



## Webbed Model Integrated Learning Can Increase Motivation and Self-Regulated Learning in Kindergarten Students

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### Abstract

This study aims to analyze the effect of webbed-integrated learning on the motivation and self-regulation of kindergarten students. This type of quantitative research uses an experimental design. The research subjects were selected using the Cluster Random Sampling technique and then divided into 2 groups, namely the control group and the treatment group. A total of 64 kindergarten students aged 5-6 years participated in this study. The control group was 32 people and the experimental group was 35 people. Subjects obtained from 2 kindergarten institutions were used as experimental classes for the webbed learning model and 2 kindergarten institutions were used as conventional learning models. Data was collected using observation and test techniques to determine the effect of webbed-integrated learning on learning motivation and regulation. Assessment of motivational observation in the instrument by taking 10 question indicators and self-regulation observation assessment in the instrument by taking 4 question indicators. The data that has been obtained was analyzed using the IBM SPSS application. The results of this study reported that there was a significant difference ( $*p < 0.05$ ) in the experimental group with a webbed integrated learning model on the motivation and self-regulation of kindergarten students compared to the control group. Data are presented as Mean Std Error. P-value was obtained by using an Independent t-test to compare the control and experimental groups. Integrated Learning Webbed Model is effectively applied in learning to increase learning motivation and self-regulation in kindergarten students. This is because the learning carried out is adjusted to the characteristics of students so that learning can be understood. Learning activities are carried out through interesting and fun play activities that cover six aspects of development areas. In addition, students are able to manage their minds so that they can carry out learning activities, and behave well, students can also regulate their emotions when participating in learning at school.

Keywords: Webbed Model Learning, motivation, self-regulation, kindergarten students

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### 1. Introduction

In the learning process, students can organize and manage all academic activities and are believed to be able to

solve problems (Ghani et al., 2021). However, this cannot be separated from the role of a teacher at school. Conventional learning sometimes makes



kindergarten students feel bored or bored, because the things that are presented are only the same thing every day, and the lack of teacher exploration of technological media that is developing at this time is also the reason why children tend to be bored and do not enjoy their learning activities (Setyorini, 2020). So far, the kindergarten learning process still has several problems, one of which is that teachers as educators must understand how digital technology is developing today, especially in the world of education (Nurkolis and Muhdi, 2020). In addition, teachers often do not use learning models in learning activities and teachers still do not understand how to make it easier for children to do assignments through e-learning (Owusu-Fordjour, C. and Hanson, 2020). In this regard, Kindergarten Education is classified as a mindset category that is still unable to absorb complex information and is proficient in using tools, so the teacher's role is important in this learning activity, including during the current COVID-19 pandemic (Astini, Sari, 2020).

In recent years, around 75% of educational institutions have implemented online learning (Siti Syarah, Mayuni and Dhieni, 2020; Chitra et al., 2022). Although the incidence of the COVID-19 pandemic is starting to decline, teachers are still required to continue to innovate and design creative and innovative learning activities and teaching materials in order to attract the attention of students (Koumpouros and Kafazis, 2019; Viner et al., 2020). If teachers are not creative and innovative

in the learning process, this will certainly reduce students' motivation and self-regulation it will have an impact on learning outcomes for kindergarten education (Schulz, Finstad-Milion and Janczak, 2018; Eadie et al., 2021; Huda et al., 2022).

Alternative solutions need to be found to overcome these problems. One of the learning models that can be applied is the webbed model of integrated learning. Webbed integrated learning model is a form of theme-based learning model (Puspita, Hoerudin and Yudiantara, 2020). Previous research reported that this webbed learning model is recommended for use at various levels of education in the hope of a learning approach that produces students who can actively participate in learning activities and voluntarily seek and explore their own knowledge holistically (Rosnawati and Sari, 2021). Until now, there has been no report on the effectiveness of webbed-integrated learning on motivation and self-regulation in early childhood education.

This study aims to analyze the effect of webbed-integrated learning on the motivation and self-regulation of kindergarten students.

## **2. Method**

### **2.1 Study Design**

This type of quantitative research uses an experimental design. The research subjects were selected using the Cluster Random Sampling technique and then divided into 2 groups, namely the control group and the treatment group.

## 2.2 Subjects

A total of 64 kindergarten students aged 5-6 years participated in this study. The control group was 32 people and the experimental group was 35 people. Subjects obtained from 2 kindergarten institutions were used as experimental classes for the webbed learning model and 2 kindergarten institutions were used as conventional learning models.

## 2.3 Procedure

- 1) Prepare administration such as research permitSubjek dibagi menjadi 2 kelompok yaitu kelompok control dan kelompok perlakuan
- 2) Teachers became observers in this study. Each kindergarten institution has 2 teachers who are observers.
- 3) Collecting data using observation and test techniques to determine the effect of webbed-integrated learning on learning

motivation and regulation. Assessment of motivational observation in the instrument by taking 10 question indicators and self-regulation observation assessment in the instrument by taking 4 question indicators.

- 4) The final stage of this research, the data is analyzed and the report is prepared as the responsibility of the researcher

## 2.4 Statistical analysis

Statistical analysis in this study used the IBM SPSS version 26 application, a descriptive test was conducted to obtain the mean and standard error. Then the normality test was carried out using the One-Sample Kolmogorov-Smirnov Test method, if the data were normally distributed, the difference test was carried out using the independent t-test, but if the data were not normally distributed, the difference was performed using the Mann-Whitney U test.

## 3. Results

Table 1. Results of the normality test for motivation and self-regulation

Data	n	p-value
Motivation	67	0.073
Self-regulation	67	0.070

Based on the normality test in table 1. Motivation and self-regulation data are normally distributed ( $p > 0.05$ )

Table 2. Homogeneity Test

Data	n	p-value
Motivation	67	0.108
Self-regulation	67	0.849

Based on the homogeneity test in table 2. Motivation and self-regulation data showed homogeneous results ( $p > 0.05$ )

The results of the analysis of motivation and self-regulation of each group are presented in Figure 1.

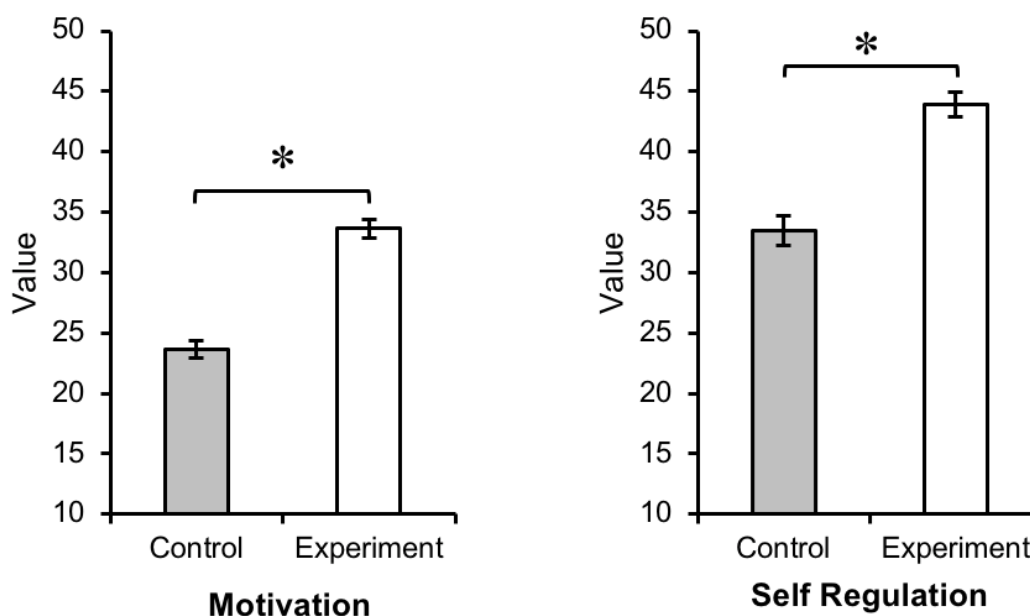


Figure 1. There is a significant difference ( $*p < 0.05$ ) in the experimental group with the webbed model of integrated learning on the motivation and self-regulation of kindergarten students compared to the control group. Data are presented as Mean Std Error. P-value was obtained by using an Independent t-test to compare the control group and the experimental group.

#### 4. Discussion

##### 4.1 Webbed Model Integrated Learning on Learning Motivation in Kindergarten Students

Our research reports that webbed integrated learning used in learning on learning motivation in kindergarten children shows a significant difference

between the control group and the experimental group. This can be seen from the observations made in both groups. A study reported that webbed learning had a significant effect on increasing children's learning motivation through interesting and practical activities to stimulate children's motivation (Puspita, Hoerudin

and Yudiantara, 2020; Escobar-Almeciga and Brutt-Griffler, 2022).

Specifically, the application of the webbed model of integrated learning in the experimental group can increase the learning motivation of kindergarten students. The learning designed by the teacher is well conceptualized so that it can produce active and cheerful students participating in activities holistically and not separately so that it is easy for children to understand learning well (Puengwattanapong and Leelasantitham, 2022). By giving flexibility to students, it can grow active students. Teachers are required to continue to innovate and design learning activities and teaching materials creatively and innovatively to attract students' attention (Viner et al., 2020)

We believe that the Webbed Model integrated learning can bring new colors to growing early childhood learning motivation. This is because in integrated learning the webbed model, the chosen theme is a theme that children are interested in by presenting interrelated activities in all areas of development. Whereas conventional learning often makes students feel bored, because the things that are displayed are only the same things every day, the teacher's lack of exploration of technological media that is currently developing is also the reason why children tend to be bored and do not enjoy their learning activities (Setyorini, 2020).

Meanwhile, when compared to the implementation of integrated learning

using the webbed model in the control group, the experimental group gives more freedom so students can actively participate in learning so that students do not get bored quickly. Meanwhile, in the control group, children's motivation was lower because the learning carried out was less able to foster children's creativity because the teacher was less creative in designing learning.

We assume that every learning has a very big influence on students, especially on learning motivation. So that the integrated learning webbed model can be used to increase learning motivation in kindergarten students.

#### **4.2 Webbed Model Integrated Learning Against Self-Regulation in Kindergarten Students**

Our research reports that webbed integrated learning used in learning about regulation in kindergarten children shows a significant difference between the control group and the experimental group. This can be seen from the observations made in both groups. Several studies report that the development of integrated thematic learning tools based on interactive compensatory models can improve students' self-regulated learning (Graham et al., 2012; Puspita, Hoerudin and Yudiantara, 2020; Rosnawati and Sari, 2021).

Learning in the experimental group shows that students are able to take care of themselves without help, are able to use objects well, can do their own work, like to help, want to share, want to take turns in using toys or stationery, can

interact well, and can choose toys according to their needs. his wish.

The analysis of the experimental group on self-regulated variables using 13 indicators with various activities at knowing the level of management of student learning activities. In the experimental group, it turned out that students were able to manage their minds so that they could carry out learning activities, and behave well. In addition, students can also regulate their emotions when participating in learning at school.

Learning in the experimental group uses a theme as a central point that is able to inform all existing learning concepts with activities. So educators should be able to use webbed integrated learning models to improve abilities or problem-solving efforts in kindergarten children.

## 5. Conclusion

Integrated Learning Webbed Model is effectively applied in learning to increase learning motivation and self-regulation in kindergarten students. This is because the learning carried out is adjusted to the characteristics of students so that learning can be understood. Learning activities are carried out through interesting and fun play activities that cover six aspects of development areas. In addition, students are able to manage their minds so that they can carry out learning activities, and behave well, students can also regulate their emotions when participating in learning at school.

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