The Implementation of Socrative as a Tool for Formative Assessment in Students' Perspective

Latifah Suryani(✉) and Endang Fauziati

Muhammadiyah University of Surakarta, Pabelan Salatiga, Indonesia
nisanazla@gmail.com

Abstract. The purpose of formative assessment tools usage is mainly to assess learning outcomes easily and quickly in an English classroom. Socrative is one of the students' response system applications that can be used for formative assessment. Socrative is an online platform and it is really simple to use. This research was intended to investigate the implementation of Student Response System Socrative at Muhammadiyah Program Khusus Junior High School in students' perspective. This study employed a qualitative research design with the aim of finding out the implementation of Socrative. The technique of the data collection in this study is close interview, ensuring the conversation remains focused on the key themes. The respondents were 30 students at nine grades Muhammadiyah Program Khusus Junior High School in the academic year 2021/2022. The questionnaires were adapted from the technology acceptance model (TAM) by Davis, which consists of two specific variables: Perceived usefulness and perceived ease of use. The findings of the research show the majority of respondents have positive perceptions toward Socrative. The students provide positive responses with regard to "perceived usefulness and ease of use" of Socrative for formative assessment. It is hoped that this tool not only could be used for formative assessment but also in all aspects of English language assessment. It is also expected that this research could assist Indonesian educators to blown up their creativity.

Keywords: Socrative · Perception · Formative Assessment · Technology Acceptance Model (TAM)

1 Introduction

With the expansion of technological advances and the rise of a generation obsessed with smartphones, it is becoming important to find more innovative and interesting formative assessment tools for teaching English as a foreign language. Since March 2020 because of the pandemic, most of schools around the world are challenged to find alternatives way to support online environment especially for assessment. One tool for assessment that promising and relevant for formative assessment is Socrative. This tool can be used for testing, and has potential features, so that Socrative is chosen for conducting formative assessment. School nowadays tends to use mobile based test and computer

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based test rather that paper-based test because it is more eco-friendly and more user-friendly. In this online teaching learning environment many schools in Indonesia has changed the system of their education. This pandemic insists school carried out the learning process through distance learning. The implementation of E-Learning became prioritize to achieve an entire teaching learning process, and for formative assessment was not an exception. A study by [1] found that digital fluency can promote independent learning and meet the perceived needs of future teachers. Additionally, research by [2], claimed that Socrative as a digital for online test- taking brought positive response on students' perceive. [2] presented positive attitudes toward Socrative as an online assessment to support class interaction and test accomplishment. Digital and cellular technologies are essential resources for meeting the needs of independent learning. Technical learners need not only the skills and competencies associated with the use of technical tools, but also knowledge of the norms and practices for their proper use. Digital technology allows people to learn new things and solve a variety of problems. This study attempts to investigate the implementation of Socrative as a tool for formative assessment in students' perspective of Muhammadiyah Program Khusus Kottabarat Surakarta so that they would have experienced using mobile-based for formative assessment in their classroom. The implementation of Socrative as a tool for formative assessment is to replace the paper-based test in the classroom.

Socrative is defined as a web platform that can be accessed using any browser connected to the Internet [3–6]. Socrative is an online platform application which attempt to engage and assess the students with an easy and friendly way. It is full- featured application that can be used in any devices. Socrative is an easy tool that is used for creating formative assessments and getting result in the actual-time. Socrative's student response system authorizes educators by engaging their class with a number of educational games and exercises. There is simple procedure to login this wonderful app that can be run on laptops, smartphones and tablets. Teachers can login to their device and perform many activities available on their dashboard. On Socrative, teachers can do a lot of activities to engage students. Socrative is a web-based rating tool that includes a room system. Students receive a code that allows them to enter the teacher's room to start grading. Exams include dynamic group activities of exit tickets, open-ended or multiple-choice quizzes, and space competitions. Socrative can register teachers for free, and students can also create free accounts. Teachers use short answers to get immediate feedback on learning goals. This tool allows teachers to quickly assess the progress of individual students or entire classes and decide if they are ready to move on to the next topic.

Socrative provides a platform for educators to create quiz questions up to 50 and more and view student achievement or grades, and track student responses and progress in real time. You can use it anytime, anywhere. This makes learning easier and provides teachers with feedback to improve learning. [7] stated that Socrative is a suitable tool for teachers that is use to improve teaching and learning outcomes in English classrooms. [8] highlighted the benefits of using a student response system. He said it provides a platform for educators to create quiz questions, view student grades, and track student responses and progress. This allows learners to cognitively process the questions asked by the teacher [9]. This allows students to provide feedback and answers to questions and quizzes in the form of language exercises during lectures [10]. Immediate feedback

helps teachers and students identify difficult areas. It also encourages active student participation by providing opportunities for teachers to interact more actively with students. Socrative has the same features as Kahoot, but is not game-based and is another popular tool. Socrative is a web-based software requirements specification (SRS), not a game-based, like Kahoot and Quizziz that requires no special tools [11]. Socrative evaluates student responses and provides immediate feedback.

Formative assessment, as the name suggests, gives information for the teacher and students on how to go about the rest of the lesson or unit. Formative assessment happens every day during the teaching process. It can be used to evaluate what students know at particular point so that the teacher would intervene to meet the lesson objectives. Formative assessment can also be done as students self- assessment as part of their reflection on their learning process. Formative assessments are embedded in practice and are great way to improve practice. Formative assessments are day to day activities helping teacher measure comprehension and provide constructive feedback and guidance to their students. Throughout this process they also help teachers to analyse and incorporate findings into the next-day teaching. With this type, the student will receive regular feedback. Hence formative assessment can be referred to as the assessment for learning. Formative assessment is often 'informal' and is prepared by the teacher and is used as part of the class activities. As much as assessments can be an accountability tool, it should also be a continuing method for learning. Both formative and summative assessments can be said to contribute to learning-centered teaching. Formative assessment also referred to as assessment for learning is a continuous feedback and feed forward with a specific goal of enhancing teaching as well as learning [12]. In today's classroom, formative assessment is seen as an important way in which teachers can help students in understanding and ways to engage the learner into the concepts at hand [13]. With this positive outlook of assessment and strong student interest, it would be reasonable to believe that formative assessment programs will enhance students' learning [14]. It's often immediate and aimed to inform changes the teacher should make to the direction of instruction so that teaching is more effective. This is possible because teachers provide feedback to the pupils to identify progress and gaps in learning as they target individual student needs [15]. Learning assessments must take place in the classroom as students participate in the learning process. Black and William, in their study "Inside the Black Box," argue strongly that if assessment is to be of value, it must be included in the learning and educational [13]. It also requires students to take an active role in the pre-assessment process. [16]. [17] argues that formative assessment provides teachers with the opportunity to assess their students' knowledge at various points in their learning.

Students' perceive on the use of online learning platform, the technology acceptance model (TAM) is one of the most reported models. TAM is relevant to this study because the acceptance of a technology depend on 1) perceive usefulness and 2) perceived ease of use by the users. Both of them are also determinants of user behavior. This means that students' behaviour is shaped by their perception. [18] highlighted that users tend to use an application if they perceive will help them to perform a job better. This variable is called as perceived usefulness. According to [18] perceived ease of use is "the degree to which a person believes that using a particular system would be free from effort", on the other hand, perceived usefulness is "the degree to which a person believes that using a

particular system would enhance his or her job performance". Perceived ease of use also affects the perceived usefulness. However, the perception of usefulness is also influenced by perceived ease of use. In this study, perceive usefulness and perceived ease of use of TAM proposed by [18] were used to analyze students' perception toward the integration of Socrative in formative assessment. Perception is closely related to attitude. In the other words, a person is confronted with a situation or stimuli. The person interprets the stimuli into something to him or her based in prior experiences. However, what an individual interprets or perceives may be substantially different from reality. What is an attitude? Usually, when we refer to someone's attitude, we try to describe their behaviour. Attitudes are complex combinations of what we call personality traits, beliefs, values, behaviours, and motivations. Attitudes define how we view situations and how we act in relate to the situations and objects. As illustrated in the three component model, attitudes include feelings, thoughts, and actions. Attitudes may simply be an enduring evaluation of a person or object.

According to [18] The two fundamental factors, perceive ease of use and perceived usefulness, constitute these user beliefs. However, external factors that may influence these beliefs, such as personal experience, professional experience, organizational factors, social and political influences, and perceptions of the tasks that need to be performed using technology, there are some variables. As Davis has demonstrated, this model can be extended from its initial goal of examining user acceptance of existing products to plan the concept, and in this case, TAM model is suggested. This study focuses on the perception of Muhammadiyah Program Khusus Junior High School students who have used Socrative for formative assessment. For research purposes, this study investigates the implementation of Socrative as a model for formative assessment from the students' perceive and students' attitudes toward Socrative.

2 Research Method

In this research, the researcher applies the qualitative method. The qualitative data were collected using closed survey toward students' perception. The collected data were analysed to identify the students' perception towards the implementation of Socrative as a tool for formative assessment. Participants responded to the surveys about their perspectives after using Socrative for the first time. The population was the ninth grade students in Muhammadiyah Program Khusus Junior High School of academic year 2021/2022. Thirty students of class A and class B were chosen as a sample. They were between 14–15 years old. The respondents were selected because they are the ones who ever employed Socrative to identify the implementation of Socrative as a tool for formative assessment from the perspective of the students themselves. The surveys contain 2 questions related to the perception of implementing Socrative as a tool for formative assessment. The respondents answered the survey through Google form as the online platform. An observation checklist consisting 5 questions were used to observe and record students' behavior during the implementation of Socrative as a tool for formative assessment. The observation checklist was used by respondents during the implementation of Socrative for formative assessment.

The questionnaires were adapted from the TAM by [18], which consists of two specific variables; 1) perceived usefulness and 2) perceived ease of use. The researcher

designed a formative assessment using Socrative. The questionnaire consists of items, which divided into two parts. Part 1 consists of 4 questions on perceived usefulness. Part 2 consists of 3 questions on perceive of use. For the remaining items, respondents were asked to answer two open- ended questions in order to obtain more detailed information on the features, which are favourable or unfavourable, offered by Socrative from the students' perceptions. For close- ended question, the students were asked if they would continue using Socrative in the future. The researchers guided the students to use Socrative in their learning. The researchers conducted tutorials on using Socrative, after the teacher delivered the materials in the class, students were instructed to use Socrative to reinforce and assess their understanding of the lessons learned. Students login to Socrative Web and enter the room name, the students answered a Socrative quiz that consist of 20 multiple choice questions on the taught lesson. Then students are asked to answer all the questions in the survey.

3 Findings and Discussions

This part describes the findings of students' perceive towards the use of Socrative application as a formative assessment. The perceptions of students regarding with the use of Socrative as a tool for formative assessment are as follows: 1) They considered Socrative increases students' activeness in the learning process, 2) Socrative boost their learning performance, 3) Socrative increase students' skill to accomplish task more effectively and, 4) Socrative useful for formative assessment. Here are the explanations for each category.

3.1 Socrative Increases Students' Activeness

The result shows that 24 of 30 participants agree that the use of Socrative as a tool for formative assessment was an effective tools that enhances the effectiveness in the teaching learning process. They said that Socrative is effective for assessment because of the features in it. There are many features provided in Socrative.

> "it is a fun application for students' task because they can answer the questions then get instant feedback, whether their answer is true or false and the explanation include in it" (student 11)
>
> "Using Socrative is interesting because it is an online application and accessible" (student 25)
>
> "Socrative creates learning interactions can go online with ease" (student 3)
>
> "Socrative is an interesting application that gives students responses that is clearly laid out" (student 14)

The findings above, the use of Socrative as a formative of assessment had a positive response from the students' perception as they claimed that Socrative is an effective tool. In Socrative after answering all questions, students will get the instant feedback, teacher can include the result of the answers, whether right or wrong. Thus, the students interested and motivated to engage in teaching learning process.

Boost Students' Performance

The other finding of students' perceive on the use of Socrative as a tool for formative assessment is that the students assumed that Socrative could strengthen their performance. The following are their statements from the interview.

"Socrative make students more confident and excited with the result" (student 15)

"Socrative increases student's performance. With knowing the result, it motivated the students to tune in the classrrom." (student 17)

"Socrative can go beyond engaging students as an online platform."(student14)

It can be concluded that students' performance increases as they used Socrative as a tool for formative assessment. Furthermore, the features in Socrative such as quiz, space race and exit ticket gave new insight for the students in doing the assessment. There are many quiz-based tools out there right now designed in Socrative which help the teacher and the students in remote learning. From a multiple choice quiz a question and answer poll provides teachers with the instant feedback from a live student response that clearly laid out. So, form using in the room to remote learning offers a lot of powerful assessment uses.

Students may submit answer, share responses, and demonstrate their learning through the use of multiple choice or true or false questions, surveys, and open-ended responses questions.

Socrative improve students' skill to accomplish task more effectively

Technology integration is an on-going process and demands continual learning as it can be used in the learning process in a variety of ways. The integration aimed to enhance and support educational environment, teacher instruction and student learning. The use of Socrative as a replacement tool of paper based test help the students to accomplish task more effectively. When the students have access to a variety tools of technology such as Socrative provides them deeper understanding of content and can finish the task more effectively. Most of the students agreed with this statement. Socrative enables the students to complete the task more quickly.

The following statements are derived from the interview.

"For me, Socrative not like "old fashioned" pencil-and-paper method, Socrative is great tools to learn more effectively" (student 10).

"Socrative allowed digital simulations to modern classroom with more hands-on approach help accomplish the task effectively" (student 19).

"Socrative can be a collaboration tools provides online worksheet where students take quizzes effectively" (student 25).

"Socrative is a piece of technology that students probably prepare the test well" (student 29).

It can be inferred that Socrative enables the students complete their tasks and their assessment more effectively. The interview revealed that Socrative is a tool of formative assessment that offering a question and answer that can be created by teachers and help

the students with marking near instant, which saves teacher and students times while also making progress faster and more effective for learning.

One of the benefits of student response system such as Socrative is to improve students' engagement and achievement [19], Students' response system may take different forms, but the majority of them allow for immediate student responses, as well as feedback from the teacher regarding their work. Students may submit answers, share responses, and demonstrate their learning through the use of multiple choice or true/false questions, surveys, and open-ended response questions [16].

Socrative useful for Formative Assessment

Some of the participants agreed that Socrative was useful for formative assessment. The using of technology in this case is the use of Socrative for engaging formative assessment gave beneficial for students to prepare the assessment which enhance the students' learning. In the world of education, there are many limitations on teaching materials, learning experiences, and teaching approaches [20]. The accessibility of Socrative makes the formative assessment much easier to implement for the teaching learning process. The following statements are taken from the interview.

> "Socrative one of assessment tool help to test a range skill and knowledge" (student 21)
>
> "Socrative improve the validity of a test that is particularly important" (student 19)
>
> "Socrative with the pretty content help student to achieve result better" (student 30)
>
> "Socrative is a learning system where formative assessment is graded by technology and students have to get higher result"(student 22)

In can be concluded that Socrative is essentially a competency based system works really well and students do significantly better using this tool. Socrative as a formative assessment tool intended to build skills and practices in a certain direction. Socrative for formative assessment is used during the class to ensure students are grasping what is being taught. It helps the teachers to know who understand and who is not. [17] argues that formative assessment provides teachers with the opportunity to assess their students' knowledge at various points in their learning. Results from such assessments, in turn, inform future instruction. Tics. While the factors that come from the teacher are the strategies or learning methods used and the readiness of the teacher to master the learning material [21].

In using Socrative allowed digital assessment for formative assessment in modern classroom. Using Socrative the assessment can be presented and prepared well. Socrative also enables the timing and the quality of learning feedback in an instant way so that it can be said that Socrative is more effective and useful. Socrative is a tool for formative assessment that more accessible; anytime, anywhere access this platform not only the benefit of it but student can enhance their learning performance.

The next part described the students' perceived on Socrative ease of use. The finding indicates that students have positive thought of Socratives' ease of use. The result as

follow: 1) Socrative eases the students' work, 2) Socrative is easy to use, 3) Socrative is fun and flexible. Here are the explanations of each result.

Socrative ease the students work
All participants agreed that the use of Socrative can ease the students' work, as stated in the following statements.

> "Socrative allow students to participate in assessment for a more interactive learning experience" (student 7).
>
> "Socrative made the assessment more engaging and exciting" (student 11).
>
> "Socrative made the students more curios to learn" (student 15).
>
> 'Socrative increase the students' attention span proved to do well in formative assessment" (student 27).
>
> "Socrative create amazing opportunities for students to benefit from it" (student 29).

The finding indicates that student like Socrative because it ease the students work particularly for formative assessment. Socrative provides not only the correct answer but also students got the explanation of the task to improve their understanding and know their mistakes. In Socrative teachers able to create quick questions, quizzes and exit slips that allow for multiple-choice, true/false, and one-sentence-response questions that can produce a grade with feedback for every student [22]. Furthermore, basic assessment strategies, students can team up to play Space Race, a collaborative activity where allows student to give quick answers. Teachers also monitor student's progress and download results in an excel format [23].

Socrative is easy to use
Most of the participants agree that Socrative is easy to use. Teachers have a freedom to create quizzes and allowing them to offer multiple right answer. After conducting teaching learning, teacher can make sure students have understood what have been taught in the lesson. By using Socrative allowed the student to work competitively and because Socrative is easy to use gets the students involved with passion.

Here are the statements from the interview.

> "Socrative provides simple procedure to login" (student 23)
>
> "Socrative perform many activities that available on their dashboard" (student 16)
>
> "Students can see the quick feedback that flash on the result" (student 25)

The data above showed that the use of Socrative for assessment is easy to use. This application is reachable and compatible. Students is easy to access just enter their name and the student number and immediately engage with a number of educational assessment games and exercises. Teacher also gave the complete guide for students on how to use Socrative.

Socrative is fun and flexible
Almost participant agreed that Socrative was fun and flexible. Students understanding can be reviewed in the moment and different type of format. Students can save the result

and can measure the progression. Socrative also help to make such a way of spotting together material that may need more attention. This online platform is very flexible that helps students encourage their ability via digital platform.

Here are the statements from the interview.

"Socrative make the interaction more fun" (student 23)

"Socrative gave flexibility in completing the assessment" (student 18)

"Socrative are not bored" (student 7)

The vast majority of respondents mentioned that they like Socrative because it is fun and flexible. The students not bored with the variety features and easy to use and the instructions are clear. However, the result of this study has positive attitudes towards online- testing, some reported arose regarding with the bad connection, battery is about to die and the time wasting on-screen time. The finding of [24] presented issues in accordance with the use of technologies in the teaching learning process. [24] suggested the ways to overcome the technical problems on using online learning platform.

4 Conclusion

The result indicated that the students have positive perceive toward Socrative as a tool for formative assessment. The result showed that students have positive thought on the Socrative's usefulness and ease of use. The result also support the technology acceptance model [18]. Socrative can be used in formative assessment in the future and assist teacher to teach more creatively and can be used to measure students' understanding toward the lessons. Future researchers are recommended to explore more the features of Socrative to facilitate class interactions moreover for students' assessment. The future researchers check the latest features of Socrative to support their learning especially e-learning tools. The future researchers are advised to encourage the participation of the students to use Socrative at certain check points to get a more accurate on students' understanding of the material. It is important to use Socrative that has a lot of useful tools to help the teachers or the researchers to help along the way when they get stuck.

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