Strengthening Students’ Motivation and Confidence to Achieve Learning Goals in Blended Learning Method

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Abstract
Today's pandemic has changed any sector, including education, from its normal state into the condition we never expected before. From primary to higher education, the institutions are forced to change teaching and learning models into virtual since the Government tries to stop the spread of the virus by prohibiting face-to-face classes. Online learning has come like tsunami trends as the outbreak rose. It also happened in some vocational schools where students live in dormitories. Initially, they conducted offline classes, but they were transferred to go home as the virus spread. In one semester, they faced two models of learning, online and offline learning methods. Based on this situation, this article aims to disseminate the effectiveness of blended-learning models to improve students' motivation and confidence in speaking class by using the material to build their high-order thinking skills. The method of this study is combined between experimental and descriptive qualitative, by which the result of the research and analysis will be described in numbers and words. This study shows that the blended-learning method can improve students' motivation and confidence during speaking class, as shown in the assessment. The experimental group who taught using a blended-learning method integrated with HOTS materials achieved better scores in the TOEIC test, speaking assessment, and observation.

Keywords: blended-learning; high order thinking skills (HOTS); students’ motivation
Introduction

Blended learning is a process of learning and teaching and, now, this approach has become more popular following the massive role of digital technology in education. It combines offline learning, which is often referred to as conventional learning. In this method, students and teachers meet face-to-face in class, with online learning, where the learning process is carried out through the internet and technology. Blended learning is proven to increase the effectiveness of the learning process and student learning outcomes. In the pandemic era, especially, it needs to be done because online learning cannot immediately replace the importance of the natural learning process (offline learning). Online learning is not fully able to achieve learning objectives as can be completed in offline learning. However, online learning can be a partner that complements conventional learning in the classroom. Online learning, commonly called e-learning, can significantly complement classroom learning models or powerful media for enrichment programs (Husamah, 2014).

Blended learning at the university level is a learning innovation that teachers take to bridge the limited space and time. Not infrequently, teachers have limited time when carrying out the face-to-face learning process in the classroom. For that, the teacher adds enrichment materials or processes lecturing online either synchronously or asynchronously. Moreover, since the Covid-19 virus outbreak that occurred in almost all parts of the world, the entire learning process automatically switched to online learning. However, at certain higher education institutions, they have the policy to continue to carry out face-to-face learning, one of which is Merchant Marine Polytechnic (PIP Semarang).

The online learning process carried out when students are outside the dormitory, or home differs from learning in a class. Of course, when online learning is carried out, the teacher must choose materials that can build critical thinking attitudes, not just closed learning. Online learning provides more space for students to think more broadly with the support of technology and learning resources scattered on the internet. It is different from learning in the classroom, where access to finding learning resources is limited. With the application of methods, blended-learning students are expected to build and improve critical thinking processes towards the surrounding environment and problem-solving processes, which are the basic principles of learning in the Industrial 4.0 era.

This study tries to reveal the effect of blended learning on students’ activities and learning outcomes, mainly speaking skills. The design used in this research is experimental research. This method uses two groups of samples, which will be the object of research. The first group is the experimental group, the group that will receive treatment research, while the other group is the control group. This group does not receive special treatment. The study results will be described qualitatively by describing the pretest and posttest results and the results of observations and interviews. The object of research is the 3rd-semester students of the Merchant Marine Polytechnic. The purpose of this study is to describe how student activities during Blended learning implementation, analyze whether blended learning can improve student learning outcomes, especially in critical thinking skills HOTS (Higher Order Thinking Skills)
Since the Covid-19 virus outbreak spread throughout the world, including Indonesia, the entire learning education activities switched from face-to-face to online learning. The impact of the virus pandemic has affected almost all sectors, one of which is the education sector. The online learning system, which was initially only promoted at the higher education level to facilitate the limited time possessed by lecturers and students, is also implemented at the basic education level starting from elementary school to high school.

The pros and cons and various polemics have emerged with the online learning system, but this is the only step the Government can take in the education sector to minimize the risk of transmission caused by the Covid-19 virus. Parents/guardians of students feel that online learning is ineffective, especially in primary education. In practice, parents, apart from guiding the learning process, often do the tasks and questions that the teacher gives to students. So far, the learning tradition is that parents entirely rely on education to the teachers and are only involved very little in the guidance and consultation outside the classroom. It triggers a very different new adaptation for parents/guardians. They often complain that the distance learning system is tiring and creates new problems. Several educational institutions have implemented a blended-learning process based on this problem, which combines distance learning with face-to-face learning. Of course, face-to-face learning at the pandemic is still ongoing, with rigorous health protocols to avoid new clusters at the school level. One of the higher education institutions that carry out similar learning is Merchant Marine Polytechnic. Students in semesters 1-4 must stay and attend both theoretical and practical learning from the dormitory during regular learning. However, due to the Covid-19 outbreak, students were sent home for several months following the advice of the Government. While at home, students conduct distance learning for several meetings. However, towards the end of the semester, students are sent back to higher education institutions to continue their studies because medical evidence must be met.

The online learning provided stimulates students who are less interested in learning English, especially in speaking skills in conventional learning. Students can use learning media as widely as possible with technology and the internet to absorb new information and knowledge during online learning. The learning design made also raises interest in conveying opinions and information better than in regular learning. At this stage, students can think critically to solve problems and find new ideas for situations in their environment. This process is the principle of learning in the Industrial Revolution 4.0 era, often known as Higher Order Thinking Skills (HOTS). The design of this learning method makes English a foreign language or a second language, but English is a tool to achieve learning goals. In traditional English learning, which is the goal of a subject, currently, English is a tool to achieve learning objectives, convey information in its entirety, and compete at the global level.

This blended-learning process then becomes the most appropriate learning method for the student's condition. This blended-learning learning increases the participation, motivation, and activity of almost all students, which is usually only found in a few students. Of course, from rough observations, it can be seen that there are pretty significant differences in learning
activities carried out only with face-to-face learning with this blended learning. For this reason, this study tries to describe and measure the effect of blended learning on these students' activities and learning outcomes. By conducting combined learning activities and integrating them with HOTS materials, the students were expected to improve their speaking skills. The assessment undertaken to measure the improvement are former tests, such as; TOEIC Test and Speaking Assessment, and observation and interviews.

Previous Studies

At first, online learning was considered superior to conventional learning. Learning to use e-learning is considered more flexible and open-ended, meaning that learning is accessible to students anytime and anywhere (Husamah, 2014). The principle of the development of e-learning is changing the concept of teacher-centered to students-centered. The biggest obstacle to e-learning is the lack of direct interaction between students and lecturers. The e-learning nature of methods asynchronous that only provide material, practice, and enrichment makes the essence of two-way learning disappear. In addition, students tend to interpret new material or information according to their understanding, which is often very basic and requires further explanation. Therefore, one of the service improvements that teachers can make is to develop a blended learning method. This method combines the best characteristics of classroom learning and the best characteristics of online learning to reduce the limitations found in conventional learning (Husamah, 2014). Several studies on Blended learning or the effect of e-learning on student learning outcomes have been widely used. Several previous researchers carried it out. Some of the research that has been done will be presented in the following paragraphs.

Hima (2017) investigated the effect of blended learning on the learning motivation of grade VII students in mathematics. The design of this research is quantitative research, by which the results and discussion will be carried out by statistical analysis. The application of this method, according to his research, has been proven to increase students' learning motivation in mathematics. It can be seen from the increasing indicators of student learning motivation, including students who look enthusiastic, attentive, serious in learning, and actively discussing and looking for additional material via the internet (Hima, 2017).

If Hima examines the effect of blended learning at the elementary education level, Sjukur (2012) tries to analyze the effect of this method at the level of vocational education. The object of his research is vocational school students in senior high school. Sjukur tries to find out the difference and increase students' motivation and learning outcomes in blended learning. The research conducted by Sjukur used a quasi-experimental design with a population of 62 SMK students who were randomly selected. The results showed differences in students' learning motivation using blended learning and conventional learning with sig values. 0.012 with a mean of 4.74 and learning outcomes with an average of 13.39 (Sjukur, 2012).

Not much different from Sjukur, Syarif (2012) also examined the effect of the model blended learning on the motivation and learning achievement of SMK students. Syarif's research aims to determine the differences in student motivation and learning achievement in
applying the blended learning method in KKPI subjects. Syarif's research shows a significant difference between students' motivation and learning achievement compared to blended learning with conventional learning. In addition, there is an increase in students' motivation and learning achievement, but there is no interaction effect of the application of learning models and motivation on student achievement (Syarif, 2012).

In the three previous studies, researchers have only been limited to the output final to test the effectiveness of blended learning on student learning outcomes, in contrast to Luntungan et al. (2013), who tried to increase student creativity through the implementation of blended learning. This study uses a Classroom Action Research (CAR) design with two cycles. This study aimed to improve the quality of the process and learning outcomes in the classroom. The observations and interviews show that blended learning encourages students to be creative and happy participating in the learning process (Luntungan, 2013).

Another research that integrates the Blended learning model with critical thinking skills is research by Yaniawati (2013). In her research, Yaniawati describes how the implementation of e-learning improves students' HOTS abilities and its effect on student behavior and learning outcomes. The population was taken from two different universities with a total population of 162 students. Based on the data analysis, it can be concluded that students who study using the blended learning method have better critical thinking skills than students who only use one learning method, both e-learning and conventional learning. There is no significant difference in student behavior between the two learning methods (Yaniawati, 2013).

Blended learning to improve students' HOTS has also been carried out by Eliyasni et al. (2019). Research conducted by Eliyasni tested the effects of methods blended-learning and Project-Based Learning to increase students' HOTS. The method used is experimental research. The results obtained are a significant increase in the HOTS of students who use blended learning integrated with PBL (Eliyasni, 2019).

Lukitasari et al. explained that the Blended learning method integrated with the model was Problem Based Learning to improve students' critical thinking skills based on the tests' results. The population of their study was 28 students in the Cell Biology course at the University of Madiun. The effect of applying this method is that students can provide straightforward explanations, build essential skills, provide further explanations, determine solutions to a problem, and draw relevant conclusions (Lukitasari, 2019).

Not much different from Lukitasari, Rahmi, et al. evaluated students' HOTS abilities in discussions conducted using the Blended learning method. Discussions at the higher education level are exciting and interactive in conventional learning and can also be an innovation in online learning. Rahmi tested students' critical thinking skills during discussion activities using face-to-face meeting assessment sheets and online learning in his research. The data is described descriptively. At the end of the study, it was concluded that students' HOTS abilities increased when they were assessed directly, either during online or offline learning (Rahmi, 2019).

Based on several studies on blended learning and its relationship to improving students'
HOTS, this study will adopt blended learning methods to improve English speaking skills integrated with HOTS. The research data will be presented qualitatively by describing the situation before and after treatment and quantitatively by displaying the results of the posttest written and interviews. The population of this research is the 3rd-semester students of Semarang Shipping Science Polytechnic.

Method

This study combines two approaches to analyzing the data. It is conducted by using experimental and descriptive qualitative approaches. The aim is to measure the effectiveness of using the blended learning method combined with HOTS materials, significantly to improve English speaking skills. This research was conducted by dividing the class into two groups: the experimental and control groups. The experimental group was taught using blended learning integrated with HOTS materials, while the control group was taught using blended learning without integration with HOTS principles.

The initial stage of this research is to collect general data using a pretest and observations conducted using interviews (to measure speaking skills in English). This stage was done in the first meeting of the semester. The HOTS principle is implemented in learning materials and models. For example, the experimental class used a discussion presentation model with HOTS-based questions, while in the control class, this was not given. From the first until the fifth meeting, students learned in the classroom, and in the next meeting, sixth meeting until the last meeting, they learned online through video conference application and e-learning.

At the end of the meeting, in the 14th meeting, they were given posttest and final stage observations again. The population of this study was 3rd-semester students of the Semarang Merchant Marine Polytechnic with a sample of 24 students who were divided into two groups. The research instrument was in pretest-posttest the form of multiple-choice questions, which consisted of 30 questions and essay ten questions, which had a time allocation of 60 minutes.

The research results are presented quantitatively by describing the results of the pretest-posttest and qualitatively, where the differences in activities and student learning outcomes were described in detail. The results of the TOEIC Test and Speaking Test were presented in tables and diagrams. To make the explanation clearer, both graphs and tables are then completed with the description related to the discussion.

Result and Discussion

The analysis of the findings and discussion in this section will be based on the assessments conducted after the end of the semester in which the method has been implemented. The assessments conducted are the former test; TOEIC Test Preparation, Speaking Assessment, and observation.

TOEIC Test Preparation

The former test used by the Language Center of Merchant Marine Polytechnic to measure students’ achievement in English proficiency, especially in the class of Management of sea
transportation and port, is TOEIC Test. This test is being used to differentiate students' competency in English, and thus the companies who will recruit the students as an officer can count on this score.

The test was conducted for pretest and posttest. The questions of the test can be measured to assess students' skills in reading and writing. TOEIC test does not measure students' speaking skills, and due to this, the assessment of students speaking skills was conducted through another assessment present in the next section. The result of students score on TOEIC tests can be seen in the figure below:

![Chart Title](image)

**Figure 1. TOEIC Test Score Distribution of Control Group**

The first figure shows us the score distribution of the control group from pretest and posttest. TOEIC Tests measures students' competencies in listening, reading, and structure. In this study, pretest and posttest were given to measure their competencies in reading and listening only. On the pretest, the total score for the reading and listening section has a minimum number of 238 and a maximum number of 436. Meanwhile, the mean score obtained in the pretest for this group was 342.4, with a standard deviation of 56.7. This standard deviation value indicates that the range of minimum and maximum values are not too extensive. The distribution of values tends to be the same and close to the average value. It shows that the student's abilities at the pretest tend to be the same and homogeneous. This value can be seen in the graph on the gray bar. The distribution of student scores is in the same line with each other.

Meanwhile, during the posttest, which can be seen in the graph with the green line, the minimum score was 238, and the maximum score was 475. There was an increase in the score of 39 points for the total posttest score. The mean total posttest score was 377.8. The increase in the mean score is 35 points. The standard deviation of the total posttest scores increased by 22.2 to 78.9. A more considerable standard deviation value in the posttest can be interpreted that the range of values in the total posttest is getting bigger and away from the average value. Although the minimum score on the pretest is still the same, the maximum value has increased, and the scores obtained by students are increasingly varied. In the control group, the learning
method applied has a better impact on the achievement of student grades.

To compare with the experimental group, the following is a graph of the distribution of values in the group:

![Figure 2. TOEIC Test Score Distribution of Experiment Group](chart)

The experimental group shows that the range of pretest scores (in the gray line) has a diverse distribution. It is evident from the considerable standard deviation value of 108.5 with a minimum of 277 and a maximum of 673. The average total pretest score in the experimental group is 391. There is a difference in the value of 29 points for the mean pretest value of the control group and the experimental group. It means, from the beginning, the mean value of the experimental group was higher than that of the control group.

Meanwhile, the total posttest score of the experimental group has an average of 418 or has a difference in value with the pretest score of 27 with a minimum total score of 277 (the same as the minimum pretest value), and a maximum value of 554. This maximum value has decreased from the maximum value at the posttest. In addition, the standard deviation for the posttest scores decreased. It can be interpreted that the student's score is close to the average value or has a value that tends to be homogeneous with each other. This value can be seen in the dark blue line. This value can be interpreted that the distribution of values close to the average is wider than the pretest or that most students get higher scores at the posttest. This value distribution implies that students can improve their grades after learning with the Blended method. Both the control and experimental groups had an increase in value compared to the pretest value.

**Speaking Skill Test for Internship Preparation**

The second assessment is done to analyze the influence of the method is the speaking test. This test measures students' English-speaking ability to classify which one has low, sufficient, and good ability. The results of this test will later be used as consideration for student internships. Later, students who have good English-speaking skills will be placed in multinational companies.

This test contains images (in the form of graphs and diagrams) containing data on a company. Students must be able to describe and provide explanations related to the images and data. In addition to describing an image, another question given is how students can solve
problems in the world of work, such as SWOT analysis, sales increase analysis, and how students can build good relationships at work.

The graph below is the result of the speaking test in the control group. The graph shows that the average speaking test score is 2.5, with a minimum score of 1 and a maximum value of 4. The standard deviation for the overall score is 0.9. This figure implies that the value of the sample has a low distribution, or it can be said that the students’ scores are almost close to the average value and are homogeneous. As seen in the graph, the aspects assessed from their speaking skills are speaking fluency and speaking accuracy. From these two aspects, 50% of the samples have the same value and are homogeneous (as seen from the even and equal bars between all bars). While the other 50% have different values between speaking fluency and speaking accuracy, and the total value obtained for both vary, which can be seen on the yellow bar.

Figure 3. Speaking Test Score Distribution of Control Group

The value obtained in the control group is different from the experimental group. In figure 4, we can see that the range of student scores is more heterogeneous when compared to the control group. This group’s average speaking test score is 2.5, with a minimum score of 1 and a maximum of 5. In addition, the standard deviation of the total speaking test scores is 1.2 or 0.3, more significant than the control group. It means that the distribution of scores obtained by students is wider and away from the average value. In addition, the maximum value in the experimental group was higher when compared to the control group. The implication of the value obtained is that the implementation of blended-learning learning methods combined with materials to improve students’ Higher Order Thinking Skills has a better impact on the experimental group. For this reason, this learning method can increase student scores and provide a better influence on the blended learning that is not provided with learning materials about HOTS.
Observation and Interview

In addition to the two types of tests, this study also provides direct evaluation to students in a questionnaire. This questionnaire contains several evaluative questions after completing the course. Some of the evaluation results will be presented in the following sub-chapters.

Questions in the first category are about the methods used during the pandemic. The graph on the left is the answer to whether the blended learning method has a better effect when compared to face-to-face learning or online learning. 4 respondents answered they disagree, 21 respondents answered they agreed. The remaining seven respondents answered strongly agree. However, compared to the graph on the right, which asks whether face-to-face learning is better than online learning, the results obtained are two respondents answered disagree, 19 agreed. The remaining ten respondents answered strongly agree. It means that although most respondents agree on the benefits of Blended learning to improve their learning abilities, they prefer face-to-face learning.

The next question is about the ability of students after participating in learning using the Blended learning method. The aspects assessed are listening, speaking, reading, writing, and understanding of structure and grammar. Of the five aspects, the highest answers in the agreeing category are speaking skills and listening skills, and the two are reading, writing, and understanding grammar skills. So, the most significant benefit after taking this blended learning method in the Language Improvement course is improving students’ English speaking and listening skills. These results can be seen in graph number 6 below.
Furthermore, the questionnaire also asked about the learning materials provided. Among them are (a) clear learning objectives, (b) clear and easy-to-understand lesson plans and materials, (c) the tasks and exercises given are per the learning, and (d) learning materials can make students play an active role in the learning process. Of the four points, the two most appropriate and answered with agreeing are points (a) and point (b). It means that students can achieve learning objectives because they have clear learning objectives and are supported by appropriate learning materials and plans to achieve learning objectives.

The graph above is the answer to the question about their reasons for choosing this Language Improvement Course. The majority answered because of interest, with 84.4%, although basically, the respondents required this course. It can be interpreted that although initially, students take this course as an obligation because they get the benefits of this course so that they choose it because of their interest and desire to learn English. Only 9.4% of respondents answered that they took the course because of degree requirements and the rest because of the time offered following their free time.

The last two questions are the benefits obtained after attending the course and
suggestions for future course improvements. The results of the two questions are then classified into five categories, as shown in the two tables below.

<table>
<thead>
<tr>
<th>No.</th>
<th>Benefits of The Course</th>
<th>Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Improving Confidence</td>
<td>3</td>
</tr>
<tr>
<td>2</td>
<td>Improving Skills</td>
<td>13</td>
</tr>
<tr>
<td>3</td>
<td>Growing Interests</td>
<td>2</td>
</tr>
<tr>
<td>4</td>
<td>Improving English Grammar Competency</td>
<td>11</td>
</tr>
<tr>
<td>5</td>
<td>Improving TOEIC Score</td>
<td>3</td>
</tr>
</tbody>
</table>

Table 1. List of Benefits of the Course

<table>
<thead>
<tr>
<th>No.</th>
<th>Suggestions</th>
<th>Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Method</td>
<td>4</td>
</tr>
<tr>
<td>2</td>
<td>Course Materials</td>
<td>7</td>
</tr>
<tr>
<td>3</td>
<td>Instructors’ Performance</td>
<td>1</td>
</tr>
<tr>
<td>4</td>
<td>Duration</td>
<td>14</td>
</tr>
<tr>
<td>5</td>
<td>Others</td>
<td>6</td>
</tr>
</tbody>
</table>

Table 2. List of Respondents’ Suggestions

Based on the table above, it can be seen that the most benefits that students feel are skills in English which are increasing. It corroborates the results of the survey on what skills improved in the previous section. In addition to increasing skills, knowledge of Grammar and Structure is also the most felt by students. At the same time, most of the students’ suggestion is to add the duration of learning. The majority of students want additional time for this course. They hope that in the next semester, this course can continue to be implemented. For another aspect, the course materials can increase their interest, motivation, and confidence in mastering English, as shown in the table below.

CONCLUSION

Blended learning in the English language improvement course to bridge learning activities during the pandemic is a strategic step to increase students’ self-confidence and learning achievement. The learning method, which was initially to facilitate the absence of face-to-face learning, which was not permitted during a pandemic, is a new learning alternative to improve learning objectives. This method provides a refresher on the saturation of face-to-face learning and online learning only. Some of the results obtained after implementing blended-learning include:

1. Blended learning is felt to be more effective than online learning alone or face-to-face learning. This hybrid learning can provide alternative learning during a pandemic.
2. Blended learning that was carried out during the pandemic improved speaking and listening skills in English.
3. Blended learning was considered to increase students’ motivation and confidence, which could be seen from the increased speaking test results in the experimental group and observational assessments.
4. Furthermore, blended learning can be applied as an alternative if face-to-face learning is allowed to be carried out when the pandemic ends.

For further research about blended learning and technology-enhanced learning, the writer suggested that other researchers undertake a study in different areas of language skills at any other level, especially higher-level education.

References


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