Increasing Student’s Civic Knowledge Through Schoology Based E-Learning

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**ABSTRACT**

This research based on the phenomenon of switching from conventional learning to full e-learning which is part of the impact of the physical distance policy in adapting to the Covid-19 pandemic situation. SMP Negeri 30 Bandung is one of the schools that uses Schoology as an alternative media for e-learning during the Covid-19 pandemic. Therefore, it is necessary to examine how the increase in civic knowledge of students through Schoology-based e-learning is related to the diversity of subjects in Citizenship Education subjects. The purpose of this study was to determine and analyze the increase in the civic knowledge of students through schoology-based e-learning as seen from the learning completeness of at least 70%. This type of research is sequential mixed methods using qualitative and quantitative approaches. The research sample used a random sampling technique to class VII students of SMP Negeri 30 Bandung for the academic year 2020/2021 with a total of 75 people. The results showed that the percentage of students' learning completeness was 70.7%, so it can be categorized as students who have completed learning individually and most of them have been able to achieve the Minimum Mastery Criteria (KKM).

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1. INTRODUCTION

The rapid development of Information Technology (IT) has a significant impact on relations between individuals, society and even nations and states (Ngafifi, 2014). One form of technological advancement in the field of education is the emergence of the term "e-learning" (Setyoningsih, 2015). E-learning is the foundation and logical consequence of the development of information and communication technology (Silahuddin, 2015). E-learning can be interpreted as an educational system that uses electronic applications to support the use of internet media in the teaching process (Mutia & Leonard, 2015). E-learning has several functions, namely as an additional, complementary, or substitute media in the learning process.

Lately, e-learning has become an alternative learning used by almost several educational institutions in the country. Given that early 2020, the outbreak of an infectious virus known as Coronavirus Disease (Covid-19) has shocked the world. The World Health Organization (WHO) declared coronavirus disease (Covid-19) a global pandemic on Wednesday, March 11, 2020. This decision is based on the distribution of 118,000 cases that have infected 114 countries.

In response, the Indonesian government has adopted physical distancing and social distancing measures to limit activities as a precaution. In the field of education, the policy is contained in Circular Letter Number 4 of 2020 issued on March 24, 2020 concerning the implementation of education policies in the emergency of the spread of coronavirus disease (Covid-19). This policy presents a new alternative in the implementation of the education process during the pandemic, namely Work from Home (WFH) or called learning from home. The implementation of WFH in learning certainly utilizes e-learning as an alternative to conventional learning.

According to Technologue.id data, the utilization of online-learning services in Indonesia increased significantly by 98% compared to the previous year. E-learning applications are one of the most popular digital services in the field of education because they are an alternative virtual teaching method for educators and students. Data shows that this proves that Indonesia's internet usage reached 175 million at the beginning of 2020, this figure is equal to 25.3 million new internet visits per year (Harahap & Adeni, 2020). However, the number may change because from elementary to secondary school, more than 45 million learners have used distance learning or switched to e-learning-based virtual learning.

Based on observations made at SMP 30 Negeri Bandung that with the coronavirus pandemic, learning activities in schools have stopped, this is because the policy issued by the government requires learning to be carried out at home or learning from home (BDR). With this policy having an impact on the difficulty of interaction between teachers and students in the learning process, many subject materials have not been delivered due to time compression and teacher difficulties in fulfilling academic administrative completeness. Therefore, SMP Negeri 30 Bandung uses the Schoology application as an alternative e-learning learning media during the Covid-19 pandemic and as a solution step in dealing with obstacles to learning.

Schoology is one type of Learning Management System (LMS) that has a function, namely to support administrative needs, documentation, online-learning activities connected to the internet, e-learning, delivery of learning materials and activity reports (activity reporting). Therefore, Schoology can also be said to be a platform of e-learning that can automate and virtualize the internet-based electronic teaching and learning process (Irawan et al., 2017).
Schoology has many features to support quizzes, tests, discussions, and assignments in the learning process. Some of the advantages contained in the Schoology platform are as follows (Aminoto, 2014).

(i) Materials, serves as a place to store all folders such as, materials, assignments, exams, discussions, links connected with other applications.

(ii) Gradebook, serves to recapitulation of students' scores from various assignments or exams that can be converted to e-report cards.

(iii) Badges, serves to reward students in the form of points given by teachers.

(iv) Attendance, which is a feature of student attendance automatically and equipped with information in each lesson.

In addition, in Schoology there is a Groups feature that is used to create groups in grouping tasks completed by groups grouped based on different topics or categories, thus making virtual group learning effective (Aminoto, 2014).

Based on an initial survey conducted by schools on user satisfaction (teachers and students) in using Schoology as a learning medium after the last few weeks of using Schoology, it showed that 90.4% of 479 responses stated that the application is a good medium to use in the full online-learning process, especially for the independent learning process, of course with some advantages possessed by Schoology.

However, apart from the selection of the right media in supporting the e-learning process, namely how students understand the material received during the learning process (Hadisi & Muna, 2015). Given that full e-learning learning limits interaction between teachers and students, which in fact requires guidance and direction from teachers not only in transferring knowledge but how they are able to become moral people and know their rights and obligations as citizens. So in this case, the highlight or discussion of research is about Civic Education.

**Figure 1.** Percentage of Schoology Survey Results (Survey by SMP 30 Bandung)
In Civic Education in schools must be able to develop the civic competence of students. Civic competence is a set of knowledge, concepts, values and skills as a supporter of participatory and responsible citizens in relation to community and state life (Sudrajat, 2020). This civic competency consists of three types, namely competence in aspects of knowledge or civic knowledge, competence in aspects of attitudes or civic dispositions, and competence in aspects of citizen skills or civic skills.

Competence in aspects of knowledge (civic knowledge) in PPKn subjects in schools is usually the main focus of teachers in the teaching and learning process in the classroom, because PPKn subjects are multidisciplinary fields of study, which in detail PPKn knowledge material includes human rights, rights and obligations of citizens, democratic principles and procedures, government and non-government institutions, government based on law and free and fair courts, national identity, constitution as well as values and ethics that live in society (Mulyoto & Samsuri, 2017). The scope of civics knowledge, including knowledge of the political system, government, constitution, laws, rights and obligations of citizens, and so on (Kusumawati, 2017). This relates to the Core Competencies of civic knowledge contained in Civic Education subjects in schools. So the relationship with student learning outcomes is what they get in teaching and learning activities at school formally related to the ability to absorb the material received.

Increasing the capacity of civic knowledge during the PPKn learning process in schools is by providing citizenship knowledge through information search strategies, students are given flexibility in accessing information about matters related to citizenship issues (Nasrullah et al., 2018). The scope of material in PPKn is very broad, so the information search strategy is suitable for the application of the PPKn learning process.

Information technology devices that are popular among students include gadgets, laptops, and internet networks that can be used to support PPKn learning with information search strategies. Of course, in a full e-learning learning situation, this will be a momentum in increasing civic knowledge to students at large.

The civic knowledge referred to in this study is the result of learning, namely in the form of cognitive abilities of students which are understood as civic knowledge (citizenship knowledge), especially in diversity material where students can know and understand the meaning of diversity in the frame of Bhineka Tunggal Ika. Therefore, the Schoology application is a means of adaptation in full e-learning learning in the midst of the Covid-19 pandemic conditions that are able to utilize technology properly and appropriately to support effective and efficient learning implementation.

2. METHODS

This research uses a mixed methods approach that combines qualitative and quantitative approaches. The research method used is sequential exploratory, which is collecting and analyzing qualitative data then collecting and analyzing quantitative data. The research design can be seen in the following scheme.
Qualitative data were obtained through observation and interviews which emphasized the participants in depth. While the quantitative approach is used to measure the increase in civic knowledge of students in Schoology-based e-learning learning.

This research was carried out in SMP Negeri 30 Bandung with the subject of the study, namely class VII students who were randomly selected from the total population of 297 students so that the sample determined was only 75 people or about 10% of the total class VII students of SMP Negeri 30 Bandung. The selection of samples is based on the objectives of the study with calculations using the Slovin formula.

Data instruments in this study are divided into two types, namely qualitative instruments and quantitative instruments. The qualitative instrument used is a learning implementation sheet as an assessment of the Schoology-based e-learning process. While the quantitative instruments used are knowledge tests or cognitive tests related to diversity material in class VII PPKn subjects. This test is carried out after students have finished being given material to the end during the learning process using Schoology media with the form of multiple-choice questions of 40 items.

Furthermore, data collection techniques in this study are through:

(i) Observation Method
   Direct observation is used to observe the Schoology-based e-learning process carried out by PPKn teachers and see the activeness of students.

(ii) Interview Method
   Interviews were conducted with vice principals for curriculum, media experts and Civic Education teachers with triangulation techniques to obtain information on planning and implementing Schoology-based e-learning.

(iii) Post Test
   Cognitive tests are tested after students obtain material about diversity through the media of Schoology. This test is used to determine the mastery of material in students and the completeness of learning of students at least 70% able to meet the Minimum Completeness Criteria (KKM).

Based on the following data collection techniques, the data analysis carried out in this study is:
2.1 Learning Implementation Analysis

This implementation analysis is used to determine the use of Schoology in the learning process. The instrument used contains assessment indicators that are scored 1-5. It then calculates the sum of the scores on each indicator by using the formula:

\[
\text{Percentage} \, (\%) = \times 100\% \frac{\sum \text{Perolehan Skor}}{\sum \text{Skor maksimum}}
\]

The assessment obtained is quantitative, then converted into qualitative sentences. Qualitative assessment uses criteria that can be seen as follows:

**Table 1. Score Criteria**

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>76%-100%</td>
<td>Excellent</td>
</tr>
<tr>
<td>51%-75%</td>
<td>Good</td>
</tr>
<tr>
<td>26%-50%</td>
<td>Enough</td>
</tr>
<tr>
<td>0%-25%</td>
<td>Less</td>
</tr>
</tbody>
</table>

Source: (Noprinda & Soleh, 2019)

2.2 Cognitive Test Analysis

Cognitive test results are used as an indicator of student learning completeness. Students are said to be complete in the lesson if they have achieved a completeness score with a minimum test result of 70, and complete classically if 70% of all students have passed the Minimum Completeness Criteria (KKM). The test consists of 40 multiple-choice questions containing Basic Competence 3.4 from the aspect of knowledge (cognitive) on diversity material.

Before cognitive test instruments are used, these instruments must first be analyzed, namely through the level of difficulty of the questions after students fill out cognitive tests. This is to test the extent to which students master the subject matter that has been delivered and psychological changes after experiencing the PPKn learning process. Therefore, to measure the level of difficulty of each question item, the following equation is used:

\[
P = \frac{B}{JS}
\]

Where:
- \(P\) = difficulty index
- \(B\) = the number of students who answered the question correctly
- \(JS\) = total number of test-taking student

**Table 2. Difficulty Index and Classification**

<table>
<thead>
<tr>
<th>Difficulty Index</th>
<th>Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.00</td>
<td>Too Hard</td>
</tr>
<tr>
<td>0.00 &lt; I ≤ 0.30</td>
<td>Difficult</td>
</tr>
<tr>
<td>0.31 &lt; I ≤ 0.70</td>
<td>Keep</td>
</tr>
<tr>
<td>0.71 &lt; I ≤ 1.00</td>
<td>Easy</td>
</tr>
<tr>
<td>I = 1.00</td>
<td>Too Easy</td>
</tr>
</tbody>
</table>

Source: processed by researchers, 2021
3. RESULTS AND DISCUSSION

3.1 Research Results

As mentioned earlier, technological developments in the world of education must be utilized properly. With digital media-based learning, this can also be applied to Civic Education learning. Digital media-based learning will make it easier for students to understand the subject matter. Therefore, in an effort to increase students' understanding of material about diversity in e-learning learning, the school made a policy to use Schoology as an e-learning medium at SMP Negeri 30 Bandung, especially during the COVID-19 pandemic.

3.1.1 Learning Implementation

In this study, learning implementation data was obtained through direct observation by researchers of online classroom learning and assessment of classroom management capabilities by Civic Education teachers. Based on observations, results in the form of percentages are obtained through the histogram as follows.

![Figure 3. Observation Histogram](https://doi.org/10.17509/civicus.v21i1.45602)

The results of class observations on learning activities between teachers and students as a whole were at \textbf{75.6\%}. The percentage is categorized as \textbf{good}, which is between (51\%-75\%). In implementation, it can be observed how the learning process takes place starting from the opening, core activities, and closing. Some of the components observed include the presence of students in PPKn class learning, most of \textbf{≥ 80\%} of the total they can follow the lesson, teacher and student interaction is well developed, and student activities during learning take place interactively.
In addition, the most important thing is how teachers are able to manage classes well, this is an effort to strengthen students' understanding of the material presented, not only knowing the concept but being able to understand meaningfully. Therefore, through researchers' observations of the ability of classroom management by Civic Education teachers in e-learning results obtained a percentage of 80%, the percentage is in the very good category, which is between (76%-100%).

It is known that even though in carrying out learning in class by video conference, the teacher is able to manage the class well. Seen from how the teacher's personality is able to bring a happy atmosphere when students learn and can provide motivation to students by providing learning stimulus before the discussion of the material begins.

In addition, especially in the use of learning media, teachers are able to utilize interactive media based on TPACK (Technological, Pedagogical, Content Knowledge). This is proven based on the results of interviews with PPKn teachers, that the learning strategies carried out have been based on 21st century skills, which include the critical, creative, collaborative, and communicative thinking skills of students in constructing their own knowledge and understanding through group learning to solve problems related to the material.

However, learning success, not only occurs in the teaching and learning process, but student learning outcomes are used as indicators that can be measured to see the extent to which learning can be in accordance with the expected goals. Therefore, the learning outcomes in question are students' knowledge of the concept and meaning of diversity after the material is given in the learning process. Civic knowledge of students is measured using cognitive tests in the form of multiple-choice questions totaling 40 questions.

The cognitive test is tested once, namely at the end of learning, so it is called single-test-single-trial-method. The next stage is to analyze the level of difficulty of the question items which aims to see the quality of the questions based on their grouping and measure the extent to which students master the subject matter that has been delivered in terms of the ability to answer each question item. Here is a descriptive stratistic analysis on learners' cognitive test results.

3.1.2 Descriptive Statistical Analysis of Cognitive Tests

With the difficulty level test, it can be determined whether each question item of the cognitive test instrument is classified as too difficult, difficult, medium, easy, or too easy. The difficulty index can be classified as follows.

<table>
<thead>
<tr>
<th>Criterion</th>
<th>Sum</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Difficult</td>
<td>3</td>
<td>7,5%</td>
</tr>
<tr>
<td>Keep</td>
<td>15</td>
<td>37,5%</td>
</tr>
<tr>
<td>Easy</td>
<td>22</td>
<td>55%</td>
</tr>
</tbody>
</table>

Source: processed by researchers, 2021

Based on the difficulty level index, the majority of question criteria are at the easy and medium levels, so that the questions are worthy of being tested to students and can give an idea that students have mastered the material that has been delivered in the learning process.

Furthermore, based on the results of cognitive tests tested on 75 students randomly from all classes VII, it is known that the highest score achieved by students is with a value of 93 and the lowest score obtained is with a value of 40 and the average cognitive test result is 68.78. The data on the results of cognitive tests of students based on completeness criteria can be seen in the table below.
Based on the table above, it can be seen from the number of samples as many as 75 people, students who get the most scores are in the interval between 72-79, which is 24 people and students who get minimum scores are in the interval 40-47, which is as many as 7 people. Students who score more than the KKM determined by the school are 70 and the completeness criteria are at least 70% of the total sample. From the acquisition of data on frequency distribution, it is also known that students who have been completed individually are 53 people and students who have not completed as many as 22 people. Thus, it can be concluded that the learning results show that the research target has been achieved with a completion percentage rate of 70.7%, which exceeds the predetermined completeness limit of 70%.

### Discussion

Learning is basically a conscious effort of teachers to teach students to achieve the goals to be achieved ([Emda, 2018](#)). Learning refers to the process of interaction between learners, teachers and learning resources in the learning environment ([Hanafy, 2014](#)). It is said that learning is also an aid from the teacher, making it possible to acquire knowledge and understanding, mastery of the material, and shape the personality and beliefs of the learners themselves.

As explained by Komalasari in ([Martini, 2018](#)) that learning can be interpreted as a system or process that systematically plans or designs, implements, and evaluates subjects so that learners can effectively achieve their learning objectives.

Based on field findings through overall observation, that the learning process that teachers do, especially in delivering diversity material within the frame of Bhinneka Tunggal Ika can be said to be able to provide a good understanding to students, because of the integration between the material delivered in class and students' observations of the environment directly associated with the material. This is an effort to strengthen students' understanding of the material presented, not only knowing conceptually but being able to understand meaningfully.

Understanding is the result of learning a student if he can explain back or describe a material that has been learned in detail using his own language. One of the students'
understanding of the material is influenced by the learning process. The success of the learning process is an indicator of the implementation of the curriculum that has been made by the school institution, so that in the learning process teachers are required to create a conducive learning atmosphere and encourage students to develop their creativity with the help of teachers.

In this case, PPKn becomes the spirit to increase students' civic knowledge. Civic knowledge or civic knowledge is related to what citizens should understand. In PPKn subjects at school, civic knowledge is usually one of the main focuses of teachers in the teaching and learning process in the classroom, because this is the first ability that students must receive without forgetting other Civic Education competencies.

Civic knowledge competence has several indicators in it. First, the indicators contained in civic knowledge, one of which is that students are able to identify diversity, ethnicity, religion, race, and intergroup within the frame of Bhinneka Tunggal Ika which in its implementation is contained in the material Chapter IV of Junior High School grade VII. Therefore, the civic knowledge referred to in this study focuses on the extent of students' knowledge or understanding of the diversity material that has been learned by Civic Education teachers and how complete individual students are to the learning material learned.

The concept of complete learning is based on the view that all or almost all students will be able to learn knowledge and skills well as long as they are given time that suits their needs. According to M. Uzer Usman in (Suryapermana, 2016), complete learning is the achievement of the minimum level of mastery set for each lesson unit both in individuals and groups, in other words students are able to thoroughly master all competencies and basic competencies in certain subjects.

Complete learning is a learning pattern that uses the principle of completeness individually, in the sense that although learning is aimed at a group of students (classical), but completeness allows the potential of each student to develop at different levels. Student learning results based on cognitive tests at the end of learning show that most students have completed the learning sub-unit with a percentage of 70.7% of all grade VII students who are a sample of 75 people.

This is certainly influenced by activities in the learning process in class and assignments that students have completed. Thus, the completeness of this study is the completeness of the learning outcomes of students in civic education learning, so it can be said that judging from the learning outcomes of students in increasing civic knowledge, most of them have been able to achieve absorption, namely KKM (Minimum Completeness Criteria).

4. CONCLUSION

In general, observations on the implementation of Schoology-based e-learning have been able to become an alternative in increasing students' civic knowledge in the midst of the COVID-19 pandemic situation. The results showed that the learning implementation process was proven to be able to provide good enthusiasm and motivation for students and provide easy access to learning during the COVID-19 pandemic. In addition, judging from the results of cognitive tests of students showed a percentage level of completeness of 70.7%. This figure is in the good and complete category based on the predetermined completeness indicator, which is 70%.

Researchers suggest that students in the e-learning process should be able to behave in accordance with educational principles. For teachers, it is expected to always improve competence for the quality of education, because basically education in the 21st century has evolved to IT-based learning (Science Technology) and for schools it is expected to improve
the means of supporting Civic Education learning so that students do not feel bored in learning. In addition, it is necessary to conduct further research as a development in this research.

5. REFERENCES


