The Effectiveness of Classical Tutoring Services through Blended Learning Based on Google Classroom Applications to Improve Students’ Self-Regulated Learning

Muhammad Ilham Baktiar\textsuperscript{a}, Abdul Saman\textsuperscript{b}, Irfan\textsuperscript{c}, Irfan Arifin\textsuperscript{d}, Bakhtiar\textsuperscript{e}, Yasdin\textsuperscript{f}, Syamsuardi\textsuperscript{g}, Ratnawulandari\textsuperscript{h}, \textsuperscript{a}Guidance and Counseling, STKIP Andi Matappa, Indonesia, \textsuperscript{b}Guidance and Counseling, Universitas Negeri Makassar, Indonesia, \textsuperscript{c,d}Fine Arts and Design, Universitas Negeri Makassar, Indonesia, \textsuperscript{e}Education and Social Science, Universitas Negeri Makassar, Indonesia, \textsuperscript{f}Automotive Engineering Education, Universitas Negeri Makassar, Indonesia, \textsuperscript{g}Early childhood education programs, Universitas Negeri Makassar, Indonesia, \textsuperscript{h}Guidance and Counseling, Universitas Muhammadiyah Palopo, Indonesia, Email: ailhambakhtiar86@gmail.com

This study aims at investigating: (1) the effectiveness of traditional tutoring using Google Classroom application as a counselling media to improve students’ self-regulated learning, and; (2) the effect of general tutorial service using Google Classroom Application as a counselling media on students’ self-regulated learning. This is a quantitative study with a real experimental design involving control and innovative classes evaluated through pretest and post-test using questionnaires. The research findings showed that after the implementation of classical tutoring using Google Classroom Application as a counselling media to improve students’ self-regulated learning, students still had low ability to plan the lesson, had the excellent ability to carry out the learning activities, and had average skills in evaluating the learning process so that it is considered that they still need a more exciting and more fun learning service. In addition, there was 58\% improvement on the self-regulated learning of students in the experimental group after served with a classical tutorial with Google Classroom Application based blended learning.

Key words: Classical tutorial, Blended Learning, Counselling and Tutoring, Application, Google classroom, Self-regulated Learning
Introduction

Student achievement in schools can be boosted if a good quality of learning models supports it. The variety of available methods will stimulate the enthusiasm and motivation of students to learn and do the various tasks given. The process must, of course, be adapted to the needs, characteristics, and abilities of students as well as the available facilities. Therefore, teachers need to use learning methods that can improve the learning achievements, and need to develop learning environments that are relevant to the current conditions.

Classical service is provided to give information to students. This service is offered in the classroom to create well-structured and prepared counselling on a scheduled basis (Garrison, 2005; Fatimah, 2017) that can reach all students at every level. Classical tutorial service is one of basic tutorial and counselling activities which is planned to guide counsellor to perform direct interaction with students on a scheduled basis. It includes discussion, lectures, question and answer, and practice that can stimulate students to be active and creative during the teaching activities (Depdiknas, 2007). It is also a systematic service provided to support students developing their potential optimally (Triono, 2014). It illustrates that classical tutorial is highly suitable provided to students because it is priorly scheduled and presented systematically thus can activate students potentials and nurtures in order to achieve a better learning result. An earlier study showed that classical tutorial is useful to improve students’ control (Mukhtar, Yusuf, & Budiamin, 2016) while Andriati (2015) explained that classical tutorial with role play technique could improve students’ self-confidence. Therefore, a traditional tutorial is believed to be useful in changing students’ behaviour. As a systematic service (Triono, 2014), classical tutorials should be adapted to the development of education and technology in order to ensure its effectiveness in the classroom. Nowadays, most schools use traditional tutorials in their teaching methods like face to face learning through lectures, discussions, and tasks (Depdiknas, 2007). In fact, those activities will be more enjoyable when supported with technology like Google Classroom Application.

Information and technology are developing rapidly nowadays, including in education. This development has an impact on the change of teaching tools like computers and the internet, which are referred to as e-learning electronic-based learning (Ekawati, 2018; Saddhono, Hasibuan, & Bakhtiar, 2019). The strategy of utilising information and technology through e-learning should become an innovative learning model for this era. This innovation develops the blended learning model, which collaborates face to face learning and virtual learning (Alonso, Manrique, Martinez, & Vines, 2011; Husamah, 2014). The combination of those two methods will make the learning activities in the classroom more powerful. According to Tham (2011), blended learning is the combination of multimedia technologies, CD Room video streaming, virtual class, voicemail, email and telephone conference, online animated text, and video streaming. Blended learning is the method which elaborates classical education(face to
face) with online teaching (Sari, 2013; Sutisna, 2016; Walijati, 2016). This model has several strengths. For example, it is easier to be accepted, it is more flexible to schedule students, and students are easy to adapt to do the tasks (J. E. Gallagher, 2005; Pradnyana, 2012). Blended learning is the right solution for online-based learning; one of its varieties is the Google Classroom application. Google Classroom is a new feature of Google App for education that can be utilised by teachers and students for learning. Google classroom is a Learning Management System (LMS) based learning system with software (Matheos & Cleveland-Innes, 2018; Wicaksono & Rachmadyanti, 2017). Google Classroom can support students and teachers to achieve the learning goals since it can simplify the communication performed by those two parties, and assists teachers in distributing tasks and doing assessments (Al-Maroon & Al-Emran, 2018). Google classroom media facilitates students to receive jobs from the teacher and send them back online. Teachers are also possible to do assessments and give comments or feedbacks online. Therefore, students can independently review references, study the materials, complete the tasks, and submit them.

The learning achievement obtained from blended learning will significantly contribute to students’ success in their future life. Therefore, Google Classroom base blended learning model is a way to increase students’ learning independence or self-regulated learning (Iftakhar, 2016; Valle et al., 2008). A study found that Google classroom can boost the students’ self-directed learning (SDL) cognitive skills (Jakkaew & Hemrungrote, 2017), and (Sari, 2013) stated that the implementation of that strategy could improve students’ independent learning. Considering those backgrounds, the researcher was interested in carrying out a study under the title “The Effectiveness of Classical Tutorial Service through Google Classroom Application based Blended Learning to Improve Students’ Self-Regulated Learning.”

The aims of this study are to identify: (1) The effectiveness of Classical Tutorial using Google Classroom Application as a counselling media to improve students’ self-regulated learning; (2) the effect Classical Tutorial Service on Students’ Self Regulated Learning after treated with Google Classroom Application as the counselling media.

**Methods**

This study employed a quantitative approach with true-experimental design with pretest and post-test (Sugiyono, 2014) to study the effectiveness of Google Classroom Application based classical tutorial service to improve students’ self-regulated learning.

The research procedures started from planning, pretest, the implementation of online teaching or classical tutorial using Google Classroom Application based Blended Learning, and post-test. More detailed stages are explained as follows: (1) The determination of subjects; (2)
Giving pretest to subjects; (3) Implementing the Blended Learning with Google Classroom application on research subjects; (4) Distributing the post-test to research subjects.

The subjects of this study were students of Senior High School 3 Makassar consisting of 36 people in the control class and 36 people in the experimental class. The data were collected using questionnaires.

The questionnaires were distributed to the research samples to get data describing the condition of students’ self-regulated learning before (pretest) and after (post-test) the implementation of a blended learning method using the Google Classroom app. The questionnaires used closed questions with the Guttman scale. The data were analysed using descriptive statistic method to describe the students’ self-regulated learning before (pretest) and after (post-test) the implementation of blended learning using Google Classroom app by using frequency distribution table and calculating its percentage (Tiro, 2004). To get the description of the effect of Google Classroom application based blended learning, we calculated the mean of variable scores based on the equation (Hadi, 2004; Mustaniroh, 2015). The inferential statistic analysis used criteria analysis to know whether the data had fulfilled the criteria. Therefore, it needed to perform normality and homogeneity tests.

Hypothesis test

According to Hadi (2004), inferential analysis is used to test the proposed hypothesis. One of the functions of inferential analysis is to withdraw a conclusion about a case that is being investigated applied to a number of samples that have been generalised into a bigger population. Hadi (2000) mentioned that the inferential analysis is used to test whether the implementation of blended learning using Google classroom application can improve students’ self-regulated learning using t-test. It was also to know how effective the classical tutorial is by using blended learning. The t-test was performed using SPSS 20 for windows. The significance level was 0.05 that “the $H_0$ is rejected if the $t_{count}$ ≥ $t_{table}$ and accepted if the $t_{count}$ ≤ $t_{table}$”.

Results and Discussion

The Implementation of Classical Tutorial using Google Classroom Application as counselling media to improve the students’ Self Regulated Learning

The classical tutorial is a basic tutorial that is provided to all students to assist them in developing their attitude and life skills based on their developmental stage (Glynn, Aultman, & Owens, 2005; Nurihsan, 2013). Besides that, the classical tutorial is given to all students joining a particular unit of learning (Winkel and Hastuti, 2006). The traditional tutorial assists
students in being more independent and in developing more optimally based on applicable norms both on individual and group basis (Waljiati, 2016). This shows that the standard tutorial service can bring a significant impact on students’ development both at school and in their society so that they can become independent humans.

The research findings describe the effectiveness of classical tutorial using blended learning with Google Classroom app to improve students’ self-regulated learning (Salmon, 2000). From questionnaires, we can identify the students’ self-regulated learning level after teaching using Google Classroom application in each learning indicators. A more detailed description is presented in the following pie chart.

a. Students’ learning ability based on the process of teaching planning

Figure 1 indicates that students’ ability to plan the learning was low as there were 15 students (out of 35 students in total) or 45% of them showing the low scores, indicating that they were less able to plan their learning. This data describes that a new plan is necessary for students before they start the learning process because it affects the result of their knowledge and possibly brings impact to the development of their interest in the future.

![Figure 1. Description of Students’ Ability to Plan the Learning](image-url)
b. Students’ Learning Ability based on the way of conducting the learning activities

![Carrying out The Learning Activities](image)

**Figure 2. The Description of Students’ Ability to Do the Learning Process**

Figure 2 shows that students’ ability to run the learning process was mostly still at the average level as 15 of them (43%) were in that category. Therefore, tutorial programs are always highly necessary for them to boost their motivation to study harder.

c. Learning Evaluation Ability

![Learning Evaluation](image)

**Figure 3. The Description of Students’ Learning Evaluation**

Figure 3 informs that the students’ ability to evaluate their learning activities was in the average category as the majority of them were in the low level, or 14 of them (40%) were in the high grade and are considered to be able to evaluate their learning process. The data cover information about students’ success and failure in learning, their reaction to their
tasks, and how they evaluate the tasks or work before submitting them, taking remedial,
and their independence not see their peers’ work and more confident in their own actions.

The Effect of Classical Tutorial Service with Google Classroom as Counselling Media on
Students’ Self Regulated Learning

Before and after providing excellent tutorial service through online base learning, which in this
case was the use of Google Classroom app, instruments were given to measure the effect of
that facility. The data were analysed using a t-test with SPSS 20 for windows. The significance
level was 0.05 with the criteria that “H₀ is refused if the \( t \text{ count} \geq t \text{ table} \) and is accepted if the \( t \text{ count} \leq t \text{ table} \).”

The hypothesis of this study is that the application of standard tutorial service using Google
Classroom with a blended learning model can increase students’ self-regulated learning. The
next step is to prove the hypothesis; it should priorly be explained that if H₁ is accepted while
H₀ is refused, the method has a significant effect on students’ self-regulated learning while if
H₀ is accepted, but H₁ is rejected, the technique has no significant effect on students’ self-
regulated learning. Following is the description of the analysis results from the test performed
on the hypothesis.

<table>
<thead>
<tr>
<th>Table 1. Paired Samples Statistics</th>
<th>Mean</th>
<th>N</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pair 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pretest eks</td>
<td>69.9167</td>
<td>36</td>
<td>4.68661</td>
<td>.78110</td>
</tr>
<tr>
<td>Posttest eks</td>
<td>78.7222</td>
<td>36</td>
<td>5.24056</td>
<td>.87343</td>
</tr>
<tr>
<td>Pair 2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pretest kont</td>
<td>59.0833</td>
<td>36</td>
<td>6.20311</td>
<td>1.03385</td>
</tr>
<tr>
<td>Post-test Kont</td>
<td>59.6111</td>
<td>36</td>
<td>6.13318</td>
<td>1.02220</td>
</tr>
</tbody>
</table>

Based on the data presented in Table 1, we can see the statistical results of the implementation
of standard service using Google Classroom App with a blended learning model based on data
collected from the pretest and the post-test. In the experimental class, the average score of the
pretest was 69.9167, while the post-test was 78.7222, with the total number of respondents of
36. The mean score of the post-test is higher than the pretest, indicating a dramatic
improvement after the treatment. Then, in the control group, the average rating of the pretest
was 59.0833, while the post-test was 59.6111. The difference between pretest and post-test
scores is very little, indicating that there is no significant increase in the pretest.

The data indicate that the improvement experienced by students in the experimental group was
more significant than in the control group. In other words, the implementation of the classical
tutorials using the Google Classroom app with a blended learning method effectively improves students’ self-regulated learning.

**Table 3. Paired Samples Correlations**

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Correlation</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pair 1</td>
<td>Pretest_eks &amp; Post-test_eks</td>
<td>36</td>
<td>.664</td>
</tr>
<tr>
<td>Pair 2</td>
<td>Pretest_kont &amp; Post-test_Kont</td>
<td>36</td>
<td>.965</td>
</tr>
</tbody>
</table>

Table 3 shows the correlation score of control and experimental groups indicating that the innovative class has a value of 0.664 with the probability value of (sig.) 0.000, while the control class has a score of .965 with the probability value of (sig) 0.000. The probability value, which is < 0.05, indicates that there is a real correlation between self-regulated learning and classical tutorial service with the Google classroom app. If the value of r is squared, the contribution of the traditional tutorial using Google classroom app to the change of self-regulated learning can be seen.

**Table 4. Paired Samples Test**

<table>
<thead>
<tr>
<th></th>
<th>Paired Differences</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
<th>95% Confidence Interval of the Difference</th>
<th>T</th>
<th>df</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pair 1</td>
<td>Pretest_eks - Post-test_eks</td>
<td>-8.80556</td>
<td>4.09752</td>
<td>.68292</td>
<td>-10.19196 to -7.41915</td>
<td>-12.894</td>
<td>35</td>
<td>.000</td>
</tr>
<tr>
<td>Pair 2</td>
<td>Pretest_kont - Post-test_Kont</td>
<td>-5.2778</td>
<td>1.62983</td>
<td>.27164</td>
<td>-1.07923 to .02368</td>
<td>-1.943</td>
<td>35</td>
<td>.060</td>
</tr>
</tbody>
</table>

Table 4 shows that the experimental group has a big $t_{count}$ which is -12.894, with a sig score of 0.000. Because the sig < 0.05, it can be concluded that $H_0$ is refused while $H_1$ is accepted. It means that in general, there was a significant difference in students’ self-regulated learning before and after standard tutorial service with blended learning methods using Google Classroom App. Then in the control group, the $t_{count}$ is -1.943 with the sig value of 0.000, which is more significant than sig 0.050. Therefore, it can be concluded that $H_0$ is accepted while $H_1$ is rejected. It means that there was no significant difference in students’ self-regulated learning before and after standard tutorial service with blended learning methods using Google Classroom App. Thus, it is stated that to improve the students’ self-regulated learning, classical tutorial service with a blended learning approach using the Google Classroom app is recommended.
Based on the N-Gain score of the experimental class, which is 29%, the result is considered to be in the medium level or effective to improve the research object as the minimum score is 3.23, or 3%, and the maximum rating is 57.69 or 58%. While the control class got an average of 1.2% only, which is categorised to be not sufficient as the minimum score was -2.38 or -0.2%, and the maximum score was 18.37 or 18%. It means the implementation of blended learning using the google classroom app in the experimental group was very effective in improving students’ self-regulated learning or their learning independence.

### Table 5. Descriptives N-Gain Score

<table>
<thead>
<tr>
<th></th>
<th>Eksperimental class</th>
<th>Control class</th>
</tr>
</thead>
<tbody>
<tr>
<td>(mean)</td>
<td>29%</td>
<td>1.2233</td>
</tr>
<tr>
<td>Minimum</td>
<td>3.23</td>
<td>-2.38</td>
</tr>
<tr>
<td>Maximum</td>
<td>57.69</td>
<td>18.37</td>
</tr>
</tbody>
</table>

**Conclusion**

The research findings show that the implementation of classical tutorial service using Google classroom app as a counselling media to improve students’ self-regulated learning was still low in terms of students’ ability to plan the education, was high in their ability to carry out the learning activities, and was average in evaluating the learning process. Therefore, it is considered that they still need a learning service which is more exciting and fun. Furthermore, there is an improvement in students’ self-regulated learning in the experimental group after receiving classical tutorial service with blended learning method using Google Classroom app, which was 58%.
REFERENCES


