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# Implementation of Webbed Type Integrated Learning to Improve Student Learning Activities

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© 2023 The Authors. This open access article is distributed under a (CC-BY License) Abstract: Integrated learning is a learning approach that adapts to the level of student development and gives students the opportunity to learn both individually and in groups. The study aims to provide an overview of the application of webbed-type integrated learning in primary schools. The subjects in the study are teachers in Gugus II Kecamatan Payakumbuh Timur. The research is carried out using descriptive qualitative methods, where data collected from the results of observations, interviews, and documentation is analyzed descriptively to describe the application of webbed-type integrated learning in elementary schools. Research results show that in integrated learning of the webbed type, learning starts from themes in everyday life that are close to the student environment, so learning becomes more meaningful. In the learning process, students are actively involved in various fun learning activities. Thus, it can be concluded that integrated learning using the webbed type is very suitable for application in elementary schools because it can improve student learning activities.

Keywords: Integrated learning; Learning activities; Type of webbed

# Introduction

One of the government's efforts to create quality human resources is through education. Because, through education, one can develop optimally according to his potential. Education is the process of changing behavior by adding knowledge and life experience so that students become more mature in thought and attitude (Putri, 2018). A child's education begins in his or her nearest environment, the family, and then extends to school and society. Their life process is a process of learning over time. Learning is not just getting information to live but also learning to learn (learning to learn) and to be (leaning to be) so that they can follow the times that are constantly experiencing change.

Learning is a conscious effort by the teacher that is intentionally done with the aim of making the learning process happen for the student. Learning is the process of interaction between teachers, students, and learning resources in a learning environment (Linawati et al., 2013). Learning is the aid given to teachers so that the process of acquiring knowledge, the mastery of skills and habits, as well as the formation of attitudes and confidence in students, can occur (Djamaluddin & Wardana, 2019). In other words, learning is a process to help the student learn well so that there is a change in behavior that includes knowledge, attitudes, and skills in him or her. The greater the participation of students in learning activities, the greater the likelihood that students will understand and master the materials presented, and vice versa (Tangkearung & Lolotandung, 2021).

Teachers are one of the most important components of the learning process, so teachers should be able to make the process of learning more effective and interesting so that students feel happy and motivated during the process (Masitoh & Mariono, 2022). Teachers, as educators, have a huge role to play in increasing activity in student learning activities. In other words, the quality of the relationship between teachers and students determines the success of an effective learning process.

Integrated learning is learning that begins with a particular language or theme that is associated with

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other languages, certain concepts are related to other concepts, and is carried out spontaneously or planned, either in one or more fields of study, with a variety of learning experiences so that learning becomes more meaningful (Tirtoni, 2017). Integrated learning is a learning system that enables students, both individually and in groups, to actively search, dig, and discover holistic, meaningful, and authentic concepts and principles (Dewi, 2017; Linawati et al., 2013; Trianto, 2014). It is said to mean that in integrated learning, students will understand the concepts they learn through direct observation and connect them with other concepts that they understand (Daryanto & Sujendro, 2014; Hernawan et al., 2016; Syafrilianto, 2019).

Integrated learning emphasizes student's participation in the learning process and decisionmaking, while teachers only direct the teaching process. Through integrated learning, several concepts that are relevant to a particular theme do not need to be discussed repeatedly in different fields of study, so the use of time in learning activities is more efficient, and the achievement of learning goals is also expected to be more effective (Darmawan et al., 2021). Compared to conventional learning, integrated learning emphasizes student involvement in learning, so that students are actively involved in the learning process and decisionmaking. The integrated learning approach emphasizes the application of the concept of learning while doing something (learning by doing) (Intang et al., 2021).

One of the integrated learning models that is suitable to be applied in primary schools is web-based. Webbed is one of the recommended models for blending knowledge across subjects (Soares et al., 2021). The webbed model is an integrated learning model that uses themes as the basis of learning (Armadi & Astuti, 2018; Efendi, 2021; Intang et al., 2021; Yusuf & Wulan, 2015). A webbed-type learning model combines a variety of basic competencies from several subjects into a theme, and the theme that has been determined as the unifier of learning activities that blend several topics at once in one face-to-face session can create a pleasant learning atmosphere that makes for a meaningful experience for students (Armadi & Astuti, 2018; Marzuki, 2017; Soares et al., 2021). It is easier for students to understand what the teachers are teaching. Thus, the theme becomes central to the learning process, where one theme can connect one subject matter with another subject matter that is bound and can be communicated continuously.

Integrated learning type webbed is a learning pattern of teaching in integrated learning that uses a topic or theme to blend and link several concepts that are interrelated into one learning package (Robin Fogarty, 2009). Integrated learning is packed with themes or topics discussed from a variety of perspectives or disciplines that are easily understood and recognized by students, so that some concepts relevant to the theme no longer need to be discussed repeatedly on different subjects, so the time spent is more efficient and the expected learning goals can be achieved effectively (Sukariasih, 2017). With this integrated learning, students are expected to have the ability to identify, collect, evaluate, and use the information around them meaningfully, as information is acquired by students not only through the provision of knowledge from teachers alone but also through the opportunity to strengthen and apply it in a range of new and increasingly diverse situations (Akib et al., 2020).

Themes developed in integrated learning are taken from outside the subject but are in line with the basic competence and topics of the subject (Armadi & Astuti, 2018; Yusuf & Wulan, 2015). With specific themes considered relevant to the students' abilities in primary school, the learning process carried out is expected to have a great impact and meaning on the development of students' potential and be in line with the expected educational goals (Dewi, 2017). With themes already connected to such other subjects, students can explore their ability to strengthen their understanding according to the theme. The aim of the theme is not only to master the concepts of the subject but also concepts from other subjects that are interrelated and adapted to the child's learning experience, so that learning becomes more meaningful. Thus, in the integrated learning type, set one theme that can be connected with the subject of other languages and other fields of study that correspond to the themes already established and planned.

Webbed-type integrated learning aims to enhance the understanding of the concepts learned by students in a more meaningful way, develop the skills to find, process, and utilize information, cultivate the development of positive attitudes, good habits, and higher values necessary in life, develop social skills, increase the passion for learning, and choose activities that meet interests and needs (Wali et al., 2020). With the fusion of subjects, students will acquire knowledge and skills integrally and will be able to understand the concepts learned through experience or direct and real observation. The most prominent characteristic of SD students is their holistic nature, which means they tend to look at everything as a whole, to live their experiences as something of a totality, and to see themselves as the center of the environment that is an unclear whole of its elements.

Therefore, the learning process at school must be improved immediately so that teachers can give birth to generations that have superiorities in various fields, so that the Indonesian nation can compete with other nations and not get left behind due to the rapid global flow (Mardhiyah et al., 2021). The quality of learning should be improved, one of them through learning processes that are able to actively involve students and maximize the role of teachers in facilitating learning (Wibowo, 2016). But the reality is that in education today there are many problems that are faced at the time of learning process, one of which is the lack of student learning activity (Paneo, 2020). Thus, through this research, the researchers will describe how to improve student learning activity through integrated webbed type learning. The novelty of this research is that it focuses more on student activities, lesson materials presented more contextually, project-based learning so that many products are produced from student learning activities.

In this regard, integrated learning can be used as one of the learning alternatives to improve student learning activities because the stage of cognitive development of SD students is still in the concrete operational stage and their thinking ability and psychological needs are still in development. However, integrated learning is not fully utilized because teachers have difficulties designing their curriculum (Anwar, 2018). Several relevant studies related to it have previously been done by experts. For example, a study conducted by Marzuki (2017) obtained the results of research showing that integrated learning of a scientificbased webbed model can improve the critical thinking ability of class VI elementary school students in the East Pontianak district. Furthermore, research conducted by (Armadi & Astuti, 2018) that integrated learning of local culture-based webbed types improved the learning outcomes of primary school students in SDN Pangarangan III. In addition, research by Yusuf et al. (2015) also obtained the results that the application of model learning learning discoverv and type combinations shared and webbed can improve the skills of the science process participants. Later research conducted by Chang et al. (2020) also obtained the results that the development of integrated learning webbed and threaded models can significantly enhance student knowledge, attitude, and interest in the crossdisciplinary robotics curriculum. However, research that provides an overview of how the application of integrated learning can improve student learning activity in primary schools has not been done much. Therefore, this study is considered important because the presence of an overview of the application of integrated learning type webbed by researchers is expected to improve student learning activity, especially in elementary schools.

# Method

The research method used is the qualitative descriptive method. The qualitative research method is a method used to study the conditions of natural objects, in which the researcher is the key instrument (Sugiyono, 2022). Qualitative research also means a research process to understand human or social phenomena by creating a comprehensive and complex picture that can be presented in words, reporting detailed insights obtained from informed sources, and performing it in a natural setting (Rijal Fadli, 2021). Descriptive research examines the status of a group of people, objects, conditions, and systems of thought, or events in the present with the aim of making a systematic, factual, and accurate description of the facts studied. The scheme or flow in this study can be seen in Figure 1.



Figure 1. Qualitative descriptive research

Qualitative descriptive research in this study aims to describe the application of integrated learning based on the activities of students in primary school. The subjects in this study are SD teachers in the teacher work group Gugus 2 Districts of Payakumbuh East City Payakumuh. Data collection techniques are carried out through observation, interviews, and documentation. The data that has been collected is described in a descriptive way through the processes of data reduction, data presentation, and conclusion drawing.

## **Result and Discussion**

Integrated learning of the webbed type is one of the learning models that uses thematic approaches to integrating learning. The development of this type of web-based learning begins with determining a particular theme. The theme is determined by agreement between the teacher and the student. Themes are taken from everyday life, which is close to the student environment. In determining such themes, there are several things that teachers should pay attention to: themes relevant to student life, themes capable of making students actively involved in learning activities, themes that provide diversity and balance in the curriculum, themes that are adapted to existing learning media, and themes that are capable of inspiring students to do a project (Avanti Vera Risti, 2017). After a theme is agreed to be used in the learning process, it is developed into a sub-theme by paying attention to the relationship between subjects. Below are examples of themes developed in an integrated learning type webbed on students of class 3 SD in Gugus 2 Districts of Payakumbuh East City Payakumbuh, as seen in figure 2.



Figure 2. Developing themes into sub-themes

Based on Figure 1, it can be explained that in this study, the theme agreed upon by teachers and students is the development of technology. Where the theme is associated with several subjects such as IPS, IPA, Indonesian language, mathematics, and SBdP and subsequently developed into sub-themes. The first subtheme is about the development of transportation technology; the second sub-theme is about the impact of transportation technology development; the third subtheme is about writing experiences stories; the fourth sub-theme is about measuring the surroundings of flat buildings; and the fifth sub-theme is about the technique of folding and cutting.

After the themes and sub-themes are determined, the learning plan, or steps of activities to be done by the teacher, the methods and media to be used, and the form of evaluation to be carried out are determined. Because, in order to present and deliver the learning materials correctly, teachers are required to master the strategy and teaching methods well, the teacher is also expected to be able to prepare the learning, carry out, and evaluate the learning results of students well, choose and use the appropriate models of learning interaction teaching, as well as manage the class and guide the development of students accurately (Trianto, 2014). The steps of the learning activities carried out by the teacher are divided into three stages, namely the initial activities, the core activities, and the closing activities (Setiawan et al., 2023).

At the preliminary stage, there are several activities carried out by teachers, namely: 1) greeting and greetings to students; 2) asking news and checking the presence of students; 3) asking students to pray; 4) raising schemes of students by agitating some images of the tools generated by the development of technology; 5) doing ice breaking; 6) performing apperceptions by telling stories and answering questions with students related to technological developments, especially in the field of transportation; 7) communicating the themes and goals of learning as well as the steps of activities to be taken; and 8) asking questions. Thus, this preliminary activity is the initial activity that must be done by the teacher before starting learning, where the most important activity to be carried out is to communicate the purpose of learning and to transmit the initial perception of the material to be studied (Badelah, 2021).

The learning objectives that have been formulated in the lesson are: 1) through rotating activities to other groups, students can write various means of land, water, and air transportation on cardboard provided carefully, 2) By looking at information through concept maps, students can correctly identify traditional and modern means of transportation correctly, 3) Through joint media, students can correctly classify traditional and modern transportation means, 4) Through group discussions, students can correctly explain the impact of the development of transportation technology on life correctly, 5) Through assignments, students can make present and future means of transportation using folding and cutting techniques creatively, 6) Through measuring activities, students can calculate the circumference of a flat shape of a carefully made means of transportation, and 7) through assignments students can write stories of experience about the development of tools for transportation in the form of a puff book with interesting.

To achieve this goal, there are several methods used by teachers, namely the method of window shopping, discussion, question answering, and recitation. In addition, teachers also use a number of media, tools, and materials to help the learning process so that students can be actively involved. Some of the tools and materials used by teachers include sticky notes, cardboard paper, origami paper, HVS paper, tape, spidols, pens, glue, scissors, staplers, and rows. From the tools and materials, students are asked to produce a number of media, such as concept maps, text cards, hard paper, transposh tools, and puff books. After all the plans, tools, and dissipation materials are completed, the learning activities are carried out. The next stage is core activity. In this core activity, teachers carry out several activities involving student activities related to the learning goals that have been formulated according to the themes developed. Teachers only act as facilitators who guide learning activities, and students are active in doing activities. The role of the teacher as a facilitator is to ensure the availability of facilities to facilitate the learning activities for students (Shofiya et al., 2020).

Initially, teachers divided students into several heterogeneous groups. Each group consists of six people. Next, the teacher distributed tools and materials such as cardboard paper, large spidols, and small colored spidols to each group. One student in each group wrote the word "TRANSPORT" on the middle of his cardboard paper using a large spidol. The writing is quite large and is given a box or frame. After that, students were assigned to make three lines on the box or frame and write the words land, sea, and air. The words are also framed and can be made into boxes, circles, or clouds according to student creativity.

In the next step, the teacher asked each student to choose one of the colored spidols they liked. The teacher describes the activities to be carried out, where students from each group will visit and travel around to the other group to write the names of land, sea, and air transportation on each cardboard that is in the group. The name of the means of transport must not be the same. This activity was repeated until all the groups returned to their original groups. After the students returned to their original group, they were asked to reexamine the means of land, sea, and air transport that had been described by their friends from other groups. Then the student corrects if there are misresponses, adds if there is a lack of answers, and replicates the result of the conceptual map formed from the activity.

Following the activity, the teacher asked the students to identify the means of transport on land, sea, and air that appear on the concept map and group them into two groups: traditional transportation and modern transportation. For this activity, the teacher distributed sticky notes to each group in two different colors. One color for traditional transportation and one color for modern transportation. Next, students in their respective groups write the names of traditional and modern transportation tools onto a sticky note, with the provision of one paper for each name of transportation means. The teacher then distributed two pieces of cardboard to each group and asked the students to paste their sticky notes on the cardboard. Each card is given both traditional and modern titles. After that, the teacher distributed a lengthy piece of cardboard and asked the student to write the title of the transportation. The teacher also distributed the tape and cuts to each group and assigned the group to combine the cardboard with the tape so that it becomes a ripe medium. The teacher then asked the students to display their work on the classroom wall.

Next, the teacher distributes work sheets to each group and gives instructions on the activities to be done. Students read the instructions on the worksheet and ask the teacher if there are any less-understood instructions. Next, students discuss in their respective groups the impact of transport technology developments on life. At that time, the teacher accompanied the students in each group and monitored the course of the discussion. After the discussion was completed, the representatives of each group were asked to present the results of the discussion to the class, and the other group gave a response. Teachers show appreciation for the students' activities.

In the next step, the teacher distributed a few origami papers to each group. The teacher gives instructions on the activities that will be done by the students. Where each student is asked to take two sheets of origami paper to make the means of transport existing at the present time and the means they want in the future with the technique of folding and cutting. In this case, students make it according to their own creativity.

After the students finished making the transportation, the teacher asked the students about the flat building they found from the activity. Students answered that there were several flat buildings they found, namely square, square long, triangular, and circular. Next, the teacher asked the student to measure around the flat building using a grid. Then, the teacher gave an explanation on how to determine a flat building circuit. Students listened carefully to the teacher's explanation and asked if anything was misunderstood.

The next activity is to distribute a piece of HVS paper to each student. The teacher asked the student to fold the paper and cut it, then unite it into a book. The book is called a puff, a book that can be penetrated or blown because of its small size and because it consists only of a few pages. After that, the teacher gave instructions on how to make a puff book, i.e., on the first page, a cover containing the name and title of the story. The cover is decorated with pictures and interesting colors to make it look better. Both pages of the book contain words of introduction and thanks. The third page is a list of contents, and the fourth and next pages contain stories of experiences that students will write about the means of transport they have ever used.

After the student finished writing the story on his puff book, the teacher distributed a piece of cardboard paper to each group and asked the student to write the title "My Story" on the cardboard. Next, the teacher asked the students to paste the puff book and the pictures of the transportation equipment they had made onto the cardboard according to their respective creations. Then students from each group were asked to present the results of their group work in front of the class. Students were also asked to write about the experiences they wrote about in the book. After that, the students exhibited their group work on the classroom walls. Next, the teacher documents the results of the student's work and gives the student the opportunity to visit to see the outcomes of the other group. Teachers also don't forget to reinforce the teaching material that students have already learned with the theme of technological development. In addition, teachers also give appreciation and rewards to groups and students who have already actively participated in learning activities. Below are the results of student learning activities in the research model of integrated learning type webbed, as seen in the following figure 3.



**Figure 3.** Results of student work in integrated learning type webbed. (a) Concept map; (b) Media release; (c) Vehicles and puff books

Once the core activity is completed, the next stage is the closing activity. At the closing activities, teachers and students concluded the lessons learned on the day related to the theme of technological development, in particular in the field of transportation. Teachers also reflect and ask students for their opinions about the learning activities that have already been carried out, whether students are happy with the learning activities they have already done, whether learning is meaningful for students, and so on. After that, the teacher provides follow-up and delivers the lesson that the students will learn the next day. Finally, the lessons were closed with do'a, and students sang local songs together with joyful joy.

Based on the integrated learning type and the theme of the development of technology that the teacher has already implemented, and in accordance with the objectives expected at the beginning of learning, it appears there are some works produced from student learning activities. Student activity is the activity of the student, including everything that the student does as well as all activities that occur both physically and nonphysically during the learning process (Nurkhikmah, 2013). Student learning activities are crucial in determining student learning success. Active learning activities will have a positive impact on students. In learning activities, students are required to actively follow the learning process. The student's activity is seen from the perspective of paying attention to the teacher's explanation and asking questions about things that are less understood by him or her in doing the tasks given by the teacher (Nurmala Ayu Desy & Naswan, 2020).

Student learning activities can be driven by learning motivation. In other words, the higher the motivation of the student to learn, the greater the learning activity he does, and the greater the learning results he achieves (Wardani et al., 2020). In learning, activity plays a very important role because, in principle, learning is doing, which means doing activities. There is no learning without activity (Nurmala Ayu Desy & Naswan, 2020). Therefore, activity is a very important principle in the learning process.

As the learning process continues, the student's learning activity looks great. Students are very enthusiastic about seeking information and gaining knowledge. Students are also skilled and independent in their tasks. Have a high level of curiosity and always show a willingness to cooperate and support each other in their group. All students are involved in learning activities. The learning was carried out with full enthusiasm and joy because the learning presented by the teacher was not toned down and dispensed with an interesting icebreaker. Work produced from student learning activities such as concept maps, media slides, transportation tools, and puff books is evidence that integrated learning is not centered on the teacher but more on the student's learning activity during the learning process. Integrated learning, already done by teachers, can improve student learning activities.

## Conclusion

Based on the results of research and discussion, it can be concluded that in the application of integrated learning of the webbed type, the first step that teachers should take is to determine the theme of learning through a joint agreement between teachers and students. The theme chosen is a topic that is general and close to the student environment. Themes are then developed and merged into sub-themes that exist on several subjects, creating a theme network. The subjects are then linked to the learning material from several subjects, but the separation is not so clear. After that, the learning plan is made by determining what activities should be done at each stage, from the beginning, or core, to the end. In planning such activities, teachers should ensure that any learning objectives to be achieved must involve student learning activities. Thus, integrated learning of the webbed type can make the understanding of concepts for students more fun and meaningful, cultivate the cognitive and psychomotor skills of students to find the material behind the game, develop positive attitudes of students during the learning process between students themselves and between students and teachers, and improve student learning motivation. Thus, the implementation of integrated learning of the webbed type in elementary schools can enhance student learning activities. Based on the results of research and discussion, it can be concluded that in the application of integrated learning, the first step that teachers should take is to determine the theme of learning through a joint agreement between teachers and students. The theme chosen is a topic that is general and close to the student environment. Themes are then developed and merged into sub-themes that exist on several subjects, creating a theme network. The subjects are then linked to the learning material from several subjects, but the separation is not so clear. After that, the learning plan is made by determining what activities should be done at each stage, from the beginning, or core, to the end. In planning such activities, teachers should ensure that any learning objectives to be achieved must involve student learning activities. Thus, integrated learning can make the understanding of concepts for students more fun and meaningful, cultivate the cognitive and psychomotor skills of students to find the material behind the game, develop positive attitudes in students during the learning process between students themselves and between students and teachers, and improve student learning motivation. Thus, the implementation of integrated learning in elementary schools can enhance student learning activities.

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#### Author Contributions

Desi Aulia: writing-original draft preparation, result, discussion, methodology, conclusion, review, and editing; Chairul Azmi and Yanti Fitria: analysis and proofreading.

#### **Conflicts of Interest**

The authors declare that there is no conflict of interest regarding the publication of this paper.

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