The Implementation of Post-Pandemic Blended Learning in Elementary Schools

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Abstract

The study aims to analyze the implementation of post-pandemic blended learning in elementary schools at Jabodetabek. We know that for two years, learning has always been done with a remote system using the e-learning method. In the new normal era, learning began to be integrated with a blended system, namely a combination of face-to-face and remote. There are also those who mean combining two methods, namely conventional methods, and e-learning. The method used is a survey research method with a descriptive approach, where researchers identify the uses of blended learning in learning and conduct management analysis of the application of blended learning at the MI/SD level after the Covid-19 pandemic. The research was conducted in 2021 in the Jabodetabek area. The instrument used is a questionnaire supported by theory and observations. In the research results obtained from 186 respondents, 82% stated that the application of post-Covid 19 blended learning in elementary schools was still relevant. So the researchers concluded that blended learning is a new method of learning. Class is not the only place for learning, teachers can do learning anywhere and anytime.

Kata kunci:
Blended Learning; Covid-19; Elementary School; Post-Pandemic.

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INTRODUCTION

The Covid-19 pandemic has changed people’s mindset toward learning that can only be done in the classroom. Apart from being a disaster, a pandemic is also a way for innovation to occur in the education sector. Learning that was originally, limited by space and time can now be done anywhere and anytime. Teachers must be competent as leaders in the classroom as well as managers in creating conducive and active classroom conditions to achieve success in teaching and learning activities.

The survey of an overview led by the Indonesian Child Protection Commission (KPAI) and the Federation of Indonesian Teachers Unions (FSGI) towards teachers and understudies connected with distance learning training (PJJ) during the plague. According to the findings of the survey, the primary issue with PJJ is that educators prefer to give assignments and evaluations. This can be interpreted as educators placing an emphasis on assessment activities rather than meaningful learning activities on PJJ.

This may be something that educators are forced to do as a result of a lack of mastery of online learning applications or patterns of thinking that traditional learning, which has been a daily occupation, frequently makes it difficult for educators to implement PJJ, rather than as a result of their lack of knowledge. Because the assessment is done by measuring the discipline and responsibility of students in the collection of assignments, and actually, because students are more expected to have direct interaction with educators in online learning activities based on the results of the survey, the use of social media in the implementation of PJJ stands out because its use is customized to be carried out daily for both educators and students, despite the fact that social media is not intended as an online learning application. This is what makes PJJ unattractive.

The use of blended learning models is certainly one of the solutions in learning in the new normal era, where learning is divided into groups. In practice, blended learning can also be done by combining conventional learning with e-learning. Term blended learning or hybrid learning is increasingly familiar to the public, the application of

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learning that combines conventional learning with electronic (online) learning is now increasingly being used by students and teachers. The grouping of face-to-face or conventional learning methods through learning-based methods, also known as e-learning (electronic learning), is referred to as hybrid learning or blended learning.\(^6\) In the field of education, this approach is fairly new. With reference to the principles of constructivism, learning models blended learning suitable in learning activities, because in the learning process must focus on students’ thinking processes, not just on the results. In addition, this learning prioritizes the role of students taking the initiative and communicating to find answers to contextual problems given by the teacher through the students themselves and students are encouraged to be active in learning activities.\(^7\)

Ramdhani et al. stated blended learning is straightforward in concept but still fairly diverse.\(^8\) Because it combines asynchronous internet-based learning with traditional (synchronous) learning, blended learning is simple to implement. A variety of learning methods are combined in blended learning. So it tends to be expressed that mixed learning is a learning strategy that joins at least two methodologies in figuring out how to accomplish the objectives of the educational experience. One illustration of this would be the simultaneous use of face-to-face and web-based learning in education. Additionally, blended learning not only increases interaction between students and teachers but also reduces the distance that has existed between them.\(^9\) There are three understanding documentation blended learning, namely: 1) a combination of methods, strategies, and learning strategies; 2) a combination of online and in-person learning; and 3) a combination of all three.\(^10\)

According to Bardule, certain advantages of blended learning include adaptability and ease of use in the learning environment, which improve learning, interest in learning, and social interaction.\(^11\) This approach, in the author’s opinion, has at least a few advantages. Rahmatillah found that the discovery that there is a change in the average student learning results following the application of the model hybrid learning indicates that the effectiveness of applying the model hybrid learning to advance the


quality of learning for students can be said to be effective. According to the findings of this study, hybrid learning improves learning outcomes.

Research by Nurhadi shows that with a comfortable learning environment, blended learning is a very effective and efficient technique towards improve participants’ abilities. Students find learning to be fun, and their attentiveness in learning grows. Mixed learning bargains enhanced learning, whichever independently or in gatherings and at the equivalent or various times. Rohana & Syahputra shows that this learning model is theoretically suitable for application in post-new normal schools and tertiary institutions, nevertheless additional research is still needed in the field to test its effectiveness.

Usage mixed learning in learning has a positive impact since it can go about as a work to take care of specialized issues as a learning medium. Students can empower themselves to learn independently during the implementation process, free of time and distance constraints, thereby stimulating their independence and the development of cognitive and affective competencies and creativity for stakeholders in education. The main finding in research conducted by Dhianti is the use of a learning management system (LMS) makes it easier for teachers and students to participate in the learning process because it can be accessed at any time and from any location without being constrained by time or space. The application of the model of blended learning demonstrates that it is effective in the learning of mathematics. The results of research conducted by Purwitasari et al. show that Schoology’s application of blended learning can boost student engagement and achievement. Furthermore, it is realized that the consequences of information examination show that the level of accomplishment inspiration and learning accomplishment for the exploratory class utilizes the mixed learning higher than the control class understudies who utilize the customary model, as such the model mixed learning constructive outcome on accomplishment inspiration and understudy accomplishment in arithmetic.

Various investigations discovered that educators are hesitant to utilize ICT and some do not utilize it really during the execution of another framework where one of the

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normal issues is protection from change.\textsuperscript{18} The degree to which teachers accept change is closely linked to the implementation’s success or failure.\textsuperscript{19}

Based on the explanation, research was carried out with the aim of analyzing the implementation of post-pandemic blended learning at SD/MI, which is the difference from other studies in that this research was conducted in the Jabodetabek area in 2021. Where it is known that for two years, learning has always been carried out with a remote system using the e-learning method. In the new normal era, learning began to be integrated with a blended system, namely a combination of face-to-face and remote. There are also those who mean combining two methods, namely conventional methods and e-learning.

**RESEARCH METHOD**

This research is a field research by using a quantitative approach. The research was conducted using a survey research method with a descriptive approach, in which researchers identified uses blended learning in learning and conducting relevance analysis blended learning at the MI/SD level after the Covid-19 pandemic. When analyzing data, a descriptive approach describes the data as it is collected without intending to draw generalizations or conclusions. Through the elucidating investigation strategy, the scientist attempts to make sense of obviously founded on the aftereffects of the exploration that has been completed.

The data used is primary data. Deployment management blended learning at the MI/SD level after the Covid-19 pandemic was measured using a questionnaire. The questionnaire uses a Likert scale model, where each answer has a different score. Statements on the questionnaire, for positive answers, the score will be higher, and for negative answers, the score will be lower. Test the validity and reliability of the questionnaire using SPSS 25.0 software. The validity test is using the Pearson Bivariate correlation (Pearson Moment Product) and the reliability test is using Cronbach’s Alpha.

Teachers who are members of the SD/MI population in Jabodetabek in 2021 involved in this research. The sampling technique in this study was cluster random sampling because the data sources used were very broad. The details of the respondents in this study are as follows:

<table>
<thead>
<tr>
<th>No.</th>
<th>Region</th>
<th>Number of Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>South Jakarta</td>
<td>12</td>
</tr>
<tr>
<td>2</td>
<td>West Jakarta</td>
<td>32</td>
</tr>
<tr>
<td>3</td>
<td>East Jakarta</td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>Bogor city</td>
<td>3</td>
</tr>
<tr>
<td>5</td>
<td>Bogor Regency</td>
<td>6</td>
</tr>
</tbody>
</table>


RESULT AND DISCUSSION

Result

After the variables are measured, they can be used to answer the purpose of this research, namely to find out whether the implementation blended learning each of which is relevant for post-pandemic Covid-19 in MI/SD and knows how to implement blended learning post-pandemic Covid-19 in MI/SD.

Table 2. Descriptive Statistics of Learning Implementation during the Covid-19 Pandemic

<table>
<thead>
<tr>
<th>Statistics</th>
<th>Valid</th>
<th>Missing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Implementation of Learning During the Covid19 Pandemic</td>
<td>183</td>
<td>0</td>
</tr>
<tr>
<td>Mean</td>
<td>89.3770</td>
<td></td>
</tr>
<tr>
<td>Std. Deviation</td>
<td>6.10665</td>
<td></td>
</tr>
<tr>
<td>Variance</td>
<td>37.291</td>
<td></td>
</tr>
<tr>
<td>Range</td>
<td>32.00</td>
<td></td>
</tr>
<tr>
<td>Minimum</td>
<td>76.00</td>
<td></td>
</tr>
<tr>
<td>Maximum</td>
<td>108.00</td>
<td></td>
</tr>
</tbody>
</table>

From the results of data collection, the highest score obtained for the learning implementation variable during the Covid-19 pandemic was 108 and the lowest score was 76. The results of arithmetic descriptive statistical analysis obtained a mean value of 89.37 and a standard deviation of 6.10.

Table 3. Descriptive Statistics of Post-Covid-19 Pandemic Learning Implementation

<table>
<thead>
<tr>
<th>Statistics</th>
<th>Valid</th>
<th>Missing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Post-Covid19 Pandemic Learning Implementation</td>
<td>183</td>
<td>0</td>
</tr>
<tr>
<td>Mean</td>
<td>54.8197</td>
<td></td>
</tr>
<tr>
<td>Std. Deviation</td>
<td>17.57700</td>
<td></td>
</tr>
<tr>
<td>Variance</td>
<td>308.951</td>
<td></td>
</tr>
<tr>
<td>Range</td>
<td>90.00</td>
<td></td>
</tr>
<tr>
<td>Minimum</td>
<td>.00</td>
<td></td>
</tr>
<tr>
<td>Maximum</td>
<td>90.00</td>
<td></td>
</tr>
</tbody>
</table>

From the results of the data collection, the highest score results for the post-pandemic Covid-19 learning implementation variable are 90.00 and the lowest score is 00.00. The results of arithmetic descriptive statistical analysis obtained a mean value of 54.81 and standard deviation of 17.57.
Respondents who agreed on the variable stated that blended learning during the Covid-19 pandemic it made it easier for students to master learning material, namely 80.3% based on the data written in the table. This can be interpreted that during the Covid-19 pandemic, learning was carried out online or also called distance learning in accordance with the directions given by the government through the local education office and in practice the teacher applied learning blended learning, this makes it easier for students to master learning.

Table 4 describes a comparison of the implementation of blended learning during the pandemic and after the Covid-19 pandemic in detail.

Table 4. Comparison of Learning Implementation Blended learning During the Pandemic and After the Covid-19 Pandemic

<table>
<thead>
<tr>
<th>No</th>
<th>Statement</th>
<th>Blended Learning During a Pandemic</th>
<th>Post-Pandemic Learning</th>
<th>Blended Learning</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Score Average Category</td>
<td>Score Average Category</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Students learn more quickly when they use blended learning methods.</td>
<td>3.20 Quite Good</td>
<td>2.97 Quite Good</td>
<td></td>
</tr>
<tr>
<td></td>
<td>With blended learning, it fosters student enthusiasm in every process.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>During blended learning, learning objectives can be achieved.</td>
<td>3.16 Quite Good</td>
<td>2.92 Quite Good</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>During blended learning, students are required to keep achieving.</td>
<td>2.95 Quite Good</td>
<td>2.92 Quite Good</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Blended learning according to students’ learning styles.</td>
<td>3.13 Quite Good</td>
<td>2.90 Quite Good</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Blended learning can be used to help students’ master competence.</td>
<td>3.03 Quite Good</td>
<td>2.72 Quite Good</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Teachers master the technology in the system used in blended learning.</td>
<td>3.05 Quite Good</td>
<td>2.92 Quite Good</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Assignments given by the teacher to students during blended learning.</td>
<td>3.28 Quite Good</td>
<td>3.30 Quite Good</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>During blended learning, the material has been explained in advance by the teacher.</td>
<td>3.30 Quite Good</td>
<td>3.28 Quite Good</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>During learning using the blended learning system the teacher uses teaching materials such as modules, worksheets, textbooks, and others.</td>
<td>3.23 Quite Good</td>
<td>3.13 Quite Good</td>
<td></td>
</tr>
</tbody>
</table>
During learning using the blended learning system the teacher is more intense in communicating/consulting with parents of students to find out progress.

### Table 4: Implementation of Blended Learning in Elementary Schools

<table>
<thead>
<tr>
<th></th>
<th>Description</th>
<th>Score</th>
<th>Rating</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>During learning using a blended learning system the teacher uses a variety of learning models in teaching.</td>
<td>3.16</td>
<td>Quite Good</td>
<td>Quite Good</td>
</tr>
<tr>
<td>11</td>
<td>During the blended learning process the teacher gives assignments with the aim of gathering information about student understanding to increase the learning outcomes achieved.</td>
<td>3.23</td>
<td>Quite Good</td>
<td>Quite Good</td>
</tr>
<tr>
<td>12</td>
<td>Blended learning is an appropriate alternative to use during a pandemic and post-pandemic Covid-19.</td>
<td>3.26</td>
<td>Quite Good</td>
<td>Quite Good</td>
</tr>
<tr>
<td>13</td>
<td>The employment of blended learning is carried out according to the scheduled time for each subject that has been agreed with the teacher.</td>
<td>3.28</td>
<td>Quite Good</td>
<td>Quite Good</td>
</tr>
<tr>
<td>14</td>
<td>Blended learning is done to make the learning process operative and effectual.</td>
<td>3.21</td>
<td>Quite Good</td>
<td>Quite Good</td>
</tr>
<tr>
<td>15</td>
<td>Blended learning can replace face-to-face learning.</td>
<td>2.82</td>
<td>Quite Good</td>
<td>Quite Good</td>
</tr>
<tr>
<td>16</td>
<td>Blended learning throughout the Covid-19 pandemic can be used to help complete subject matter that has a wide range of material.</td>
<td>2.80</td>
<td>Quite Good</td>
<td>Quite Good</td>
</tr>
<tr>
<td>17</td>
<td></td>
<td>2.89</td>
<td>Quite Good</td>
<td>Quite Good</td>
</tr>
</tbody>
</table>

| Score Average | 3.12 | Quite Good | 3.01 | Quite Good |

From the data contained in the Table 4, the implementation of blended learning during the pandemic and post-pandemic have an average score that is in a quite good category.
Discussion

Based on the results, the implementation of blended learning at MI/SD in Jabodetabek is still relevant to be applied after the Covid-19 Pandemic. In the literature review, there are several steps taken during the learning activities, namely planning, implementing and evaluating.\textsuperscript{20} The teacher carries out planning by preparing various learning tools needed such as curriculum, syllabus, lesson plans, the media used along with the models that are applied during blended learning. Teachers also have to divide their time amongst face-to-face learning and online learning as well as possible, consequently that learning purposes can be attained. Teachers generally use the Whatsapp Group and Google Classroom platforms as a medium of communication and information delivery during learning because they are considered more effective, easy to use, and generally owned by all parents of students.\textsuperscript{21}

The Whatsapp application in thematic learning is used as a virtual classroom consisting of teachers and parents of children. This application is used as a provision of school information, to provide material and assignments, questions and answers between teachers and students. The Google Classroom application in thematic learning is used as the second virtual classroom after WhatsApp. Usually, this application is used for giving assignments and collecting assignments, especially in thematic learning. Other than that, Youtube is used as a supporting learning resource after books. Subjects that are integrated in thematic are packaged in an interesting video so that children are interested in learning. The videos distributed to children are in the form of videos that are already available or videos made by the teacher himself. Then, Google Forms are used as an evaluation tool. Evaluation is provided by the teacher in the form of practice questions related to subjects that are integrated in thematic learning and used as assignments or daily tests.\textsuperscript{22}

This is because blended learning is learning that trusts the advantages of an offline learning system with online learning by utilizing various technology-based media that can be accessed via the internet, so that learning objectives can be achieved.\textsuperscript{23} Therefore, at this time blended learning seen as the best solution to improve student learning outcomes in the post-pandemic era. Apply blended learning is a combination of offline and online mode, where offline mode is important for building student interaction with real objects or problems, online mode which has practicality and flexibility. The offline

mode is important for strengthening mindsets with thoughts-on activities, which are supported by ICT-based media, materials and learning resources, in a more practical and flexible way. A touch of individual, group, and classical work settings is needed in this model or mode, to ensure that there are learning activities in building communication, collaboration, and other related abilities.

Elevated degree of crisis readiness is additionally required so personnel, heads, and understudies can rapidly adjust to changes that are unchangeable as far as one might be concerned. In order for teachers to build relationships and work toward enhancing social presence, teaching presence, and cognitive presence even in the online medium of instruction, this preparedness will require the allocation of resources to deal with mental health challenges. Additionally, teachers will need additional training in pedagogical methods. In addition to incorporating technology into classes, faculty will be able to consider alterations that could be made to further enhance teaching and learning if rigorous quality assurance methods (such as Quality Matters) and continuous quality improvement are implemented.

CONCLUSION

Based on the data analysis, the application of blended learning at SD/MI in Jabodetabek still relevant for use in learning after the Covid-19 pandemic. This is because implementing blended learning is a combination of offline and online modes, where offline mode is important for building student interaction with real objects/problems, online mode which has practicality and flexibility. The offline mode is important for strengthening mindsets with thoughts-on activities, which are supported by ICT-based media, materials and learning resources, in a more practical and flexible way. A touch of individual, group, and classical work settings is needed in this model or mode, to ensure that there are learning activities in building communication, collaboration, and other related abilities.

Application blended learning in learning in MI/SD after the Covid-19 pandemic, namely implementation blended learning in MI/SD thematic learning, teachers can carry out online and offline learning by utilizing virtual applications including whatsapp, Google Classroom, Youtube and Google Forms. This research is an initial contribution as literature or an illustration related to implementation blended learning in elementary schools and helping other researchers to broaden understanding of implementation blended learning. Then, model blended learning can be an alternative in the process of implementing learning after the Covid-19 pandemic. The research conducted is limited to Jabodetabek so it is possible that blended learning is no longer relevant for use in other areas, especially areas with limited internet access.

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