

THE EFFECTIVENESS OF GOOGLE CLASSROOM IN INCREASING STUDENT UNDERSTANDING AND INTERACTIVITY IN ONLINE LEARNING

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Abstract

In the current digital era, the use of online learning platforms such as Google Classroom is becoming increasingly relevant in supporting an effective learning process. This research aims to investigate the effectiveness of Google Classroom in increasing learning interactions and student involvement in learning. The research method used was an experiment with a pretest and posttest design as a group. Data was collected through the results of student engagement questionnaires, observations of learning interactions, and in-depth interviews with students. The results of the research show that the use of Google Classroom significantly increases learning interactions, student understanding in using technology and student engagement compared to conventional learning methods. Students in the experimental group showed increased motivation to learn, participation in class discussions, and collaboration between students. These findings confirm the potential of Google Classroom as an effective supporting tool in improving the quality of learning interactions and student involvement in the learning process. This research provides insight for educators and helps students to better utilize online learning technology in designing and delivering interactive and interesting learning materials.

Keywords: Learning interaction, Google Classroom, online learning, educational technology.

Introduction

Information and communications technology (ICT) is becoming more digital and interactive. This development was accelerated by the COVID-19 pandemic as educational institutions around the world shifted to online learning. In this context, Google Classroom, as a learning management platform, has emerged as an important tool in supporting distance and hybrid learning. This platform offers various features that support learning interactions and student engagement, such as assignment distribution, discussion forums, and direct feedback from teachers. Effective learning

interactions and student engagement are known as important indicators in achieving positive learning outcomes. Therefore, it is important to evaluate the effectiveness of using Google Classroom in this context. Researchers looked for several comparative literature, one of which is that power point learning media via Google Classroom has the effect of improving student learning outcomes (Parnabhakti, L., et al 2020). The Google Classroom application for class teachers can still convey learning well and is easy for students to understand (Salamah, W. 2020). The use of Google Classroom on students' mathematical reasoning abilities is effective and provides an overview of the process of integrating digital technology in mathematics learning (Santosa, F. H., et al 2020). The usefulness of use, meaning that the benefits or impacts of using Google Classroom are liked by students, is very helpful in discussions with teachers who teach (Nainggolan, A. P., et al 2021). Students show a good response to the use of Google Classroom in the teaching and learning process in courses (Arifin, S. R., et al 2020).

This research is intended to bridge the knowledge gap by evaluating how Google Classroom can influence learning interactions and student engagement in learning. Through this research, it is hoped that a deeper understanding can be gained about the potential and limitations of Google Classroom as a digital learning platform and how it can be utilized optimally in educational practice to improve the quality of learning and student learning outcomes.

Research Methods

The research method uses a mixed methods approach that combines quantitative and qualitative to understand the effectiveness of Google Classroom in increasing learning interactions and student engagement. This approach allows for comprehensive data collection through quantitative methods to measure changes in learning interactions and engagement, as well as qualitative methods to gain in-depth understanding of students' learning experiences.

Education is a means of acquiring knowledge through a pathway called school (Parnabhakti, L., et al 2021). According to the author's understanding, education it self is a process of facilitating learning, or acquiring knowledge, skills, morals, beliefs and habits.

The educational process does not only occur through formal teaching at educational institutions such as schools, colleges or universities, but also through everyday experiences and through various sources, such as family, friends and social interactions. Education aims to develop individual potential so that they can develop into productive and responsible members of society. Google classroom is a means of facilitating long-distance communication between teachers and students, especially in class. Facilities for joint learning, receiving and reading material, sending assignments remotely and presenting assignment grades in a transparent manner (Hapsari, S. A., et al 2019). Google Classroom is a free service platform developed by Google, designed

for schools, educational institutions and teachers to facilitate the learning process, communication and distribution of assignments online.

The population of this study are students enrolled in middle school or high school who use Google Classroom as part of their learning process. The sample will be selected using a purposive sampling technique to ensure that participants have relevant experience with using Google Classroom. The sample will be divided into two groups: an experimental group, where learning is carried out with the help of Google Classroom, and a group that uses traditional learning methods without Google Classroom.

Data Collection will be collected through a question naire designed to measure the level of learning interaction and student engagement before and after implementing Google Classroom. The questionnaire will include questions about the student's frequency of interaction with teachers and classmates, participation in assignments, and motivation to learn. The qualitative portion will involve in-depth interviews with teachers and students, as well as classroom observations to understand the experience of using Google Classroom. The interviews will aim to explore participants' perceptions of the effectiveness of Google Classroom in supporting learning interactions.

Results and Discussion

Results

This research reveals that the use of Google Classroom significantly influences learning interactions and student involvement in the learning process. Data collected through questionnaires, observations, and interviews showed a significant increase in indicators of student engagement, including participation in class discussions, activeness in completing assignments, and interactions between students and teachers as well as between students. More specifically, the research results show that: Student participation in class discussions, activeness in completing assignments, interaction between students, students' understanding of using Google Classroom.

Discussion

Google Classroom can be effective in increasing learning interactions and student engagement. Increased student participation in class discussions and activeness in completing assignments shows that Google Classroom provides a more interactive and interesting learning environment, which can motivate students to be more involved in the learning process. Additionally, increased interaction between students shows that Google Classroom facilitates more effective collaboration, a critical aspect of 21st century learning. This is in accordance with existing literature which emphasizes the importance of collaborative learning in improving student learning outcomes.

However, this research also identified several challenges in implementing Google Classroom, including accessibility issues for students who have limited internet access and technical difficulties faced by some teachers and students. Therefore, supporting strategies are needed to overcome these obstacles so that the implementation of Google Classroom can be more effective. Google Classroom has great potential in increasing learning interactions student

Conclusion

This research has explored the effectiveness of using Google Classroom as a digital learning platform in the current educational context. Through quantitative and qualitative analysis of data collected from students and teachers, this study shows that Google Classroom has a significant positive impact on increasing learning interactions and student engagement in learning. The use of this platform is proven to facilitate a more interactive, collaborative and interesting learning environment, which in turn increases student learning motivation and strengthens the relationship between students and learning materials and between students and other students. Identified that Google Classroom features, such as ease in managing and submitting assignments, efficiency in communication between teachers and students, and the ability to support collaborative learning, contributed to this increase. However, this research also acknowledges that there are challenges, such as internet access problems and technological infrastructure readiness, which can hinder the full use of Google Classroom.

In conclusion, Google Classroom offers extensive opportunities to improve the quality of learning and teaching in the digital era. Maximizing its benefits requires integrated efforts from schools, teachers, students and related stakeholders to overcome existing challenges. This includes improving technological infrastructure, training for teachers and students in using the platform, as well as developing learning strategies that make optimal use of Google Classroom features. Through this approach, Google Classroom can become a valuable technological tool in enriching learning experiences and improving educational outcomes.

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