



Development of a Collaborative Approach with a Digital-Based Learning Model to Increase Elementary School Students' Interest in Learning

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1 0	ABSTRACT
ARTICLE INFO Article history: Received 09 April 2025 Revised 16 April 2025 Accepted 23 April 2025	This study aims to determine the increase in student learning interest using the development of a collaborative approach with a digital-based learning model. The collaborative approach is a procedure in which students learn together in groups directed towards achieving collective goals so that they are accustomed to thinking critically and analytically in order to avoid conceptual errors and confusion of understanding. Then in addition to the collaborative approach, the digital learning model also plays a role to deliver learning materials, provide learning media, and also facilitate two-way interaction between teachers and students by utilizing e-learning (digital technology) such as computers, the internet, software, and applications to support and modify learning to make it look more innovative. Therefore, e-learning can be an effective tool in digital learning especially in increasing students' interest in learning. Collaborative approach with digital-based learning model has an important role as an important and effective method for learning because it allows exploration of the subject through social interaction among peers as well as between students and teachers. In her research, the researcher used a qualitative method with a literature study approach in the form of data collection from various research sources of experts. The results showed that a collaborative approach with a digital-based learning model was able to increase elementary school students' interest in learning.
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INTRODUCTION

Technology is an important part of everyday life. This technology is integrated into the curriculum to prepare the younger generation for future challenges (Sholikin & Prasetyo, 2023). The rapid development of technology has brought significant changes in various aspects of life, including education. The role of technology in education produces various benefits to improve the quality of education itself (Nurbillah & Nuriadin (in Kasmad et al., 2022)).

In education, the curriculum is the holder of control over the orientation of student learning. The existence of educational curriculum development is important so that students can utilize technology effectively (Santoso et al., 2023). With the increasingly urgent demands of the times, the learning presented must present innovative and relevant learning. Seeing this situation, the use of technology is very influential to help the continuity of the learning process (Maylitha et al., 2022).

The use of technology in learning can improve the efficiency, effectiveness, and quality of learning (Dito & Pujiastuti, 2021). According to (Wahyudi & Jatun, 2024), digital technology will allow students and teachers to access a variety of diverse learning resources, both in the form of videos, interactive materials, and content from various online learning platforms. In addition, with technology, it allows students to learn anywhere, anytime, and without time limits (Alimuddin et al., 2023). This is continued with the opinion according to Effendi & Wahidy (in Maylitha et al., 2022) that electronic media is one of the learning resources with several new methods that can facilitate teachers as well as students in learning, and learning can be done online (in the network) not only face-to-face. Murada (in Subroto et al., 2023) also argues that the use of technology in learning can revolutionize teaching methodologies, offer diverse learning styles, reduce traditional classes, learning can be done remotely, and make learning higher quality. Therefore, the use of technology in learning is very important. In addition to making it easier for students to find learning resources more widely, the use of technology can improve students' ability to use technology and increase students' interest in learning, because the methods used by teachers in learning are varied, innovative, and creative.

Student interest in learning is very important for all students, because interest in learning will affect learning outcomes. According to (Adnyana & Yudaparmita, 2023) interest in learning is an interest that students have, this interest can be expressed as a statement indicating that students prefer one thing over another, manifested through participation in an activity. Learning interest is also a person's tendency to keep paying attention and remembering some activities and will maintain consistently with pleasure (Mohzana, 2023). Meanwhile, according to Olivia (in Siregar et al., 2022) interest in learning is a student's obedient attitude towards learning activities, both regarding planning a study schedule and the initiative in making serious efforts. From these several opinions, learning interest is a feeling of liking, paying attention to, and obeying something in learning and is done happily, consistently, and seriously. With an interest in learning, it can increase students' curiosity, liking, and willingness to study diligently.

However, in reality, students' interest in learning is still low (Anggraeni, et al., 2021; Syarovina et al., 2024). According to Syarovina et al., 2024 students often show enthusiasm in participating in learning activities, which has an impact on low participation and learning outcomes. The existence of low student interest in learning is caused by several factors, including according to (Anggraeni et al., 2021) the teacher only gives assignments and does not apply learning media, then the teacher only applies conventional learning such as using textbooks so that students feel bored. Then the teacher also uses a very monotonous learning method. From some of these opinions, the existence of low student interest is caused by learning that is less able to develop student interest. Teachers also do not utilize technology as an aid in learning, it can be seen that teachers still use conventional learning such as lectures which cause students to feel bored and unenthusiastic in the learning process. In this digital age, teachers should be able to use various types of digital media that have benefits for learning, so that learning will be innovative and varied (Novela et al., 2024). The creation of an innovative learning by teachers, then teachers must have the ability to use digital in order to support the continuity of their learning. This is in line with Dewi's opinion (in Nurjannah, 2022) which says that it is important for educators and students to master 21st century competencies, namely collaboration skills, communication, critical, creative and innovative thinking, problem solving and mastering information and communication technology which requires high-level thinking skills or HOTS which will be able to create an educated community environment so that it can face challenges and competition in the future.

Based on the problems described above, a solution is needed to overcome these problems, namely by choosing an effective learning approach and model, so that there will be an increase in student interest in learning. One way to increase student interest in learning is by applying a collaborative approach with a digital-based learning model.

The collaborative approach is an approach or learning that can improve the quality of learning (Wahyuningrum, 2021). According to Dermawan et al., 2023) the collaborative approach is learning by working together in small groups to achieve learning goals. Collaborative learning can be defined as a learning philosophy that makes it easy for students to work together, foster each other, learn and change together, and progress together (Husain, 2020). This approach encourages students to share ideas, discuss, and solve problems together not only with the teacher but also with other friends (Wahyuningrum, 2021). So, this collaborative approach will make students in groups more involved in learning, help make it easier for students to understand the concepts being studied, and also together will achieve quality learning goals. Of course, with this going on, a model is needed that can help it. One of the models that can be used is the Digital Learning Model.

The digital learning model is a model that utilizes technology in its learning (Jahnke, 2023). This it can also be referred to as digital learning. This digital learning model is used to deliver learning materials, provide learning media, and also facilitate two-way interaction between teachers and students by utilizing digital technology such as computers, the internet, software, and applications to support and modify learning to make it look more innovative (Wahyudi & Jatun, 2024). In addition, this digital learning model also provides benefits by making learning more interactive and flexible. It is also in line with the opinion of Kasworm (in Alenezi, 2023) that e-learning allows flexible learning and access to resources based on student needs, so that students easily gain knowledge and give opinions. It has also been proven based on research results from (Darmawati, 2022) that this e-learning produces significant results for student learning. It shows that e-learning can be an effective tool in digital learning especially in increasing students' interest in learning.

Based on the background that has been stated above, the topic of discussion is "Development of a Collaborative Approach with a Digital-Based Learning Model to Increase Elementary School Students' Learning Interest". The selection of the title is because there are still many schools or teachers who apply learning with traditional approaches or models and are not in accordance with 21st century learning.

RESEARCH METHOD

This research method uses Descriptive Qualitative with data collection techniques in the form of literature studies or literature reviews. According to According to Sarnoto et al., 2023 literature study is a technique of collecting data from various research sources aimed at answering research topic questions. The purpose of this literature study is to find out a topic by analyzing from various sources of research by experts. The sources used include scientific journals and other documents deemed appropriate to the topic discussed. The sources obtained will be processed by tracing, reading, and understanding so as to produce precise and accurate data.

Understanding Collaborative Approach in Learning

Learning is a form of interaction, integration and interconnection between educators and students with the aim of making changes towards the better in cognitive, affective and psychomotor aspects. However, in achieving these goals there must be an approach that will be given to students. One approach that can be taken in learning is a collaborative approach. The collaborative approach provides opportunities for students to learn in pairs or form small groups in achieving goals. The definition of collaborative learning approach is an approach that emphasizes interaction between students in an effort to emphasize cooperation in groups, as well as project-based learning so that students are active more thoroughly in the learning process (Apriliani et al., 2024).

Collaborative learning model is learning about working together and sharing tasks equally and slowly to realize the expected learning outcomes.

Ayuningtiyas et al. (2021) explained that "the collaborative learning model is also able to lighten the burden on students. Learning so that students are more focused on learning the material and are able to see one subject in various angles. Subject in various angles." Collaborative learning is a learning process where each student can have an opinion, share information, experiences, ideas, opinions and the abilities and skills possessed by each student (Mukhtar, 2023). According to Mukhtar (2023) this collaborative approach has several advantages such as fostering self-confidence, training emotional intelligence, training teamwork skills, and increasing student learning motivation.

RESULT AND DISCUSSION

Dimensions of Collaborative Approach in Learning

In this collaborative approach, there is more emphasis on positive dependence between students, so that they can work together to achieve goals (Dwikristanto & Muslim, 2022). This approach is easier to understand, can also improve accuracy in analysis when using the collaborative approach, and facilitates problem-solving in the collaborative approach. Therefore, according to (Lokhtina et al., 2022), Effective communication is crucial in cross-country virtual collaboration, as it ensures that all team members are aligned and working towards the same objectives. Open and continuously evolving communication fosters clarity, minimizes misunderstandings, and enhances productivity, ultimately leading to successful collaboration outcomes. Trust and appreciation are equally important, as they form the foundation of strong and productive relationships among team members. When trust is established, it encourages openness, reduces conflicts, and creates a positive working environment, even in a virtual setting. Additionally, setting clear and achievable common goals is essential to guide the team's efforts and ensure everyone is moving in the same direction. These goals must be well-understood

by all members to maintain focus and motivation throughout the collaboration process.

Another critical factor is the clear division of tasks and responsibilities, which helps streamline workflows and prevents overlaps or gaps in work. When each team member knows their specific roles, it enhances accountability and efficiency, ensuring that projects are completed on time and to a high standard. Collaboration in problem-solving is also vital, as it leverages the diverse perspectives and expertise of all team members to address challenges collectively. Effective teamwork in finding solutions not only resolves issues more efficiently but also strengthens cohesion and innovation within the group. Lastly, flexibility and adaptability are key to navigating the dynamic nature of virtual collaboration. Teams must be prepared to adjust to changing circumstances, whether in schedules, tools, or strategies, to overcome obstacles and maintain progress. By embracing these principles, virtual teams can achieve successful and sustainable collaboration across borders.

Steps of the Collaborative Approach

Problem-based collaborative learning can encourage students to learn by doing and emphasize the authenticity of the collaborative learning environment, where students become participants in the active learning process, with an emphasis on independent thinking and problem-solving skills. The goal of problem-based collaborative learning not only includes the development of problem-solving skills but also guides the development of cooperation and communication abilities among learners (Amin (in Atira et al., 2022)). To facilitate educators in conducting collaborative learning, there are steps proposed by Widjaja (in Atira et al., 2022) that explain the steps in the problem-based collaborative learning process as follows: (1) learning begins with the presentation of a challenging problem, (2) students are given the opportunity to identify and design solutions to the problem individually before they learn in groups, (3) students learn in small groups consisting of 4-6 people to clarify their understanding, critique their peers' ideas within the group, make conjectures, choose solution strategies, and solve the given problem through argumentation. (4) students present the results of the problem-solving they have obtained, (5) students solve problems in the form of exercises given individually.

In the context of collaborative learning, efficient time management must be ensured to provide all group members with equal opportunities to contribute (Hasmirati et al. (in Wahyuningrum, 2021)). According to (Wahyuningrum, 2021), teachers need to ensure that every student is actively involved and that no student is marginalized. In addition, fair task distribution also poses a challenge. Each group member must be given balanced and relevant responsibilities so that every student has the opportunity to contribute maximally. Therefore, these steps are in place so that educators have a reference for using a collaborative approach, thereby maximizing the existing potential.

Understanding Digital-Based Learning

Digital-based learning or commonly referred to as e-learning is an educational method that applies the concept of digital learning using applications and networks on social media connected to internet devices (Fanaqi et al., 2022). Another opinion states that digital learning is a form of information technology applied in the field of education in the form of cyberspace, which can also be referred to as e-learning (Sarumaha et al., 2024). In line with this, (Tholkhah et al., 2023) argue that digital-based learning is a learning process through computer networks such as the internet or intranet. From the various definitions of digital learning above, digital learning can be understood as a learning method that applies learning concepts using information technology such as interconnected computer network applications, and facilitates learning as a medium for delivering material, resulting in interactive learning.

Steps for Implementation of Digital-Based Learning

Before implementing digital-based learning, it is necessary to understand the steps for applying digital-based learning. According to (Sirozi, 2024) in his research findings, several stages of proper digital learning planning are revealed, including the following the implementation of digital-based learning begins with a needs analysis, where educational institutions assess the challenges and requirements of teachers and students to identify necessary improvements for successful digital learning. Following this, strategic planning is essential, involving the establishment of clear objectives such as boosting student engagement, enhancing teachers' digital competencies, or improving accessibility for students with disabilities. Once goals are set, actionable steps must be outlined to ensure structured and measurable progress. The next phase, content and curriculum development, focuses on creating engaging and relevant learning materials that align with students' needs and the curriculum, incorporating real-world applications and interactive digital tools to enhance understanding. During the implementation stage, both teachers and students require adequate training and support, including access to digital devices, online resources, and technical assistance, while collaborative discussions help troubleshoot technology-related challenges. Finally, evaluation and adjustment play a crucial role in refining the learning process, as continuous feedback and performance assessments allow institutions to identify

strengths, address weaknesses, and make data-driven improvements to optimize digital learning outcomes.

CONCLUSION

Learning is a process of interaction, integration, and connection between educators and learners with the aim of creating positive changes in cognitive, affective, and psychomotor aspects. To achieve this goal, a collaborative approach is the right method for learners. This approach provides opportunities for learners to learn in pairs or small groups to achieve a common goal. Collaborative is a procedure in which learners learn together in groups, directed to achieve a common goal, so that they are accustomed to thinking critically and analytically to avoid misconceptions and misunderstandings.

Collaborative learning is considered an important and effective learning method for learning as it allows exploration of subjects through social interaction among peers as well as between students and teachers. To improve understanding and accuracy of analysis when applying a collaborative approach by simplifying problem solving, effective communication, trust and respect, common goals, division of tasks and responsibilities, collaborative problem solving, and flexibility and adaptability are among the key elements.

Digital-based learning or e-learning is a method of digital cognition through social media applications related to the internet. The current digital era learning models include: a) Blended Learning, b) Distance Learning, c) Mobile Learning, d) Virtual Learning Environment (VLE). Then, the learning media include: E-books, Learning Videos, Learning Apps, Simulations and Games, and Webinar video conferencing.

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