Utilization of Information Technology in Increasing the Effectiveness of Citizenship Learning

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Article Info

ABSTRACT

Purpose of the study: This study aims to explore the use of Information and Communication Technology in Citizenship Education learning at State Junior High School 5 Semarang and analyze its impact on student engagement and understanding of the concepts taught.

Methodology: This study uses a qualitative method with data collection techniques through interviews with two teachers and five students. The data obtained were analyzed using a descriptive approach.

Main Findings: The results of the study indicate that the use of information and communication technology in Citizenship Education learning helps improve interaction between teachers and students, makes learning more interesting, and makes it easier for students to understand abstract concepts. However, there are obstacles such as limited devices and unstable internet connections, which can interfere with the learning process. The novelty of this study lies in the holistic approach that not only assesses the effectiveness of information and communication technology in delivering material, but also considers how this technology can increase student active involvement in learning.

Novelty/Originality of this study: These findings provide an important contribution to developing more interactive and technology-based citizenship learning strategies.

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1. INTRODUCTION

In the era of globalization and the industrial revolution 4.0, the use of Information and Communication Technology (ICT) in the world of education has become an urgent need [1], [2]. The integration of ICT in the learning process not only facilitates faster and easier access to information, but also enables more interactive and innovative learning [3], [4]. One of the areas of education that has great potential in utilizing ICT is Citizenship Education, especially in forming a young generation that has a deep understanding of the rights and obligations as citizens [5].

Civic Education learning at the junior high school level, especially at State Junior High School 5 Semarang, faces the challenge of presenting materials that are relevant to current developments and attract students' interest. Traditional learning methods are often considered monotonous and less able to facilitate active student involvement [6]-[8]. This is one of the reasons why the use of ICT-based learning media needs to be optimized to increase the effectiveness and attractiveness of learning Civic Education [9], [10].

The use of ICT in civic education learning is expected to create a more dynamic learning experience, where students can participate actively, discuss, and access various learning resources independently. [11], [12]. The use of learning media such as videos, simulations, and e-learning platforms can help students understand citizenship concepts in a more interesting and easy-to-understand way [13], [14]. In addition, ICT also allows teachers to deliver material in a more varied and interactive way, thus encouraging active student participation in the learning process [15]-[17].

Previous research shows that the use of ICT-based learning media can improve student motivation and learning outcomes, especially in subjects that require understanding of abstract concepts such as Citizenship Education [18]. However, the application of ICT in Civic Education learning in schools, including at State Junior High School 5 Semarang, still faces various obstacles, such as the lack of technological facilities and infrastructure, and limitations in teachers' understanding of the use of ICT in learning.

The purpose of this study is to explore how ICT-based learning media can be utilized in Civic Education learning at State Junior High School 5 Semarang. This study also aims to analyze the impact of ICT use on students' understanding in Civic Education subjects and how ICT can increase student participation and involvement in the learning process. With the use of ICT, it is hoped that students will not only gain a theoretical understanding of civic concepts, but will also be able to apply them in their daily lives as active and responsible citizens. In addition, this study is expected to contribute to the development of more modern learning strategies that are relevant to the needs of 21st century education.

In this context, it is important to review the extent to which State Junior High School 5 Semarang has integrated ICT in Civic Education learning and what challenges and opportunities are faced in its implementation. The results of this study are expected to provide deeper insights for educators and policy makers in designing more effective learning that is in line with technological developments in the digital era. This study aims to explore the use of Information and Communication Technology in Citizenship Education learning at State Junior High School 5 Semarang and analyze its impact on student engagement and understanding of the concepts taught..

2. RESEARCH METHOD

This study uses a qualitative approach with the aim of exploring the use of Information and Communication Technology (ICT)-based learning media in Civic Education subjects at State Junior High School 5 Semarang. The qualitative approach was chosen because the focus of this study is to understand the experiences, perceptions, and interactions between teachers and students in the ICT-based Civic Education learning process [19], [20]. This research is descriptive in nature, aiming to describe in detail the application of ICT-based learning media and its impact on students [21].

The population of this study was all teachers and students involved in learning Civic Education at State Junior High School 5 Semarang. To obtain in-depth data, this study used a purposive sampling technique, where researchers selected samples based on certain considerations [10], [22]. The sample consisted of 2 Civics teachers who had implemented ICT in learning and 5 students selected from classes that had used ICT-based learning media in Civics subjects. This sample selection was carried out to obtain insights into the use of ICT from the perspective of teachers and students. The main instrument in this study was an in-depth interview with teachers and students. This interview was conducted with semi-structured guidelines to provide flexibility in exploring various aspects of the use of ICT in Civics learning [23]. Interview questions were designed to explore information about teachers' and students' experiences in using ICT-based learning media, the challenges faced, and the impact of ICT use on student engagement and understanding [24].

Data were collected through in-depth interviews with teachers and students involved in ICT-based Citizenship Education learning. In addition, researchers also conducted direct observations during the learning process to obtain more complete results on how ICT is used in the classroom. Documentation in the form of ICT-based learning materials used by teachers was also collected as additional analysis material [25]. This data collection technique aims to enrich the data and provide triangulation validity to the research findings.

Data analysis was conducted using thematic analysis techniques. This process begins with transcription of interview and observation results, followed by data coding to identify key themes emerging from the data [26]. The analysis stages include:

1. Familiarization with the data, namely re-reading the interview transcripts and observation results.
2. Initial coding, where the data is coded according to relevant categories or themes.
3. Theme search, by grouping similar codes into larger themes.
4. Theme review, namely ensuring that the themes found are relevant to the research objectives.
5. Definition and naming of themes, where the themes found are given clear definitions for further interpretation.

The research procedure begins with the preparation stage which includes the preparation of interview and observation guidelines, as well as the management of research permits at State Junior High School 5 Semarang. The next stage is data collection, where the researcher conducts in-depth interviews with teachers and students as well as direct observations in the classroom. After the data is collected, the researcher transcribes the interviews

and analyzes the data using thematic techniques. This process ends with the writing of a research report which includes the interpretation of the findings and a discussion of the implications of the use of ICT in learning Civic Education at State Junior High School 5 Semarang.

3. RESULTS AND DISCUSSION

Based on the research that has been conducted, the following are the results of interviews with teachers at State Junior High School 5 Semarang. Civic education which has implemented ICT in learning can be presented in the table below.

Table 1. Results of teacher interviews at State Junior High School 5 Semarang

No	Questions	Teacher Response 1	Teacher Response 2
1	What are your views on the use of ICT in Civic Education learning?	ICT is very helpful in making learning more interesting and interactive.	ICT makes it easier for me to explain abstract concepts more visually.
2	What ICT-based media do you use most often in Civic Education learning?	I often use learning videos and PowerPoint presentations.	I use e-learning applications and interactive simulations.
3	What challenges do you face in using ICT in the classroom?	Not all students have adequate devices at home, making it difficult when giving online assignments.	Sometimes the internet connection is unstable, so learning is disrupted.
4	How does ICT affect student engagement in learning?	Students are more active and enthusiastic when using ICT.	ICT increases student participation, especially during discussions using interactive applications.
5	According to you, does the use of ICT affect students' understanding of Civic Education material?	Yes, because ICT helps students understand the material more clearly and practically.	Very influential, especially in explaining abstract concepts.

Table 1 above reflects the views and experiences of teachers in utilizing Information and Communication Technology (ICT) in Civic Education subjects at State Junior High School 5 Semarang. Furthermore, interviews were also conducted with several students regarding the utilization of Information and Communication Technology (ICT)-based learning media in Civic Education subjects at State Junior High School 5 Semarang which can be seen in table 2.

Table 2. Results of interviews with students at State Junior High School 5 Semarang

No	Questions	Student response 1	Student response 2	Student response 3	Student response 4	Student response 5
1	How do students view the use of ICT in civics learning?	Enjoyable, because you can learn while watching videos or pictures.	It is easier to understand the material with the help of technology.	Learning becomes more exciting, not boring.	ICT makes me more focused when studying.	I understand the material faster.
2	What ICT-based media do students use most often in civics learning?	We often watch learning videos in class.	The teacher uses PowerPoint presentations and images.	Usually watching videos about history or the rights and obligations of citizens.	I use online quiz applications such as Kahoot more often.	I often use e-learning to do assignments.
3	What challenges do students face in using ICT in the classroom?	I sometimes have difficulty accessing the internet at home.	Sometimes the internet at school is slow.	The devices I have are often incompatible with some applications.	If the electricity goes out, I can't study online.	Sometimes I don't understand how to use the application

						used by the teacher.
4	How does ICT affect student engagement in learning?	I am more enthusiastic about learning when using technology.	It is easier to participate in discussions with ICT.	ICT makes me more interested in learning and participating.	I prefer interactive quizzes or games.	With ICT, I ask questions more often because I understand the material better.
5	According to students, does the use of ICT affect students' understanding of civics material?	It is easier to remember material with videos or pictures.	I understand the concept of citizenship more quickly with visualization.	Helps me understand the lessons better.	I find it easier to understand the material with the help of technology.	ICT makes me grasp the contents of the lesson faster.

Based on the results of interviews with two teachers and five students regarding the use of Information and Communication Technology (ICT) in learning Citizenship Education at State Junior High School 5 Semarang, it can be concluded that ICT has a positive impact on the learning process. Both teachers acknowledged that the use of ICT-based media, such as learning videos, PowerPoint presentations, and e-learning applications, can make learning more interesting, interactive, and facilitate the delivery of abstract material. This is also supported by student responses stating that learning with the help of ICT makes them more interested and easier to understand the material. Students feel more active and focused when learning with ICT, because the methods are more varied compared to conventional methods.

However, there are several challenges faced by both teachers and students. Teachers mentioned that limited devices and internet connections are obstacles, especially when giving assignments online. This is also felt by students, who have difficulty accessing the internet at home or face technical problems such as device incompatibility with the applications used. In addition, some students still face obstacles in understanding how the applications used in learning work.

In terms of student involvement, both teachers and students agree that ICT can increase active participation in class, especially when using interactive applications such as online quizzes [27]. Students feel more interested and enthusiastic to participate in class discussions and activities when using ICT [28]. This shows that technology-based learning media can increase student involvement and motivation in learning Civic Education [29], [30]. The influence of ICT on students' understanding is also quite significant. Teachers stated that ICT helps students understand the concepts taught more quickly, especially abstract ones such as rights and obligations as citizens. Students also expressed that visualization through videos and images helped them remember the material better and understand the lessons more clearly.

Previous research on the use of Information and Communication Technology (ICT) in learning tends to focus on the effectiveness of ICT in improving student learning outcomes, but often ignores the factors of student involvement and interactivity in the learning process. [31], [32]. In addition, most studies only focus on the technical aspects of ICT implementation, such as the types of media used, without exploring the impact of ICT use on the development of critical thinking skills and students' emotional engagement, especially in the context of Citizenship Education subjects [33]. In the context of secondary schools, especially at State Junior High School 5 Semarang, there has not been much research that comprehensively examines how ICT affects students' cognitive and affective aspects in Civics, which is closely related to the formation of character and national values.

The novelty of this study lies in its holistic approach in examining the use of ICT in Civics learning. This study not only evaluates the effectiveness of ICT use in terms of learning outcomes, but also analyzes how ICT plays a role in increasing student engagement and facilitating the understanding of abstract concepts taught in Civics, such as rights and obligations as citizens. This study also takes into account the challenges faced by both teachers and students in using ICT, such as limited devices and internet connections, thus providing a more complete picture of the implementation of ICT in the classroom. By focusing on the influence of ICT on student engagement and understanding of material at State Junior High School 5 Semarang, this study provides a new perspective on the importance of technology integration in theoretical and normative learning such as Civics.

This study has important implications for the development of educational practices in secondary schools, especially in Civics. The results of the study indicate that ICT can increase student engagement and accelerate their understanding of the material being taught, so that teachers are expected to utilize technology more in the learning process. In addition, the challenges identified, such as limited devices and internet connections, provide input for education policy makers to ensure a more equitable technology infrastructure in all schools. By understanding the role of ICT in facilitating more interactive learning, educators can develop more effective and adaptive learning strategies, which focus not only on academic outcomes but also on character development and student engagement in the learning process.

4. CONCLUSION

The conclusion of this study shows that the use of Information and Communication Technology (ICT) in learning Civic Education in Civic Education has a positive impact on student engagement and their understanding of the subject matter. ICT helps teachers convey abstract concepts more visually and interactively, making it easier for students to understand the material. However, challenges such as limited devices and unstable internet connections are still obstacles that need to be overcome. Therefore, better infrastructure support is needed so that the use of ICT in learning can be applied more optimally and evenly. This study provides an important contribution to the development of technology-based Civic Education learning methods that are more effective and relevant in the digital era. Future research should explore strategies to overcome technical barriers, such as device limitations and internet instability, to further optimize the integration of ICT in Civic Education learning.

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