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Bloom’s revised taxonomy-oriented learning activity to improve reading interest and creative thinking skills

I. Wayan Widiana\textsuperscript{1*}, Sulis Triyono\textsuperscript{2}, I. Gede Sudirsha\textsuperscript{1}, Made Aryawan Adijaya\textsuperscript{1} and I. Gusti Ayu Agung Manik Wulandari\textsuperscript{1}

Abstract: Reading interest and students’ creative thinking skills cannot be optimal in the current learning process. Several things cause this. One of them is low learning models. It happens because the learning activities applied by the teacher are less innovative and varied. This study aims to analyze the effect of using Revised Bloom’s Taxonomy-Oriented Learning Activities on reading interest and creative thinking skills of elementary school students. The study used a quasi-experimental research in the form of a pretest-posttest control group design. The population of this study was all fourth-grade students in Gugus 5, Kecamatan Buleleng consisted of 6 schools with 125 students. The determination of the sample is carried out using a cluster random sampling technique. The sample of this study was 58 students consisting of 30 fourth grade students as the experimental class and 28 fourth grade students as the control class. In this study, the data collection process used was a test and questionnaire method. The test method used is in the form of essay questions which are used to measure students’ creative thinking skills. The questionnaire method was used to measure students’ perceptions of reading interest. Data analysis methods used are quantitative descriptive analysis and inferential statistical analysis. The hypothesis testing used in this study was Manova, with 0.00 < 0.05. Based on the analysis results, Bloom revision taxonomy-oriented learning activities effectively increase students’ reading interest and creative thinking skills. Learning activities that are applied can increase activity and develop students’ abilities in the learning process.

Subjects: Teachers & Teacher Education; Educational Research; Primary/Elementary Education; Education - Social Sciences

Keywords: Creative thinking; reading interest; Revised Bloom’s Taxonomy

1. Introduction

Learning is an activity that is made to facilitate a systematic learning process and can be carried out with certain procedures to achieve the learning objectives that have been set (Nortvig et al., 2018; Sutrisno & Siswanto, 2016). Quality learning is learning that provides opportunities for students to learn more actively. Learning that requires students to be active demands students to learn better and make learning meaningful. Meaningful learning will positively impact students'
learning experience and social-emotional development (Bressington et al., 2018; Kostiainen et al., 2018; Ratunguri, 2016). The demands of learning today are not only meaningful learning, but the learning needed is learning that can produce human resources (HR) who can compete and have 21st-century capabilities. This skill is a provision for students in facing challenges in everyday life. With 21st century skills, students are expected to solve problems encountered in everyday life. 21st century skills, hereinafter known as 4C skills, consist of critical thinking, communication, creative thinking, and collaboration skills. 4C skills are mandatory and taught at all levels of education, especially elementary school in the field of study and 21st-century themes (Fatmawati et al., 2019; Widodo, Indraswati, et al., 2020). The same thing was also expressed by previous study, that 21st-century skills are very important to be mastered by everyone to succeed in facing challenges and problems in 21st-century life (Antara et al., 2020; Izzah & Azizah, 2019; Redhana, 2019). One of the abilities that students must possess is creative thinking skills.

Creative thinking skills is a thinking process that can produce a variety of possible answers (Febrianti et al., 2016; Sekar et al., 2015). Creative thinking is also a process used when an individual generates new ideas (Cintia et al., 2018; Tendrita et al., 2016). Creative thinking includes many high-order thinking skills such as analysis, testing, communication problem solving, and scientific process skills (Redifer et al., 2021; Yildiz & Guler Yildiz, 2021; Zhang et al., 2021). Creative thinking involves flexibility, fluency (Huang et al., 2020; Kassim et al., 2014), novelty, and elaboration (Hardy et al., 2017; Montag-Smit & Maertz, 2017). Thinking ability consists of divergent and convergent thinking skills (Gu et al., 2019; Zhuang et al., 2021). Creative thinking skills can train students to develop many ideas and opinions, ask questions, acknowledge the truth of opinions, and make students able to be open and responsive to different perspectives (Akpur, 2020; Redifer et al., 2021). Currently, it is important to improve creative thinking skills in the learning process. Students’ creative thinking ability in the learning process can affect student learning outcomes. The ability to think creatively will play a role in achieving learning outcomes. Well-developed creative thinking skills will impact learning outcomes (Fatmawati et al., 2019; Hidayatulloh et al., 2020). Students with high creative thinking skills will have good learning outcomes (Resien et al., 2020). The importance of creative thinking skills requires teachers to change the learning process. Creative and innovative learning will develop critical thinking skills and increase student interest in learning.

Interest in learning is needed in the learning process. Interest is an encouragement from the child to actively participate in the learning process to change or increase knowledge and experience (Ardiansyah & Nana, 2020; Nasution et al., 2020). Interest in learning is an important factor in success in all fields, such as studies, work, hobbies, and activities (Chen et al., 2020). Interest is not just like something or an activity (Utomo et al., 2018). Interest in learning is a force that encourages students to learn. The higher students’ interest in activities will improve the learning process, achieving the desired goals (Pambudi, 2018). One of the important interests that students must own is reading. Interest in reading affects learning outcomes and the ability to express ideas, opinions, and knowledge (Nafisah, 2014; Widodo, Dyah, et al., 2020). Students who have a strong reading interest will manifest it in their willingness to get reading material and then read it on their consciousness (Dafit et al., 2021; Sulistiowati & Wiarsi, 2021; Yuki, 2020). So, interest in reading is very important for students to have. Therefore, the learning carried out must foster a desire for students to read.

The reality that occurs in the field is that the learning activities applied by the teacher lack innovation and varied creation, so learning is teacher-centered. The approach applied is still a conventional approach without thinking about student activity in the learning process. The teacher explains more in theory than the students do their activities in the learning process. Students cannot participate actively in the learning process, so they have not improved their 5M ability, especially creative thinking in learning activities. In addition, there is a lack of opportunities for students to develop their thinking skills and develop a brave and confident attitude in the learning process. The low activity of students in participating in the learning
process resulted in low student learning outcomes. Improving students’ creative thinking skills is one sign of achieving learning goals applied in everyday life. It happened to the fourth-grade students in Gugus V, Kabupaten Buleleng, Bali. Based on the results of a preliminary study that has been carried out by giving students a creative thinking ability test, the students’ test results show that the average score is included in the low category.

Another problem is that students look less enthusiastic when learning because learning is still oriented towards teachers who only stick to textbooks. Learning models tend to be the same in every meeting. Students’ interest in learning is reduced, especially in story lessons. Teachers tend to only focus on textbooks. Those available who have a foothold in reading literacy are not the culture of the Indonesian people, considering that there are still many regions in Indonesia with low interest in reading and writing caused by their literacy skills are also low (Muslimin, 2018). Indonesian people’s interest in reading is still relatively low (Shofaussamawati, 2016). Students whose reading interest is low will also have minimal vocabulary mastery, especially foreign absorption vocabulary, that is not well known by students (Muhyidin, 2018). So, it can be said that with learning that is not innovative, creative, and based on student activities, students’ creative thinking abilities and reading interest will be low. If this is allowed, it will certainly impact the quality of education.

One of the solutions that can be offered is to use learning activities oriented to Revised Bloom’s Taxonomy. By applying bloom revision taxonomy-oriented learning activities, students can develop various abilities in the learning process. One of them is thinking creatively. Activity meaning that everything is done or activities carried out, both physical and non-physical, can be said to be an activity (Lubis, 2011). While learning is a complex activity to teach students to achieve the expected goals through the conscious effort of the teacher (Setyorini & Rizqiana, 2017). So learning activity is an activity in the learning process that teaches students to achieve learning goals (Gussa & Kabeta, 2021; Sailer et al., 2021). The achievement of an effective learning activity is certainly based on a plan so that learning objectives can be achieved optimally through Bloom’s taxonomy. Taxonomy is a framework to help teachers classify the statements used to predict the ability of students to learn as a result of the learning activities carried out (Adesoji, 2018; Darmawan & Sujoko, 2013; Magdalena et al., 2020).

Several previous studies have discussed the use of Revised Bloom’s Taxonomy-Oriented Learning Activities in the learning process. Research by Sudirtha et al. (2022) tested the effectiveness of using Revised Bloom’s Taxonomy-Oriented Learning Activities to improve students’ metacognitive abilities. This study shows that Revised Bloom’s Taxonomy-Oriented Learning Activities are effective in improving students’ metacognitive abilities. Furthermore, research conducted by Pujawan et al. (2022) also shows that learning that applies Revised Bloom’s Taxonomy-Oriented Learning Activities can increase scientific literacy and students’ creative thinking skills. In line with this, Wiranata et al. (2021) also found that the use of Revised Bloom’s Taxonomy-Oriented Learning Activities in learning can improve students’ problem-solving abilities. Based on these previous studies, the novelty of this research lies in the dependent variables studied, namely reading interest and creative thinking skills. The concept map or framework that showed the novelty of this research is presented in Figure 1.

This study aims to analyze the effect of using Revised Bloom’s Taxonomy-Oriented Learning Activities on reading interest and creative thinking skills of elementary school students. The use of Revised Bloom’s Taxonomy-Oriented Learning Activities can influence the learning activities carried out by students. Students can be active and creative in the learning process through the activities carried out. There are varied, innovative, and student-centered learning activities. This learning activity is focused on students’ ability to increase their interest in reading, to be creative, especially to think creatively, and to develop their creativity in learning.
2. Method

2.1. Research method
The study used a quasi-experimental research in the form of a pretest-posttest control group design. The experimental group was treated with online learning with revised Bloom’s taxonomy-oriented learning activities. Meanwhile, the control group was treated by applying online learning without revised Bloom’s taxonomy-oriented learning activities. The experimental and control groups were given a pre-test to determine the initial conditions before treatment, then a post-test to determine the differences in metacognitive abilities and learning outcomes between the experimental group given the treatment. The research design is presented in Table 1.

2.2. Research participants/sample and population
The population of this study was all fourth-grade students in Gugus 5, Kecamatan Buleleng consisted of 6 schools with 125 students. The determination of the sample is carried out using a cluster random sampling technique. The sample of this study was 58 students consisting of 30 fourth-grade students as the experimental class and 28 fourth-grade students as the control class.

2.3. Data collection method and instrument
In this study, the data collection process used was a test and questionnaire method. The test method used is in the form of essay questions which are used to measure students’ creative thinking skills. The questionnaire method was used to measure students’ perceptions of reading interest. All instruments used have been tested for validity and reliability. Testing the validity of the test instrument items for creative thinking skills was carried out using the CVR/CVI formula (Lawshe, 1975). The CVR calculation result for each instrument item is 1.00, so that all instrument items for the creative thinking ability test can be declared valid based on the validation provisions for each instrument item in the CVR formula. The CVI calculation result of the creative thinking

<table>
<thead>
<tr>
<th>Table 1. Research design</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group</td>
</tr>
<tr>
<td>Experiment Group</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Control Group</td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

Description: Y₁ = Pre-test reading interest score Y₂ = Pre-test creative thinking ability score Y₃ = Post-test reading interest score Y₄ = Post-test creative thinking ability score A₁ = Online learning with revised Bloom’s taxonomy-oriented learning activities A₂ = Online learning without revised Bloom’s taxonomy-oriented learning activities
Table 2. Creative thinking skills test instrument

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Creative Thinking Dimension</th>
<th>Number of Questions</th>
<th>Question Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.4.1 Compile texts about various forms of ethnic, social, and cultural diversity in writing.</td>
<td>Smoothness</td>
<td>2</td>
<td>1, 2</td>
</tr>
<tr>
<td>4.3.1 Arrange icons about activities that use forces in everyday life, such as muscle force, electric force, magnetic force, gravitational force, and frictional force.</td>
<td>Detail or Elaboration</td>
<td>2</td>
<td>3, 4</td>
</tr>
<tr>
<td>3.3.1 Composing dance movements by combining creative dance movements and traditional dances.</td>
<td>Flexibility</td>
<td>2</td>
<td>5, 6</td>
</tr>
<tr>
<td>3.2.1 Make an example of a fictional text in your language about various social activities in the community.</td>
<td>Smoothness</td>
<td>2</td>
<td>7, 8</td>
</tr>
<tr>
<td>3.6.1 Make a poetry text with the theme of ethnic diversity and the economy in Indonesia.</td>
<td>Authenticity</td>
<td>2</td>
<td>9, 10</td>
</tr>
<tr>
<td>4.4.1 Make collages with the theme of the natural environment</td>
<td>Authenticity</td>
<td>2</td>
<td>11, 12</td>
</tr>
</tbody>
</table>

skills test instrument is 1.00, so it can be declared very good based on the content validation provisions for all instruments in the CVI formula. Test the reliability test of the creative thinking skills using the Alpha Coefficient formula with a result of 0.80 with high reliability criteria. The grid of creative thinking skills test instruments can be seen in Table 2.

The questionnaire method was used to measure students' reading interest. The questionnaire consisted of 5 choices: strongly agree, agree, moderately, disagree, and strongly disagree. In testing the validity of the reading interest questionnaire instrument, it is necessary to test the validity of the instrument items, the validity of the contents of the instrument, and the reliability. Testing the validity of the reading interest questionnaire instrument items was also carried out using the CVR/CVI formula (Lawshe, 1975). The CVR calculation result for each instrument item is 1.00, so that all reading interest questionnaire instrument items can be declared valid based on the validation provisions for each instrument item in the CVR formula. The CVI calculation result from the reading interest questionnaire instrument is 1.00, so it can be declared very good based on the content validation provisions for all instruments in the CVI formula. The reliability test of the reading interest questionnaire uses the Alpha Coefficient formula with a result of 0.967 with very high reliability criteria. The grid of reading interest instruments can be seen in Table 3.

2.4. Data analysis

The pre-test data obtained were analyzed descriptively and inferential analysis using the T-test. Before the test, the post-test data obtained were analyzed by descriptive analysis and inferential statistical analysis. Inferential statistic analysis was used to determine the effectiveness of developing revised Bloom's taxonomy-oriented learning activities on metacognitive abilities and student learning outcomes. Inferential statistic analysis used the MANOVA test. Before the MANOVA test,
Table 3. Reading interest questionnaire grid

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Statement</th>
<th>Number of items</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Positive</td>
<td>Negative</td>
</tr>
<tr>
<td>The need for reading</td>
<td>15,16,17,25</td>
<td>18,28,29</td>
</tr>
<tr>
<td>Reading intensity</td>
<td>9,14</td>
<td>10,24</td>
</tr>
<tr>
<td>Enjoyment of reading</td>
<td>1,4,6,21</td>
<td>2,3,5,20</td>
</tr>
<tr>
<td>Interest in reading</td>
<td>8,13, 22</td>
<td>7,11,</td>
</tr>
<tr>
<td>Desire to read</td>
<td>19, 23</td>
<td>12</td>
</tr>
<tr>
<td>Desire to find reading material</td>
<td>26, 27</td>
<td>30</td>
</tr>
</tbody>
</table>

the prerequisite tests were carried out, namely normality, homogeneity, and multicorrelation. The MANOVA test and the prerequisite test were carried out with the help of SPSS 25.0 for Windows.

3. Result and discussion

3.1. Result
The results of the descriptive analysis are described in Table 4. The analysis results showed that the average score of the control class and experimental classes’ average scores increased both for reading comprehension and creative thinking skills. It is shown that there is a difference between the experimental class of 4.99 for reading interest and 5.49 for creative thinking ability. The data obtained relating to the pre-test were analyzed by t-test. The prerequisite tests were carried out before the analysis test, namely the normality and homogeneity tests. The normality test results for reading interest data were normally distributed with scores more than 0.05, namely 0.200 and 0.18, while for the ability to think creatively, the scores indicated were 0.18 and 0.098.

Meanwhile, for the homogeneity test, it was found that both reading interest data and creative thinking skills came from homogeneous data groups. The reading interest score indicates that this is 0.98 and that the ability to think creatively is 0.87. Based on the results of the prerequisite test, it can be said that the data are normally distributed and homogeneous so that the t-test can be performed. The analysis results showed no significant difference between the reading interest of the control and experimental classes. It was 0.078, and the ability to think creatively with a score of 0.129, more than 0.05. So there was no difference between the control and experimental groups.

The next analysis performed for the post-test data is the Manova analysis. Before analyzing the MANOVA data, the prerequisite tests were carried out, namely normality, homogeneity, and multicorrelation. Normality test results with Kolmogorov-Smirnov. The analysis results show that all data come from groups of normally distributed data. The score of Sig can indicate this. >0.05. The results of a complete analysis are shown in Table 5. After the normality requirements are met, the next prerequisite test is the homogeneity test. The homogeneity test was carried out with two analyses: the homogeneity test with Levene’s Test of Equality and the homogeneity test with the Box’s Test of Equality of Covariance Matrices. The results of the homogeneity analysis carried out show the same meaning. The research data comes from homogeneous data groups. It can be seen from the sig score. Each test showed a score of more than 0.05. The score of Sig. Levene’s Test of Equality test is 0.189 for reading interest while the score of Sig. Creative thinking ability of 0.167. Meanwhile, the homogeneity test with Box’s Test of Equality of Covariance Matrices obtained an F score of 2,314 with Sig. 0.076. The next prerequisite test is a multicorrelation test where this test aims to determine the relationship between each variable being analyzed. The results show that all the data groups tested gave Tolerance scores > 0.1 and VIF score < 1,000 for each data group,
<table>
<thead>
<tr>
<th>Treatment</th>
<th>Dependent variable</th>
<th>Pre-test</th>
<th>Post-test</th>
<th>Pre-test</th>
<th>Post-test</th>
</tr>
</thead>
<tbody>
<tr>
<td>A1 (Experiment)</td>
<td>Y&lt;sub&gt;1&lt;/sub&gt;</td>
<td>75.78</td>
<td>85.03</td>
<td>76.67</td>
<td>80.04</td>
</tr>
<tr>
<td></td>
<td>Y&lt;sub&gt;2&lt;/sub&gt;</td>
<td>74.50</td>
<td>86.98</td>
<td>75.78</td>
<td>81.49</td>
</tr>
<tr>
<td>A2 (Control)</td>
<td>Y&lt;sub&gt;1&lt;/sub&gt;</td>
<td>76.67</td>
<td>80.04</td>
<td>81.49</td>
<td>86.98</td>
</tr>
<tr>
<td></td>
<td>Y&lt;sub&gt;2&lt;/sub&gt;</td>
<td>75.78</td>
<td>86.98</td>
<td>74.50</td>
<td>85.03</td>
</tr>
</tbody>
</table>
namely 0.911 and 1.008. Thus, it can be stated that the entire data group in this study does not occur multicollinearity.

The test requirements for the MANOVA analysis have been met, where the research data obtained are normally distributed, homogeneous, and there is no multicorrelation between variables so that hypothesis testing with MANOVA can be carried out. The results of the complete analysis are described in Tables 6 and 7.

Based on the results of the analysis, several findings were obtained. First, the results of the MANOVA show that Pillai Trace, Wilks’ Lambda Hotelling’s Trace, and Roy’s Largest Root indicate that the F coefficient is 46.786b with a Sig score. 0.000 this means a simultaneous difference in reading interest and creative thinking skills between groups of students who take online learning with Revised Bloom’s taxonomy-oriented learning activities and groups of students who take lessons using online learning. Second, the Tests of Between-Subjects Effects analysis results show an F score of 1.826 with Sig. 0.023, smaller than 0.05. It means a significant effect of online learning with revised Bloom’s taxonomy-oriented learning activities on reading interest. Third, the Tests of Between-Subjects Effects analysis results show an F score of 8.029 with Sig. 0.001, smaller than 0.05. There is a significant effect of online learning with revised Bloom’s taxonomy-oriented learning activities on students’ creative thinking abilities.

Table 5. Results of normality analysis

<table>
<thead>
<tr>
<th>Treatment</th>
<th>Kolmogorov-Smirnov</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Statistic</td>
</tr>
<tr>
<td>Reading Interest</td>
<td></td>
</tr>
<tr>
<td>Online learning with revised Bloom’s taxonomy-oriented learning activities</td>
<td>0.180</td>
</tr>
<tr>
<td>Online learning</td>
<td>0.145</td>
</tr>
<tr>
<td>Creative thinking skills</td>
<td></td>
</tr>
<tr>
<td>Online learning with revised Bloom’s taxonomy-oriented learning activities</td>
<td>0.081</td>
</tr>
<tr>
<td>Online learning</td>
<td>0.164</td>
</tr>
</tbody>
</table>

Table 6. Multivariate analysis results

<table>
<thead>
<tr>
<th>Variable</th>
<th>Score of Each Test</th>
<th>F Score</th>
<th>p Score</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pillai’s Trace</td>
<td>0.486</td>
<td>46.786</td>
<td>0.0001</td>
<td>Significant</td>
</tr>
<tr>
<td>Wilks’ Lambda</td>
<td>0.503</td>
<td>46.786</td>
<td>0.0001</td>
<td>Significant</td>
</tr>
<tr>
<td>Hotelling’s Trace</td>
<td>0.874</td>
<td>46.786</td>
<td>0.0001</td>
<td>Significant</td>
</tr>
<tr>
<td>Roy’s Largest Root</td>
<td>0.874</td>
<td>46.786</td>
<td>0.0001</td>
<td>Significant</td>
</tr>
<tr>
<td>Treatment</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pillai’s Trace</td>
<td>0.075</td>
<td>3.241</td>
<td>0.043</td>
<td>Significant</td>
</tr>
<tr>
<td>Wilks’ Lambda</td>
<td>0.845</td>
<td>3.241</td>
<td>0.043</td>
<td>Significant</td>
</tr>
<tr>
<td>Hotelling’s Trace</td>
<td>0.088</td>
<td>3.241</td>
<td>0.043</td>
<td>Significant</td>
</tr>
<tr>
<td>Roy’s Largest Root</td>
<td>0.088</td>
<td>3.241</td>
<td>0.043</td>
<td>Significant</td>
</tr>
</tbody>
</table>
4. Discussion
The analysis results show that revised Bloom’s taxonomy-oriented learning activities can increase students’ reading interest and creative thinking skills. In the study, several findings were found. First, there were differences in reading interest and active thinking abilities of students who participated in online learning with Bloom’s revised taxonomy-oriented learning activities. It could not be separated from the activities carried out. The learning process carried out by students requires students to be active in carrying out activities. One of the activities carried out is problem-solving. The problem-solving activities provided opportunities for students to seek the widest possible solution to the problem by reading many sources, both from books and the internet. This problem-solving activity will make students more active in the learning process. Problem-solving ability is the ability to use existing knowledge and skills to answer unanswered questions or difficult situations (Septina et al., 2018). Problem-solving is the ability of students to solve challenging questions that cannot be solved by routine procedures that are already known to students (Nomleni & Manu, 2018). Problem-solving activities enable students to improve understanding and offer solutions more interactively (Chang et al., 2017). Problem-solving activities that are carried out are strongly supported by online learning today. Problem-solving is generally defined as a critical ability. Learning through problem-solving is popular in e-learning development (Hung et al., 2016). Learning whose activities are problem-solving emphasizes the ability of students to obtain more information both from books and from the internet. With these demands, students will seek more information with different methods. It will make students more interested in reading. It will impact reading interest. Finding information with the help of technology will positively impact students’ reading interests.

The variety of visualizations from books and the media prepared will foster student interest in reading (Xu et al., 2021). Interest in reading affects learning outcomes and the ability to express
ideas, opinions, and knowledge (Nafisah, 2014; Widodo, Dyah, et al., 2020). Students who have a strong reading interest will manifest it in their willingness to get reading material and then read it on their consciousness (Dafit et al., 2021; Sulistio-Warsih, 2021; Yuki, 2020). Interest in reading can only be grown by the awareness of each individual. It is closely related to motivation in achieving future goals and achievements (Widodo, Dyah, et al., 2020). Reading interest is very important in the learning process because it emphasizes the basic skills that students must have, namely reading skills (Fitria, 2019; Metsapelto et al., 2017; Septhin et al., 2018). The description provides an overview of reading interest, providing students with more complex reading skills and knowledge. Of course, this will have an impact on students’ thinking skills. Students who have a high reading interest will be balanced with thinking creatively (Sulasih, 2018). The ability to think creatively is a thinking process that can produce a variety of possible answers (Febriantii et al., 2016; Sekar et al., 2015).

Creative thinking is also a process used when an individual generates or generates new ideas (Cintia et al., 2018; Tendrita et al., 2016). Creative thinking includes many high-order thinking skills such as analysis, testing, communication problem solving, and scientific process skills (Redifer et al., 2021; Yildiz & Guler Yildiz, 2021; Zhang et al., 2021). Creative thinking involves flexibility, fluency (Huang et al., 2020; Kassim et al., 2014), novelty, and elaboration (Hardy et al., 2017; Montag-Smit & Maertz, 2017). Thinking ability consists of divergent and convergent thinking skills (Gu et al., 2019; Zhuang et al., 2021). Creative thinking skills can train students to develop many ideas and opinions, ask questions, acknowledge the truth of opinions, and make students able to be open and responsive to different perspectives (Akpur, 2020; Redifer et al., 2021). Students’ creative thinking skills will develop well if fun learning process. Providing learning with learning activities gives students an active role in managing their knowledge. Student-centered activities make learning more meaningful.

The second finding is a significant effect of online learning with revised Bloom’s taxonomy-oriented learning activities on reading interest. Learning activities are oriented towards Bloom’s revised taxonomy because learning that applies learning activities can allow students to be active in the learning process. A learning process that gives students the freedom to learn will allow students to dig up more information from varied learning sources. Moreover, the learning that is carried out and providing active students the learning process is also more flexible considering the learning carried out is online learning. Online learning is learning with the help of the internet. Online learning is learning carried out with the help of the internet both synchronously and asynchronously. It provides student interaction with learning resources, both educators/the environment and their peers (Dong et al., 2020). The existence of online learning provides opportunities for students to share opinions and learn more independently without any time limit and more flexible space (Hwang et al., 2020; Kkese, 2020; Lage-Cala et al., 2020). Online learning with learning activities oriented to the revised Bloom’s taxonomy will build a more pleasant learning atmosphere.

Fun learning will foster student interest in the learning process. Interest in learning is needed in the learning process. Interest is an encouragement from the child to actively participate in the learning process to change or increase knowledge and experience (Nasution et al., 2020). Interest in learning is an important factor in success in all fields, such as studies, work, hobbies, and activities (Chen et al., 2020). Interest is not just a feeling of liking something or an activity (Utomo et al., 2018). Interest is a force that encourages students to learn. The higher students’ interest in activities will improve the learning process, impacting achieving the desired goals (Pambudi, 2018). So with more fun learning will make students more interested in learning. It will make students look for information from the books provided or material on the internet. Varied material can increase students’ reading interest because the material found varies, and students are accustomed to looking for material used to solve problems. Activities in the learning process will make students explore and build their knowledge. Bloom’s revised taxonomy-oriented learning activities
make student activities more focused according to their knowledge (Gunawan & Paluti, 2017; Netriwati, 2018).

The third finding is that the application of bloom revision taxonomy-oriented learning activities positively affects students' creative thinking skills. The difference in creative thinking skills obtained by students who apply revised Bloom's taxonomy-oriented learning activities and groups of students without implementing revised Bloom's taxonomy-oriented learning activities is because learning that applies revised Bloom's taxonomy learning activities can provide opportunities for students to be active and creative in the process with learning. Bloom's revised taxonomy-oriented learning activities make student activities more focused according to their knowledge (Gunawan & Paluti, 2017; Netriwati, 2018). By applying learning activities oriented to Bloom's revised taxonomy, students can develop their knowledge. One of the knowledge that students must have is thinking creatively. In learning, students' ability to think creatively is also a supporter of the success of a learning process (Amitningsih et al., 2016; Maftukhah et al., 2017). In addition, the application of learning activities oriented to Bloom's revised taxonomy also provides opportunities for students to be more active and interact in the learning process. Increasing students' abilities in the learning process can be seen from the activities carried out during the learning process.

The revised Bloom's taxonomy-oriented learning activity changed the teacher's method in the learning process. It was originally teacher-centered learning to student-centered learning. The teacher only acts as a facilitator and motivator is to provide convenience or facilitate students in learning, and the teacher must also be able to arouse students' enthusiasm. In the learning process, the teacher plays a role in encouraging and facilitating students (Kirim, 2017; Sumiati, 2018). The application of active learning is a teacher's solution to improve students' abilities. The learning activities applied consist of 8 types of activities according to the cognitive and knowledge domains in the revised Bloom's taxonomy. The application is carried out to determine students' ability to think creatively. The ability to think creatively is very important for students both in the learning process and in everyday life.

The learning activities applied are based on active learning theory. It emphasizes student-centered learning (Nur Jannah, 2019; Zaman, 2020). Active learning has several indicators that can change students' abilities in learning. First, student-centered learning can increase student activity in the learning process. With active students, the learning process becomes more meaningful. Second, learning is based on clear goals. With clear learning objectives, the process followed by students becomes more focused, and the achievement of student competencies can also be measured. Third, active learning allows students to make discoveries related to the experience or ready knowledge they already have with new experiences offered by the teacher in the form of problems. Learning that invites students to make discoveries will increase students' thinking power. Students will also look for knowledge that is not yet known. Fourth, learning activities involve individual activities and social activities. The student-centered learning process can strengthen student interactions with other students, teachers, and their learning environment. This interaction will be able to bring up new knowledge of students. Active learning can emerge as life skill (Effendi, 2016). Active learning can allow students to show their abilities in the learning process. Student activity in the learning process can increase social interaction between students and students, teachers, and students with the environment (Effendi, 2016; Hasan, 2015). Through interaction in the learning process, students can share their knowledge. Active learning can help teachers improve student learning quality (Mubayyinah & Ashari, 2017; Toha, 2018).

The application of bloom revision taxonomy-oriented learning activities can affect the development of students' abilities. It is because learning activities are designed based on active learning theory. The advantages of learning activities oriented to Bloom's revised taxonomy are (1) student-centered learning activities; (2) learning activities invite students to find facts in learning; (3) learning activities are faced with a problem that students must solve; (4) learning activities to
improve students’ creative thinking skills, so that students have self-awareness in solving problems because through this awareness students can find out whether the completion process is correct and to what extent the truth is, and students can evaluate the location of the complete error; (5) learning activities are facilitated by appropriate, clear and relative learning media depending on the characteristics of students, materials, learning objectives; (6) learning activities invite students to interact socially; (7) learning activities develop students’ cognitive and knowledge domains. With the implementation of this learning activity, students will become more active, be creative, interact, and develop their knowledge. Therefore, this learning activity can be applied in lower or higher classes by adjusting the learning material. The application of bloom revision taxonomy-oriented learning activities is believed to improve students’ cognitive abilities and knowledge.

5. Conclusion

Bloom revision taxonomy-oriented learning activities effectively increase students’ reading interest and creative thinking skills. Learning activities that are applied can increase activity and develop students’ abilities in the learning process. This learning activity also has different advantages from other learning activities, such as being oriented to the bloom revision taxonomy, developing students’ cognitive and knowledge domains, and can be applied online.

References


Fatemowati, A., Zubaiedah, S., Mahanal, S., & Sutopo, S. (2019). Critical thinking, creative thinking, and learn-
ing achievement: how they are related. Journal of Physics, 1417(1), 012070. https://doi.org/10.1088/1742-6596/1417/1/012070


Edukrika: Jurnal Pendidikan dan Pembelajaran, 2(2), 137–144. https://doi.org/10.32585/edukrika.v2i2.43


