borg, W.R., & Gall. J.P., 2003). The development model used for this research was the Four-D development model or the 4-D model (Thiagarajan et.al., 1974). This model consists of four development stages: define, design, develop, and disseminate. The four stages can be explained as follows.

- a. Define is an activity to collect information needed to prepare a draft or initial product of model development, carried out through a literature study.
- b. Design is an activity to design a draft or initial product of the model to be developed.
- c. Development is an activity to validate and develop models, so that valid and reliable products can be produced and are ready to be implemented in learning. At the Develop stage, which was carried out in this study, only expert validity (content) and practitioner validity (item) were used. Content validity and item validity are carried out with the objectives: 1) to ensure that the developed model follows the mandated content and 2) to identify and formulate the weaknesses of the development model product design so that it can be improved based on the results obtained.
- d. Disseminate using tools developed on a broader scale, for example, in elementary schools on the border of West Kalimantan. It aims to test the effectiveness of the model that has been developed.



**Figure 1.** Stages of the 4D Model

The data collection technique used was a non-test technique in the form of a questionnaire. The instruments used in collecting data were the validation sheet of the learning model and the observation sheet on the implementation of the model. The questionnaire used in this study was a closed questionnaire using a Likert scale. Approachment used in this research is mixed methods. Mixed methods research design is a procedure for collecting, analyzing, and "mixing" quantitative and qualitative methods in a study or series of studies to understand the problems in the research, Creswell & Plano Clark (2015, p. 1088). This approach is carried out in combination with the aim of providing a better understanding of the problems and research questions rather than if it was done separately or individually. Furthermore, Sugiyono (2014) states that the combined research method (mixed methods) is a research method that combines quantitative methods with qualitative methods to be used together in a study so that the obtained data is more comprehensive, valid, reliable, and objective. Creswell in Sugiyono (2011, p. 401) states that combined or mixed research methods will be very useful if quantitative and qualitative methods separately or individually are not accurate enough to be used in understanding research problems, or by using quantitative and qualitative methods in combination. Thus, a better understanding can be obtained.

Quantitative data were found by converting the results of the answer validation sheets and observation sheets, which were then analyzed to find data in the form of scores or values. The validation sheet used a five-choice Likert scale for each item of the assessment aspect ranging from not valid, less valid, valid enough, valid, and very valid. The observation sheet used a Likert scale with four answer choices: not good, quite good, good, and very good. The learning model validation sheet and the observation sheet on the learning model implementation are reliable if they have a percentage of 75% (Ibrahim, 2005). The qualitative data were found from observations at the stage of limited trials and extensive trials, interviews, and responses from experts or experts in developing learning models.

The content validity questionnaire instrument and construct validity of the learning model development used in this study are as follows.

**Table 1.** Aspects of Assessment of Content Validity of Learning Model

No	Assessment Aspects
<i>Model Development Needs</i>	
1	Educational reform as a strategy to improve the quality of the learning process in schools
2	Management approach to assist students in understanding the learning process in teams or groups exploring physical and psychological activities (hands on-mind on) within the framework of a collaborative learning process
3	Innovative activities or educational renewal as a strategy to improve the quality of the learning process in elementary schools or state-of-the-art knowledge
4	Based on the results of improvements from the learning model that has several weaknesses in training physical skills and psychic abilities (hands on-mind)
<i>Novelty of Knowledge</i>	
5	The theory that supports the development of a multi-split model based on a hands-on-mind approach
6	The background of the development of the multi-split model based on the hands-on-mind approach
7	The purpose of developing a multi-split model based on a hands-on-mind approach
8	Description of the multi-split model based on hands on-mind on approach
9	Syntactic multi-split model based on hands on-mind on approach
10	A multi-split model social system based on a hands-on-mind approach
11	Multi-split model support system based on hands on-mind on approach
12	The use of theoretical and psychological foundation
13	Planning and implementation of multi-split models based on a hands-on-mind approach
14	Implementation of a multi-split model based on hands on-mind approach
15	Steps of multi-split model based on hands on-mind on approach
16	Encouraging further research

**Table 2.** Aspects of Assessment of the Construct Validity of the Learning Model

No	Assessment Aspect
1	Overview of multi-split models based on hands on-mind on approach
2	Theoretical and empirical support of multi-split models based on hands on-mind on approach
3	Multi-split model planning based on hands on-mind approach
4	Implementation of a multi-split model based on hands on-mind approach
	Phase 1
	Phase 2
	Phase 3
	Phase 4
5	Managing the Learning Environment
6	Use of theoretical foundation
7	Assessment and Evaluation

Steps on analyzing the data of the learning model validation sheet is by using the following method:

- a. Recap all validator statements.
- b. Find the average of each indicator of all validators.

$$k_i = \frac{\sum_{h=1}^n V_{hi}}{n}$$

Using,

$k_i$  = the average per criterion

$V_{hi}$  = hth validator's score for the i-th criterion

$n$  = total number of validators

- c. Find the average of each aspect from all validators.

$$A_i = \frac{\sum_{j=1}^n k_{ij}}{n}$$

Using,

$A_i$  = average of the i-th aspect

$k_{ij}$  = average for i-th aspect and j-th criterion

$n$  = number of criteria in the i-th aspect

- d. Find the average of all validators.

$$RTV = \frac{\sum_{i=1}^n A_i}{n}$$

RTV = average total validity

$A_i$  = average of the i-th aspect

$n$  = number of aspects

- e. Matching the total average with the predetermined categories.  
 f. If the validation results show that the learning model is not valid, then revisions are made to the learning model that is under development.  
 g. The interpretation of the validity of the Multi Split Learning Model Based on the Hands On-Mind On Approach is determined based on the validity criteria in Table 3 as follows.

**Table 3.** Assessment Criteria for Learning Model Validation

Intervention Score	Assessment Results	Assessment Category	Description
4,20 < Score	5,00	Very Valid	Can be used without revision
3,40 < Score	≤ 4,20	Valid	Usable with slight revision
2,60 < Score	≤ 3,40	Valid Enough	Can be used with quite a lot of revisions
1,80 < Score	≤ 2,60	Less Valid	Can be used with multiple revisions
1,00 < Score	1,80	Not Valid	Cannot be used yet and still need consultation

- h. After obtained the validity of the learning model, next will match the validity criteria obtained with the learning model feasibility criteria. The feasibility criteria are obtained by looking at the results of the validity of the learning model that has been determined.

### 3. FINDINGS AND DISCUSSION

This research aims to develop a product in the form of a valid or feasible "Multi Split Model Based on Hands On-Mind On Approach" learning model. This learning model integrates basic literacy in teaching and learning activities and simultaneously emphasizes the process of acting and thinking, which leads to a stronger learning foundation and instils character values in students. The phases of the learning model can be clearly shown in table 2 below.

**Table 4.** Learning Model “Multi Split Model Berbasis Hands On-Mind On Approach”

No	Phase	Teacher's Activities	Students' Activities
1.	Delivery of learning objectives and stimulation	<ol style="list-style-type: none"> <li>1. Delivering the learning objectives</li> <li>2. Deliver the lesson plan</li> <li>3. Provide stimulation by asking initial questions</li> <li>4. Provide recommendations for reading with the aim of pleasure (reading voluntarily and choosing what to read so that the cultivation of literacy interest in students can be realized)</li> </ol>	<ol style="list-style-type: none"> <li>1. Students listen and pay attention to the learning objectives</li> <li>2. Students listen and pay attention to the learning activity plan</li> <li>3. Students answer questions</li> <li>4. Students read for pleasure (oriented to reading to choose, reading as desired, engaging and responding, and as a literacy agenda)</li> </ol>
2.	Delivery of learning objectives and stimulation Integrating basic literacy (scientific literacy/ numeracy literacy/ digital literacy/ financial literacy/ cultural-citizenship literacy) on learning topics	<ol style="list-style-type: none"> <li>1. The teacher explains information on learning topics integrated with basic literacy</li> <li>2. The teacher guides students to read learning materials for instructional purposes</li> <li>3. The teacher guides the students to make groups</li> <li>4. The teacher gives activity sheets to each group with different concepts</li> <li>5. The teacher gives direction for the success of the activity</li> <li>6. The teacher guides students to work on the activity sheet and ensures that each student is involved in the activity (hands-on mind)</li> </ol>	<ol style="list-style-type: none"> <li>1. Students pay attention to information on learning topics integrated with basic literacy</li> <li>2. Students read learning materials for instructional purposes</li> <li>3. Students make groups</li> <li>4. Students receive activity sheets</li> <li>5. Students pay attention to the direction of the success of the activity</li> <li>6. Students work on the activity sheet (hands-on mind)</li> </ol>
3.	Presentation and discussion	The teacher guides each group to present their work and is responded to by other groups	Each group carries out presentations in turn and responds to each other's presentation results
4.	Strengthening learning by integrating basic literacy (reading and writing / scientific literacy/numeracy literacy / digital literacy / financial literacy / cultural-citizenship literacy) and quizzes	<ol style="list-style-type: none"> <li>1. The teacher provides reinforcement for the material that has been conveyed</li> <li>2. The teacher guides students to conclude the activities that have been done</li> <li>3. The teacher gives quizzes to students</li> <li>4. The teacher gives appreciation to each student</li> </ol>	<ol style="list-style-type: none"> <li>1. Students listen to the reinforcement of the material</li> <li>2. Students conclude the activities that have been done</li> <li>3. Students do the quiz</li> <li>4. Students receive rewards</li> </ol>

In addition, educational expert validators and learning assessment expert validators evaluate the "Multi Split Model Based on Hands On-Mind on Approach" learning model produced by researchers to demonstrate the model's validity or practicality. Both content validity and construct validity are considered in the validator's evaluation of the "Multi Split Model Based on Hands On-Mind On Approach" learning model.

### 3.1 Content Validity of Learning Model "Multi Split Model Based on Hands On-Mind On Approach"

**Table 5.** Results of Content Validity Value of Learning Model "Multi Split Model Based on Hands On-Mind On Approach" Content Validity of Multi Split Model Based on Hands On-Mind On Approach

No	Assessment Aspect	Validity	
		Average Score	Criteria
<i>The need of development model</i>			
1.	Educational reform as a strategy to improve the quality of the learning process in schools	4,5	1.
2.	Management approach to assist students in understanding the learning process in teams or groups that explore physical and psychological activities (hands on-mind on) within the framework of a collaborative learning process	4,5	2.
3.	Innovative activities or educational renewal as a strategy to improve the quality of the learning process in elementary schools or state-of-the-art knowledge.	4	3.
4.	Based on the results of improvements from the learning model, that has several weaknesses in training physical skills and psychological abilities (hands-on-mind).	4	4.
<i>Novelty of Knowledge</i>			
5.	The theory that supports the development of a multi-split model based on a hands-on-mind approach	4	5.
6.	The background of the development of the multi-split model based on the hands-on-mind approach	4	6.
7.	The purpose of developing a multi-split model based on a hands-on-mind approach	4	7.
8.	Description of the multi-split model based on hands on-mind on approach	4,5	8.
9.	Syntactic multi-split model based on hands on-mind on approach	4	9.
10.	A multi-split model social system based on a hands-on-mind approach	3,5	10.
11.	Multi-split model support system based on hands on-mind on approach	4	11.
12.	Using of theoretical and psychological foundation	4	12.
13.	Planning and implementation of multi-split models based on a hands-on-mind approach	4	13.
14.	Implementation of a multi-split model based on hands on-mind approach	4	14.
15.	Steps of multi-split model based on hands on-mind on approach	3,5	15.
16.	Encouraging further research	4,5	16.
<b>Average score</b>		<b>4,06</b>	<b>Valid</b>

Based on the results of the content validity value in Table 3, it can be seen that the learning model "Multi Split Model Based on Hands On-Mind On Approach" developed by the research team in terms of the need of a development model and knowledge novelty has a very valid qualification/fit for use. This is evidenced by the average score of 4.06 in the range ( $3.40 < \text{Score} \leq 4.20$ ), with the category valid and can be used with minor revisions.

**Table 6.** Results of Construct Validity Value of Learning Model "Multi Split Model Based on Hands On-Mind On Approach"

No	Assessment Aspect	Validity	
		Average score	Criteria
1.	The overview of Multi Split Model based on Hands On-Mind On Approach	4,5	1.
2.	Theoretical and empirical support of Multi Split Model based on Hands On-Mind On Approach	4	2.
3.	There is consistency between the components of the Multi Split Model based on the Hands On-Mind On Approach.	4,5	3.
4.	There is consistency between phases in the syntax of the Multi Split Model based on the Hands-On-Mind On Approach.	4	4.
5.	There is consistency between the syntax of the Multi Split Model based on the Hands On-Mind On Approach.	4,5	5.
<b>Average score</b>		<b>4,20</b>	<b>Valid</b>

Based on the results of the construct validity value in table 4, it can be seen that the learning model "Multi Split Model Based on Hands On-Mind On Approach" developed by the research team has a very valid/worthy of use qualification. This was proved by the average value of 4.20 in the range ( $3.40 < \text{Score} \leq 4.20$ ) with a valid category and can be used with a minor revision.

The results of the revision of the learning model "Multi Split Model Based on Hands On-Mind On Approach" based on the value of content and construct validity and suggestions from validators are as follows.

**Table 7.** Revised Learning Model "Multi Split Model Berbasis Hands On-Mind On Approach"

No	Phase	Teacher Activity Stages	Student Activity Stages
1	Delivering objectives and stimulating learning to students	a. Delivering learning objectives b. Delivering the learning activity plan c. Provide stimulation by asking initial questions d. Encouraging reading for pleasure e. Directing students to retell the material they have read to their peers.	a. Listen and pay attention to the learning objectives b. Listen and pay attention to the learning activity plan c. Answering questions from the teacher d. Doing reading activities with the purpose of pleasure e. Conveying material that has been read to peers
2	Integrate basic literacy in learning topics	a. The teacher explains the learning topic and then integrates it with basic literacy. b. The teacher guides students to read the learning material with instructional objectives c. The teacher guides students in creating working groups d. The teacher gives activity sheets to each group of students with different concepts e. The teacher provides directions for the successful activity of working on the activity sheet	a. Students pay attention to information on learning topics integrated with basic literacy b. Students read learning materials with instructional objectives c. Students create working groups d. Students receive activity sheets e. Students pay attention to the direction of the success of the activity of working on the activity sheet. f. Students work on the activity sheet.

		f. The teacher guides the students to work on the activity sheet and ensures that each student is involved in the activity process.	
3	Presentation and discussion	The teacher guides each group to present their work and is responded to by other groups.	Each group of students conducts a presentation in turn and responds to the results of the presentation.
4	Learning reinforcement integrated with basic literacy and quizzing	<p>a. The teacher reinforces the material that has been conveyed and integrates the material with basic literacy concepts.</p> <p>b. The teacher guides the students to conclude the activities that have been done</p> <p>c. The teacher gives a quiz to the students</p> <p>d. The teacher gives awards to each student</p>	<p>a. Students listen to the reinforcement of the material</p> <p>b. Students summarize the activities that have been done</p> <p>c. Students take quizzes</p> <p>d. Students receive awards</p>

The result of this research is a learning model with the name "Multi Split Model Based on Hands On-Mind On Approach" is a learning model that takes a pattern of integrating basic literacy in the Hands On Mind On-based learning activity phase. This learning model emphasizes the process of acting and thinking simultaneously, leading to a stronger learning foundation. This learning model has 4 phases namely; (1) Delivery of learning objectives and stimulation; (2) Integrating basic literacy on learning topics; (3) Presentation and discussion and (4) Reinforcement of learning integrated with basic literacy and quizzes.

Syarifah and Sumardi's (2015) study explains how a learning model is created using specific learning theories, including syntax elements, social systems, reaction principles, support systems, and instructional and accompanying influences (Eggen and Kauchak, 2012; Rusman, 2011). The "Hands On-Mind On" method was used to construct the "Multi Split Model Based on Hands On-Mind On Approach" learning model. Learning by doing, or "hands-on," is a progressive method that emphasises the development of a wide range of motor abilities in young children. According to Howe, complicated processes, rather than simple mechanisms, are required for youngsters to develop sophisticated and coordinated movement patterns. According to Mintohari (2011: 21-32), a hands-on exercise is one that encourages students to actively engage in the learning process by conducting their own research, posing their own questions, and forming their own hypotheses. Learning is more effective when students are able to put what they're learning into practice (Hofstein et al., 2008).

Psychomotor activities are tied to things that you can do with your hands. Hands-on activities can teach skills, information, and attitude at the same time. This can also help students really understand what they have learned, making it less likely that they will forget what they have learned. With hands-on activities, students will learn this information by doing it themselves. Kartono (2011:21-32) says that a hands-on activity is one that gets students to look for knowledge and ask questions, do activities and find, collect, and analyse data, and come to their own conclusions. In Aini (2014:99-105), Haury and Rillero explain that a "hands-on activity" in learning is any activity that gives students a chance to touch, perform, manipulate, and watch a scientific process.

According to Cleaver (1991), a minds-on exercise is one that gets to the heart of the matter, introducing students to the process of thinking and encouraging them to ask questions and seek solutions that can deepen their understanding. Asking kids to think critically about what they're studying can boost their engagement. This emphasises the value of developing your ability to ask questions. According to Elder & Paul (2014), asking questions can stimulate the brain's critical-thinking

processes. With any luck, by asking pertinent questions, your class will progress logically as you intend. Including student inquiries has also been shown to increase the capacity to provide appropriate reasons and foster the growth of concepts connected to the ideas in an existing problem (Yunarti, 2009).

According to Aini (2014: 99-105), hands-on minds-on activity can also provide a deep appreciation of what is learned so that what is obtained by students is not easily forgotten. The combination of physical activity (hands-on) and thinking activity (mind on) in learning activities can improve student learning outcomes. With the hands on minds on activity, it will motivate students to make learning more fun and meaningful, and have an impact on student learning outcomes. Based on this exposure, it can be concluded that (1) Hands on mind on approach is an activity that combines thinking skills and directly implements several applications that can be done based on what they think. (2) Hands-on mind approach effectively encourages students to engage in physical activity and thinking skills as they learn.

Based on behavioristic learning theory, which views human behaviour as the outcome of the interplay between stimulus and reaction, stages one through four of the "Multi Split Model Based on Hands On-Mind On Approach" were developed. At this institution, students are encouraged to let their newfound knowledge manifest in outward ways. According to this theory, stimulus intake and response output are the two most crucial aspects of learning (Gagne & Berliner, 1979). The findings from the model's development are likewise grounded in humanistic ideology and motivated by the desire to improve humanity. When children learn about themselves and their surroundings, we consider the learning process to have been effective. During their time in school, students should make every effort to develop to their fullest potential. This theory of learning takes the learner's perspective, rather than the observer, to better understand how people learn. Educators should focus on helping their pupils grow as people, which includes guiding them towards a deeper understanding of who they are and their capabilities (Suprihatin, 2017).

Each phase of the learning model, "Multi Split Model Based on Hands On-Mind On Approach" that has been developed is about transferring knowledge and strengthening basic literacy and student character values. This is clearly stated in each step of the learning model, for example, in the second phase, "integrating basic literacy on learning topics" there are steps that require students to (a) pay attention to information on learning topics integrated with basic literacy, (b) read learning materials with instructional objectives, (c) make work groups, (c) receive activity sheets, (d) pay attention to directions for successful activities to work on activity sheets, and (e) work on activity sheets that the teacher has given.

The "Multi Split Model Based on Hands On-Mind On Approach" learning model, as shown in table 4, is structured around a learning pattern that encourages students to pose and investigate questions, engage in hands-on activities to complete assigned worksheets, and share their findings with the class. Therefore, this model's findings are consistent with those of Manurung and Nuryani (2014), who indicate that, in their teaching, they place emphasis on students' growing capacity for reason and its application to the world around them.

#### 4. CONCLUSION

Based on the research data and discussion that has been presented above, researchers can conclude that the results of the development of a learning model with the name "Multi Split Model Based on Hands On-Mind On Approach" is a learning model that takes a pattern of integrating basic literacy in the Hands On Minds On-based learning activity phase has met various criteria so that it can be declared valid with (a) an average score of content validity value of 4.06 with a valid category and can be used with minor revisions and (b) an average score of construct validity value of 4.20 with a valid category and can be used with minor revisions to be used in the learning process in the classroom in order to strengthen basic literacy and student character values.

**Acknowledgement:** We want to thank the Directorate of Resources, Directorate General of Higher Education, Research and Technology, Ministry of Education and Culture, Tanjungpura University, and other institutions who have assisted us in completing this research.

## REFERENCES

- Aini Khurrotul dan Kusumawati D. (2014). Penerapan Model Pembelajaran Inkuiri dengan Hands On Minds On Activity untuk meningkatkan Hasil Belajar Siswa Pada Materi Pokok Termokimia. *Jurnal Pendidikan Kimia*. Vol. 3 (1), 99-105
- Angga, A., et.al. (2022). Penerapan pendidikan karakter dengan model pembelajaran berbasis keterampilan abad 21. *Jurnal Basicedu*, 6(1), 1046-1054.
- Annisa, M. N., et.al. (2020). Pentingnya pendidikan karakter pada anak sekolah dasar di zaman serba digital. *BINTANG*, 2(1), 35-48.
- Borg, W.R., & Gall. J.P., (2003). *Education Research: An Introduction (7<sup>th</sup> Ed.)* Boston USA: Pearson Retrived.
- Dewi, D. A., et.al. (2021). Growing Student Character through the Utilization of Digital Literacy. *Journal of Basicedu*, 5(6), 5249-5257.
- Eggen, P., & Kauchak, D. (2012). Strategi dan model pembelajaran: mengajar konten dan keterampilan berpikir. (Terjemahan Satrio Wahono). Boston: Pearson
- Elder, L., et.al. (2010). The Role of Socratic Questioning in Thinking, Teaching, and Learning. *The Clearing House: A Journal of Educational Strategies, Issues and Ideas* 71(5), 37-41.
- Gage, N.L., & Berliner, D. (1979). *Educational Psychology*.
- Harahap, D. G. S., et.al. (2022). Analysis of literacy skills of elementary school students. *Journal of Basicedu*, 6(2), 2089-2098.
- Harfiyani, A. (2018). Strengthening character education through literacy culture in the context of 21st-century learning in elementary schools. In *PROCEDURE OF THE SEMINAR AND DISCUSSION OF BASIC EDUCATION*.
- Hartati, T. (2017). Multimedia in literacy development at remote elementary schools in West Java. *Edutech*, 15(3), 301-310.
- Hendrawan, B., et.al. (2017). An Applicative Study of Cultivating Student Character Values Through Literacy Movements in Elementary Schools Based on a Critical Pedagogic Perspective. *ELSE (Elementary School Education Journal): Journal of Primary School Education and Learning*, 1(2a).
- Hofstein, A., Kipnis, M., & Kind, P. (2008). Learning in and from science laboratories: Enhancing students' metacognition and argumentation skills. In C. L. Petroselli (Ed.), *Science education issues and developments* (pp. 59-94). New York: Nova Science
- Ibrahim, M. (2005). *Seri Pembelajaran Inovatif: Assesmen Berkelanjutan*. Surabaya, UNESA University Press
- Kartono. 2011. *Hands On Activity* Pada Pembelajaran Geometri Sekolah Sebagai Asesmen Kinerja Siswa. *Jurnal Pendidikan Matematika*. Vol. 3 (2), 21-32.
- Kosassy, Siti Osa. (2019). Reviewing Learning Development Models and Learning Tools. *Journal of Civics & Law*; 14 (1).
- Labudasari, E., et.al. (2018). Building the character of elementary school students through the school literacy movement. In *PROCEDURE OF THE NATIONAL SEMINAR OF BASIC EDUCATION 2018*. STKIP Bina Bangsa Getsempena.
- Labudasari, E., & Rochmah, E. (2019). The school literacy movement's influence on students' independent character at SDN Kanggraksan Cirebon. *Premiere Educandum: Journal of Basic Education and Learning*, 9(1), 57.
- Manurung S, Nuryani Y. (2010). "Hands And Minds Activity" in Quantum Physics Learning for Teacher Candidates. In : *Proceedings of the National Physics Seminar*. Medan State University & UPI Graduate School; 2010. Available from

- <https://www.semanticscholar.org/paper/Hands-on-and-Minds-on-Activity%E2%80%9D-dalam-Pembelajaran-Manurung/c0377fdcabb24f86d6150314b1dd8bc5f0e9fd24>
- Mintohari. (2011). Hands On Activity Pada Pembelajaran Geometri Sekolah Sebagai Asesmen Kinerja Siswa. *Jurnal Pendidikan Matematika*. Vol. 3 (2), 21-32.
- Moore, G. Cleaver., dan Benbasat, I. (1991). Development of an Instrument to Measure the Perceptions of Adopting an Information Technology Innovation. *Information Systems Research* (2:3), pp. 192-222.
- Mulyatiningsih, E. (2016). Pengembangan model pembelajaran. Diakses dari <http://staff.uny.ac.id/sites/default/files/pengabdian/dra-endang-mulyatiningsih-mpd/7cpengembangan-model-pembelajaran.pdf> pada September.
- Pentianasari, S., et.al. (2022). Strengthening Character Education in Elementary School Students Through the Utilization of Digital Literacy. *PGSD Journal*, 8(1), 58-72.
- Priasti, S. N., & Suyatno, S. (2021). Application of Reading Love Character Education through Literacy Programs in Elementary Schools. *Journal of Education: Journal of Research Results and Literature Studies in the Field of Education, Teaching and Learning*, 7(2), 395-407.
- Purnama, H. I. (2019). Strengthening character education based on basic literacy culture. *Yudha English Gallery*.
- Putri, D. P. (2018). Character education for elementary school children in the digital era.
- Rahman, A. (2015). *Teachers Based on Ukim Komarudin's Notes*. Erlangga Publisher;.
- Rosyidah, N., et.al. (2019). Uji Kelayakan Media Uriscrap (Uri Scrapbook) Menggunakan Model Pengembangan 4D. *LENSA (Lentera Sains): Jurnal Pendidikan IPA*, 9(1), 1-7
- Sari, A. (2017). Implementasi pendidikan karakter di sekolah melalui kegiatan pembiasaan dan keteladanan. *Tarbawi: Jurnal Keilmuan Manajemen Pendidikan*, 3(02), 249-258.
- Sari, I. F. R. (2018). The basic concept of the school literacy movement in Permendikbud number 23 of 2015 concerns character growth. *Al-Bidayah: journal of basic Islamic education*, 10(1), 89-100
- Sari, M. K., et.al. (2021). Literacy Culture as a Character Development Effort for Students at Muhammadiyah Elementary School Bantul City. *ELSE (Elementary School Education Journal): Journal of Primary School Education and Learning*, 5(1), 112-126.
- Sugiono .(2011). "Metode penelitian kuantitatif, kualitatif, dan r & d." Bandung: Alfabeta.
- Sugiono .(2014). "Metode penelitian kuantitatif, kualitatif, dan r & d." Bandung: Alfabeta.
- Supartinah, S., & Adi, B. S. (2018). The learning model based on the balanced literacy approach contains character values for learning basic literacy in the early grades. *Journal of Educational Science Research*, 11(1), 11-22.
- Suprihatin , (2017). Pendekatan Humanistik Dalam Pengembangan Kurikulum Pendidikan Agama Islam, Vol. 3, No. 1.
- Thiagarajan, S., et.al. (1974). *Instructional development for training teacher of exceptional children*. Bloomington Indiana: Indiana University
- Ulfah, T. (2020). Strengthening Student Character Education Through the Digital Literacy Movement in Junior High Schools. In *Proceedings of the National Seminar on Education* (Vol. 2, pp. 727-736).
- Umayah, U., & Riwanto, M. A. (2020). Transformation of 21st Century Elementary Schools New Digital Literacy to Build Student Character in the Global Era. *JOURNAL OF PANCAR (Smart and Smart Children Educator)*, 4(1).
- Wiratsiwi, W. (2020). The application of the school literacy movement in elementary schools. *Reflections on Education: Scientific Journal of Education*, 10(2), 230-238.