The Development of Sentra Learning Model to Build Early Childhood Characters in Kindergarten School

Fatmawaty Yusuf1,* Muhammad Akbar2

1Alfityan School, Gowa, South Sulawesi, Indonesia
2Islamic Institute of Al-Mawaddah Warrahmah Kolaka, South Sulawesi, Indonesia
*Corresponding author. Email: fatmawatyusuf@fityangowa.sch.id

ABSTRACT
The study aims to describe the development of a learning model for character building in kindergarten students. The study employed the Research and Development (R&D) method with the ADDIE model, which consists of five stages of analysis, design, development, implementation, and evaluation. The developed model consisted of manual books, first-semester matriculation, weekly and daily plan. The results of the study reveal that the Sentra learning model in building characters of early childhood was valid. Furthermore, the practicality of the learning model was analyzed by employing an observation sheet of the teacher’s ability to manage the learning obtained the percentage of agreement 100%. The mean score of 4 teachers was in the proper category. The observation sheet of the teacher’s activity was in a good group as well. The effectiveness of the model indicated on teachers’ assessment. The Sentra learning model was confirmed as effective because the average value of student development was 79.1 or higher than the completeness value (70). Furthermore, the students' assessment of the model, in general, is in the excellent category.

Keywords: Validity, learning model, kindergarten

1. INTRODUCTION

Education and teaching should be done early on to children and given gradually according to the cognitive abilities and level of understanding of children[1]. However, many kindergarten forget the importance of moral education and spiritual intelligence and only focus on cognitive knowledge, such as writing, counting. The most important and fundamental thing in early childhood education is the formation of a child's character or morals [2], [3]. Even though a child has functional cognitive abilities, if not supported by technical, emotional abilities, it will affect his behavior.

Early childhood is the right time for the formation of children's character because they learn more from the surrounding environment. At this age, children's mental development takes place very quickly so that the right environment will form a positive character [4]. The child's experience in the first year of his life determines whether the child can face challenges. The child will show a high motivation to learn and succeed in his work later.

In the world of formal education, character formation in children is done through the process of habituation and application of learning models in kindergarten that is appropriate to the stages of development and psychological development of children. The success of character building synergies from various parties needs to be done, especially from parents, educational institutions, and the community. According to Lojdova [5], the learning model in early childhood consists of two types, teacher-centered learning and child-centered learning. Child-centered learning models include group learning models and interest-based learning models.

The formation of character is supposed to be part of the learning process at school but has not been effective. If the children are not interested in the learning method, the process will not have an impact on children's behavior, both at school and at home. Learning activities are not designed attractively, tend to be monotonous, rigid, and contain elements of command usually uninteresting for students. For example, children are not directed to tidy up the toys after use, and it is the teacher who has a role in tidying up the toys. This attitude of omission will have an unfavorable impact on the character of children. It can even carry over to behavior as an adult because children are not taught to be responsible for their environment.
In early childhood learning, the Sentra learning model is considered to be one of the solutions to shape the child's character. This model is also known as Beyond Centers and Circle Time (BCCT), which is an early childhood learning concept developed by Dr. Pamela Phelps. Sentra learning model has been applied in various countries, including Indonesia, which has officially adopted this learning model since 2004 [6], [7]. The BCCT is a revolutionary approach in the implementation of early childhood education. It combines various theories of child development, such as neuroscience theory, multiple intelligence, and the experience of teachers in building the character of early childhood. This model contains elements of Islamic values and has the main goal to change the moral, mental, and reasoning of children to be nobler from an early age.

In contrast to the old paradigm, the center model makes Character Building as its primary goal, namely how the character of children grows and develops towards noble character). There are seven characters developed in the learning model of kindergarten children, namely quality, honesty, diligence, patience, respect, discipline, and responsibility. The main characteristic of this model is the provision of scaffolding phases to build concepts, rules, ideas, and children's knowledge. There are four phases in this Sentra learning model, namely the playing environment, preparation before the child plays, child's play, and after the child plays [8].

Although it has been widely applied, the learning center models in many kindergartens have not been implemented optimally. Even teachers often consider their position superior and always right. Even students who actively ask questions are often regarded as problematic. However, this is a challenge as well as an opportunity to develop children's character by disciplining well, without anger.

The Sentra Learning Model, which was initially based on the identification of problems in the development of early childhood characters, now implements happily learning through play and learning centers. In addition, integration with Islamic values and the application of the Central Standard Operating Procedure (SOP) Learning Method Center has begun to be implemented. The teacher must carry out seventeen Standard Operating Procedures (SOP) in stages in the application of this model. Several stages of this SOP comprises of structuring the playing environment such as welcoming children and allowing children to play freely (time of adjustment), directing and guiding children in the first play, giving children time to rest. Furthermore, teachers also are in charge of dividing and guide to sitting in a circle with their respective groups and provide a foothold of experience before and after playing. Teachers also need to give sufficient time for children to perform activities. The teacher takes turns giving each child a hold while the child is playing, and together with the children tidy up the equipment and the playground.

Based on the results of preliminary observations at two kindergartens in Makassar and Gowa, and interviews with the head and teacher, the design of the center learning model approach was not carried out in accordance with the SOP. The old paradigm of learning still dominates learning by rote. The application of indicators, social-emotional are rigid and not applicable. Knowledge tends to be abstract, like the development of empathy characters only in the form of stories and rhetoric, not in the form of socio drama.

The formation of new childhood characters must be done by way of roleplaying, discipline, and consistency so that children become accustomed. Roleplay activities can build children's understanding of norms, such as distinguishing between good and bad behavior in daily life. Because of the importance and usefulness of this Sentra Learning Model, it is necessary to conduct research and development to be applied correctly. Hence this article intends to examine the "Development of Sentra Learning in Building Character of Early Childhood."

2. METHOD

This present study is a Research and Development (R & D) method, which aims to develop a learning model based on the ADDIE model [9] and simultaneously test the effectiveness of the model. The developed model comprises of manual book, Matriculation, Weekly and Daily Activity Plan. The development of this learning model focused on four teachers who applied the model and ten students in one of the kindergarten classes.

Table 1. Stages of the ADDIE Model

| No. | Stage     | Research Subject                  | Research Instrument                       |
|-----|-----------|-----------------------------------|------------------------------------------|
| 1.  | Analysis  | Teacher                           | Interview, Observation                    |
| 2.  | Design    | Researcher                        | Observation                               |
| 3.  | Development | Validators and Teachers            | Expert validation, Teacher Observation Sheet, Teacher Questionnaire |
| 4.  | Implementation | Teacher                        | Observation                               |
| 5.  | Evaluation | Researchers and Teachers           | Observation, Documentation                |
In the ADDIE model, the best approach to analyze the data is a descriptive approach. At first, the data is treated by organizing the observational data of the initial situation in the research location. Furthermore, the data then categorized into four classifications, which are a). the condition of learning media is considered problematic as it is not feasible or unable to support the learning process. This consideration is then used as the basis for designing products. Furthermore, result also show (b) teacher’s mastery of using learning media, c) the supporting conditions, such as teachers’ quality, facilities, infrastructure, and student’s physical requirements, d) the evaluation of learning model development. The assessment indicates that it is unnecessary to revise the learning media.

In addition to the qualitative analysis, the researcher conducted a qualitative study to assess the validity of the developed learning models before implemented in the target participant. Analysis of validity comprises of empirical validity and content validity. Table 2 shows the analysis of validity content based on the categorization.

Table 2. Categorization of Content Validity

| Validity Categorization | Value  |
|------------------------|--------|
| Invalid                | 1 ≤ X < 1.5 |
| Low                    | 1.5 ≤ X < 2.5 |
| Valid                  | 2.5 ≤ X < 3.5 |
| High                   | 3.5 ≤ X ≤ 4 |

Furthermore, the empirical validity tested based on experiences of using the learning media. The accurately measure the level of practicality and effectivity. The analysis of learning media practically indicates teacher’s ability (TA) to manage the learning process (Table 3) and the implementation of each aspect of teaching media (Table 4). The higher the observation results provided by the two observers at each meeting, it indicates the high ability of teachers to manage the learning process.

Table 3. Level of teacher’s ability

| Level of Teacher’s Ability | Value  |
|----------------------------|--------|
| Poor                       | 0.0 ≤ TA < 0.5 |
| Fair                       | 0.5 ≤ TA < 1.5 |
| Good                       | 1.5 ≤ TA < 2.5 |
| Very Good                  | 2.5 ≤ TA < 3.5 |
| Excellent                  | 3.5 ≤ TA ≤ 4.0 |

Table 4. Level of Implementation

| Level of Completeness | Value  |
|-----------------------|--------|
| Unimplemented        | 0.0 ≤ M < 0.5 |
| Partially implemented | 0.5 ≤ M < 1.5 |
| Fully implemented     | 1.5 ≤ M < 2.5 |

The effectiveness of learning media comprises three-level categorization of analysis:

2.1. Students’ Learning Development

The analysis was conducted on the abilities and skills obtained by students from all learning activities. The abilities of students then grouped into four categories, not appeared yet, start appears, developing as expected, excellent development. Students are considered to meet the criteria of learning outcomes at least 70% of the expectations.

2.2. Teachers’ Questionnaire

Teacher responses to learning media are considered effective if obtained ≥ 80% of positive statements for each component of learning media.

2.3. Students’ activities

Observation sheet of student activities in learning based on constructive play learning models that aim to train the fine motor skills of kindergarten students. Furthermore, the results of the analysis of the observation data are categorized as follows:

Table 5. Level of Student Activities

| Level of Completeness | Value  |
|-----------------------|--------|
| Low                   | AS < 1,5 |
| Moderate              | 1.5 ≤ AS < 2,5 |
| High                  | 2.5 ≤ AS < 3,5 |
| Very High             | 3.5 ≤ AS ≤ 4 |

3. RESULTS AND DISCUSSION

3.1. Research Results

3.1.1. Need Assessment (Analysis)

Analysis of the need assessment for developing learning media is intended to adjust the center’s learning model in shaping the character of children. The results of filling out the needs assessment by 14 educators and staff in Makassar and Gowa Kindergarten were taken into consideration in designing a hypothetical model (Result can be seen in Table 6). Furthermore, a Focus Group Discussion (FGD) was conducted to obtain detailed information from teachers, school principals, and school supervisors in Al Fityan School Gowa. The findings described in table 7.

Based on the results of the analysis, the implementation of learning centers in the formation of character is essential. Besides, several contributing factors need to be prepared to improve the effectiveness of the model, namely the implementation of a guidebook.
for teachers, implementation steps of the model in four centers, matriculation program, the weekly and daily activities plan.

### Table 6. Need Assessment Analysis

| No | Findings |
|----|----------|
| 1  | There is a need for a character learning model reference that can facilitate the teacher in implementing each indicator in a fun learning activity |
| 2  | The model developed should describe the characters and indicators at each level of activities in a fun learning |
| 3  | Utilizing a series of play activities that can support the development of children's character and stimulate the entire domain of child development |
| 4  | Teachers as a role model could provide stimulus to the students by using a fun approach, as the students can more easily accept it |

### Table 7. Al Fityaan School’s Need Assessment Analysis

| No | Findings |
|----|----------|
| 1  | The school has implemented four center systems, wherein each play activity there are three levels of play. |
| 2  | Schools have no concept of how the formation and character development following the stages of child development. The teacher also does not understand the meaning of various characters and indicators that must be achieved by children at each step of the game |
| 3  | The teacher needs guidance in implementing this learning model |
| 4  | The positive response and readiness of teachers and principals to accept and implement the learning model centers in shaping the character of children |

#### 3.1.2. The Development Hypothetical Model (Design)

The analysis showed the importance of applying the learning model center in early childhood character formation as one of the teacher's reference materials in stimulating character values and all domains of child development. Theoretical studies reveal that building a child's character can be carried out at each scaffolding play phase smoothly and pleasantly by students. Based on the results, the researchers then designed the development concept. The initial design is in the form of a hypothetical prototype model, "Development of Learning Center Models in the Formation of Character of Early Childhood." The design of this theoretical model was arranged in a guidebook as a teacher's guide, matriculation program, the weekly and daily activities plan.

#### 3.1.3. Model Development (Development)

In the process of developing learning models, the validity of the developed model is measured by assessing content validity by the assessment of two experts in the field of education. The assessment includes evaluation of book components, format, book content, language and writing, illustrations, the layout of tables and diagrams of drawings, and the usefulness of the book. The average validity of the developed model is 3.6, which is interpreted as a very high level of validity. Empirical validation is obtained from the teacher's response during the process of implementing the learning model so that it is possible to receive input related to the design of the model.

#### 3.1.4. Implementation of Learning Model (Implementation)

This stage is a trial or implementation phase of a learning model that has been validated by expert judgments. The practicality and effectiveness of the learning model can be carried out in this stage. The practicality analysis of this learning model was observed by measuring the ability of teachers to manage learning that had previously been applied by researchers. The ability of teachers to use the learning model through teacher activity sheet observations and learning management observation sheets had been previously validated. In addition, analysis of the effectiveness of the learning model is measured through teacher responses on questionnaires and observations on student learning activities.

At this implementation stage, the researcher also observes the interaction between students during play activities. Then the observations are recorded in an observation sheet. The researcher then gives feedback on each student's response during the process of implementing the learning model.

Based on the analysis of observer data related to the implementation of the learning center model in building...
children's character, the results show that all aspects to be achieved in the center learning model are well implemented as a whole, with a percentage of agreement (PA) by the two observers at 100%. In addition, the ability of teachers to manage to learn amounted to 3.45, and the ability of teachers to apply learning models amounted to 3.34. Both of these aspects, both the ability to manage learning and the ability to use learning models, are in the "good" category (2.5 ≤ TKG <3.5).

The analysis also shows the development of students who are in the category of 'developing according to expectations' with a mean score of the observer at 79.1%. It is indicated by the fulfillment of 10 of the 11 indicators of play activities in four centers in the formation of children's character. The final finding is the teacher's positive response to the developed learning model. Correctly, the teacher responded "good" by 33.3% to the manual book and answered 'excellent' by 100% to each of the matriculation programs, weekly plan, and daily activities plan.

3.1.5. Evaluation

Children's learning development that is indicated by the formed character is measured using an observation sheet of students' learning development. Eleven aspects of development are observed directly by researchers by providing a code according to the predetermined learning development criteria of students, namely:

NA: Not yet Appeared, given if students have not shown the first signs of behavior that have indicators because they are deemed not to understand the meaning of the value,

SA: Appears to appear, if students have begun to show the initial signs of behavior stated in the indicators, but not yet consistent because the child may already understand and get reinforcement from the immediate environment,

DAE: Develops as Expected, if students have shown various signs of behavior that are stated in the indicators and are starting to be consistent because, in addition to understanding and awareness, they also have the strengthening of the nearest environment and broader environment,

VGD: Very Good Development if students show the behavior expressed in indicators consistently because in addition, there is already an understanding and awareness and get a strengthening of the immediate environment, and the more full environment has grown moral maturity.

Based on the results of observations on the learning development of students according to aspects of central learning in play activities, children's learning development reaches 79.125. The success of this learning achievement is shown by more than 70% of students who are in the category of developing according to expectations (DAE). (Table 8).

| Scaffolding Phases in Sentra Learning model | Percentage of DAE students (%) |
|--------------------------------------------|---------------------------------|
| Role Play                                  | 76.3                            |
| Preparation                                | 79                              |
| Developing                                 | 84.3                            |
| Art                                        | 76.9                            |
| Average                                    | 79.125                          |

Based on the teacher's evaluation through a questionnaire sheet on the learning center model, it indicates that the four products developed are very good. It is shown on the table below.

Table 9. Teachers’ responses on Sentra learning model

| No | Product of Sentra Learning Model | Evaluation |
|----|---------------------------------|------------|
|    |                                 | Very Good  | Good | Fair | Poor |
|    |                                 | Total | %   | Total | %   | Total | %   | Total | %   |
| 1. | Manual Book                     | 3     | 66.7| 1    | 33.3| -     | -    | -     | -    |
| 2. | Program Matriculation           | 4     | 100 | -    | -   | -     | -    | -     | -    |
| 3. | Weekly Plan                     | 4     | 100 | -    | -   | -     | -    | -     | -    |
| 4. | Daily Plan                      | 4     | 100 | -    | -   | -     | -    | -     | -    |

3.2. Discussion

In this study, researchers found several specific findings that could be suggestions for improving early childhood learning. First, learning supported by a central learning manual can improve the understanding and educational methods of the teacher, especially in shaping the excellent character of children. Second, a good personality can be formed quickly and systematically in every step of the child's play. If this is applied consistently, then the character will stick firmly until the child enters formal education. Lastly, cleaning and tidying activities are essential activities in Sentra learning
as it is considered appropriate activities in building character values and stimulating child development.

Furthermore, in this cleaning activity, children can learn to classify play tools based on the color, shape, and size and its function, as well as learn about the order and organizing environment. Also, children can work together to store play equipment back to its original place in accordance with the name tag and storage place. It supports child literacy.

4. CONCLUSION

The conclusions that can be drawn from this research and development are as follows:

a. Based on the results of the content validity of the learning model, manuals, matriculation programs, and daily activity plans shows a 'valid' result. While the weekly activity plans are in the 'high validity' category.

b. The results of empirical validity show that the teacher gives a 'very good' rating with a value of 100% on each product in the form of a model manual. Based on observations of the ability to manage learning by the teacher, the observer considers that the learning model has met the practicality criteria with a percentage of agreement (PA) = 100%.

c. The results of the analysis of the effectiveness of the learning model suggest that teachers responded 'very good' to the model. Furthermore, the observation made on students development of learning with centers learning model play a role in shaping the character of early childhood.

d. Based on the constraints of the problem in this study, the center of learning models in the formation of early childhood character in kindergarten that was developed had fulfilled valid, practical, and effective criteria.

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