

EFFECTIVENESS OF POWTOON AS LEARNING MEDIA TO IMPROVE HIGH SCHOOL STUDENTS' ACCOUNTING LEARNING OUTCOMES

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Abstract

The advancement of information technology has opened new opportunities for innovation in education, including the use of Powtoon as a learning medium. This study aims to examine the effectiveness of Powtoon in improving students' learning outcomes in accounting at the senior high school level. Using a literature review method, data were collected from various scientific articles and journals, then analyzed through a qualitative descriptive approach. The findings show that integrating Powtoon into the learning process significantly enhances student engagement, motivation, and understanding. Data from multiple studies indicate improvements in learning achievement across affective, cognitive, and psychomotor domains, with an average increase in student performance from 71.85% to 89.22% after using animated media. Additionally, Powtoon effectively accommodates diverse learning styles, particularly for visual learners. In conclusion, Powtoon serves not only as a visual aid but also as a powerful tool to increase learning effectiveness, foster a more interactive classroom environment, and support the holistic development of students in alignment with an independent curriculum. Therefore, Powtoon is strongly recommended as an innovative learning medium for accounting and other subject areas

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INTRODUCTION

Education refers to any condition that influences a person's development or growth through learning experiences in all environments and throughout life (Leonard, 2018). Literally, education is an activity carried out by teachers to guide students in learning, developing ethical and moral values, and exploring knowledge (Pristiwanti et al., 2022). These educational activities are implemented through the teaching and learning process. Learning is a process where one person helps another to learn in a purposeful manner (Mahmud & Idham, 2017). According to Law No. 20 of 2003, "Education is a conscious and planned effort to create a learning atmosphere and learning process so that students actively develop their potential to possess spiritual strength, religious values, self-control, personality, intelligence, noble character, and the skills needed by themselves and society."

Every educator is expected to contribute to achieving the national education goals stated in the 1945 Constitution, Paragraph VI: "to enlighten the life of the nation." Education enables individuals to develop their potential through learning. It plays a critical role in producing intelligent and competent future generations who can maximize technological and societal advancements. Without education, a nation cannot progress. Therefore, education is essential for a country's sustainability.

Indonesia's education system continues to evolve, adjusting to societal conditions and technological developments. Currently, the country is implementing the Independent Curriculum. This curriculum promotes student autonomy by allowing access to knowledge from both formal and non-formal sources (Manalu et al., 2022). It removes restrictions on learning concepts, encouraging both teachers and students to be more creative. Monotonous learning methods hinder students' ability to demonstrate their full potential, often resulting from a lack of teacher innovation.

The Covid-19 pandemic caused a significant decline in education over approximately two years. During this period, teaching was forced to shift to online methods conducted from teachers' and students' homes. This led to reduced understanding of the material. In response, the government revised the 2013 Curriculum into the Independent Curriculum to help students regain and develop their knowledge. In this new system, teachers are required to create innovative and engaging learning methods to foster active student participation (Manalu et al., 2022).

The quality of education in Indonesia remains relatively low, causing the country to lag others. Overcoming this issue requires collaboration among the government, teachers, students, parents, and the community. Without collective cooperation, educational goals cannot be achieved (Fitri, 2021). Even so, the DPR and the government have agreed not to mandate nationwide implementation of the Independent Curriculum. Thus, especially in face-to-face school settings, teachers are expected to be more creative in delivering lessons.

Despite technological advancements, many teachers in Indonesia still underutilize digital tools for learning innovation. Some have not integrated technology into their

teaching, even though it is known to enhance students' mastery of learning materials (Lestari, 2015). According to Fatmawati & Rahman (2018), major obstacles include a lack of training, limited facilities, and low teacher motivation. Yet, research shows that digital media significantly improves student attention and understanding (Yunus, 2019). One such innovation is the use of Powtoon as a learning medium.

Teachers play a vital role in engaging students so that learning goals can be achieved. Powtoon is a digital tool that allows the creation of animated videos, featuring engaging characters, vibrant backgrounds, animation, and music. These elements help deliver information in a visually and audibly engaging format (Wulandari et al., 2020). The application is user-friendly and accessible, enabling teachers to use it effectively.

Powtoon makes a valuable contribution to learning. Wulandari et al. (2020) found that Powtoon-based learning media helps students better understand material and increases their interest in learning. This media is highly effective for improving learning quality, not only in terms of theory and curriculum but also in fostering students' critical thinking and behavior. Supporting this, Kusumawati & Danang (2022) stated that visual and audio media are highly effective in learning, as reflected in validity, practicality, improved student outcomes, and positive student responses. Students find the media helpful, flexible, and accessible anytime and anywhere.

This research explores how Powtoon can effectively enhance student learning outcomes in accounting subjects at the senior high school level. The objective is to identify how Powtoon is implemented and to evaluate its effectiveness in improving learning outcomes in accounting education.

METHODS

This research employs a qualitative descriptive method with data collection techniques based on literature studies. According to Zed (2015), a literature study is a research method conducted by examining various relevant sources related to the research topic. Its purpose is not only to explain existing theories and concepts but also to identify scientific gaps that have yet to be addressed. This method goes beyond simply reading—it involves absorbing the core ideas, processing the information, and reformulating previous concepts into new arguments. Literature study is also commonly referred to as library research.

This article focuses solely on previous articles and scholarly journals. The data analysis technique used follows the Miles and Huberman model, which includes data reduction, data display, and conclusion drawing. Data in this research is obtained from scientific articles and journals that are relevant to assessing the effectiveness of Powtoon as a learning medium in improving accounting learning outcomes among senior high school students. The collected data is then analyzed and reviewed in a critical, in-depth, and systematic manner and presented in narrative form.

RESULT AND DISCUSSION

Powtoon instructional media is highly effective in helping teachers deliver material in a more engaging and innovative manner. This media captures students' attention and encourages them to actively observe and follow the learning process, leading to improved understanding and enhanced learning outcomes. Research conducted by Julianingrum et al. (2015) explains that, from a vocational education perspective that demands the integration of technical competencies and character development, their study demonstrated that an approach delivered through animated media like Powtoon brings significant changes to learning in financial accounting. The results are not only evident statistically, but also reflect a transformation in students' attitudes and overall involvement in a comprehensive manner. When the learning process is designed to be more interactive and appealing, student engagement increases significantly. This is reflected in the three domains of learning achievement: affective, cognitive, and psychomotor. In the affective domain, the presentation of students' achievements from the pre-action phase, Cycle I, and Cycle II are as follows:

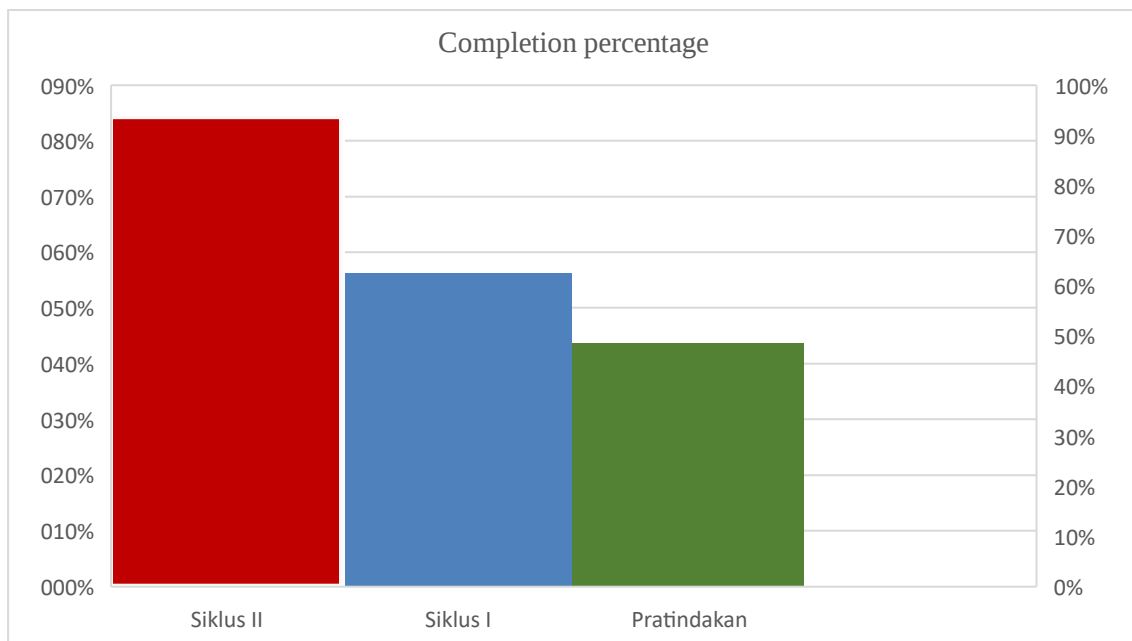


Figure 1. Percentage Completeness Performance Study Student Aspect Affective

In general, within the affective domain, students showed an improvement in learning completeness—from 43.75% in the pre-action phase to 56.25% in Cycle I, and then a significant increase to 84.38% in Cycle II. This indicates that the use of Powtoon can create a more enjoyable learning atmosphere and fostering students' intrinsic motivation to engage in the learning process, which had previously been perceived as dull, especially in accounting subjects. Furthermore, the comparison of results from the pre-action phase, Cycle I, and Cycle II in the cognitive domain is as follows:

Table 1. Comparison Results Performance Study Student Aspect Cognitive

No	Information	Pre-action	Cycle I	Cycle II
1.	Maximum value	96	100	100
2.	Minimum value	30	47	67
3.	Average	66	76	89
4.	Standard deviation	17.51	13.65	8.14
5.	Completeness	25%	56.2%	87.5%

In the cognitive domain, the improvement is clearly evident. In the initial stage, only 25% of students were able to meet the Minimum Completion Criteria (KKM), with an average score of 66. After the intervention using the articulation learning model and Powtoon animation media, the completion rate increased to 56.25% (average score 76) in Cycle I and further rose to 87.5% (average score 89) in Cycle II. This indicates that students' conceptual understanding of accounting material experienced significant reinforcement through the implementation of more contextual and visually engaging methods. In the psychomotor domain, the results were as follows.

Table 2. Comparison Results Performance Study Student Aspect Psychomotor

No	Information	Pre-action	Cycle I	Cycle II
1.	Maximum value	95.45	100	100
2.	Minimum value	31.82	47.62	67
3.	Average	69.32	79.91	89
4.	Standard deviation	22.65	16.44	8.14
5.	Completeness	50%	62.5%	87.5%

In the psychomotor domain, student achievement increased from 50% (average score 69.32) in the pre-action phase to 62.5% (average score 79.91) in Cycle I and reached 100% completion with an average score of 93.48 in Cycle II. These results demonstrate that a learning approach that goes beyond theoretical delivery—by stimulating practical skills through animation—can effectively bridge the gap between knowledge and practice. Therefore, it can be concluded that the collaboration between the collaborative articulation model and communicative Powtoon media has successfully elevated the quality of financial accounting learning to a higher level. This research reinforces that an approach integrating interactive, visual, and reflective learning elements not only improves learning outcomes but also fosters a spirit of continuous learning. Another study by Sari and Listiadi (2018) also supports this, explaining that Powtoon media can enhance student learning outcomes in the basic banking subject.

In line with the 2013 curriculum, which emphasizes active participation and independent exploration, this research provides a concrete understanding of effective practice. The implementation of a discovery learning model, harmonized with the visual strength of Powtoon media, has shown significant effectiveness in improving the quality of learning in Class X AK I at SMK Negeri Mojoagung. The improvement is evident not

only in terms of numerical scores but also in the more dynamic and interactive classroom atmosphere. Student learning outcomes can be seen in Figure 2.

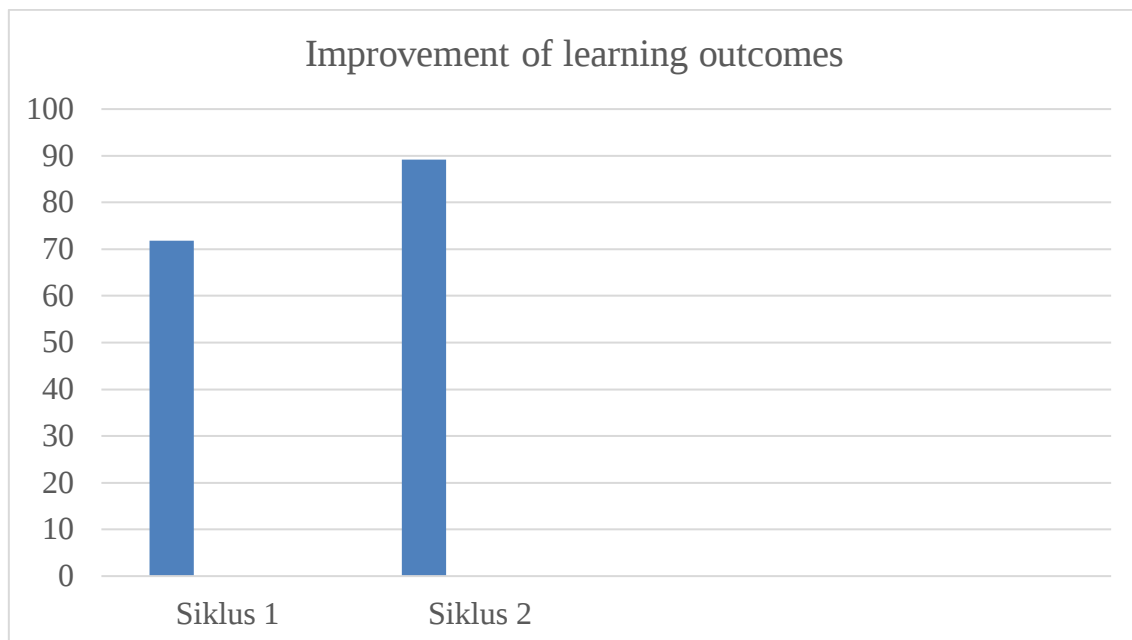


Figure 2. Improvement results Study student

Overall, the quantitative results of the study show a significant increase in student achievement, rising sharply from 71.85% in Cycle I to 89.22% in Cycle II. This reflects that discovery-based learning, enriched with animation and visualization through Powtoon, effectively supports a deeper understanding of complex materials such as savings deposits. Students are not merely passive recipients; rather, they become active explorers who construct knowledge independently. Student activity levels also improved. The activity score increased from 2.86 in Cycle I to 3.28 in Cycle II, reaching the "Very Good" category. Engagement rose even more sharply, from 2.70 to 3.54, indicating that students became more involved in the learning process. This demonstrates that a learning design combining student-centered elements and digital technology can stimulate both intellectual and participatory engagement.

From an affective perspective, student responses to this method were very positive: 40% of students "strongly agreed" and 49.90% "agreed" with the use of discovery learning and Powtoon media. This indicates not only technical success but also success in building emotional involvement and a sustained curiosity—key factors in long-term learning. Therefore, it can be concluded that discovery learning with Powtoon is not just an alternative method, but a representation of 21st-century learning: innovative, interactive, and student-centered. This combination offers a promising pathway to improving learning outcomes while fostering independent thinking among students. Supporting this, Pratiwi and Handayati (2018) also found that Powtoon media can

increase students' motivation to learn, which in turn can improve their academic performance.

To further enliven the teaching and learning process in the modern era, the use of audiovisual media such as Powtoon has shown exceptional effectiveness in increasing student motivation. Research shows that students who learned using Powtoon media exhibited significantly higher motivation compared to those who only used conventional PowerPoint presentations. The average motivation score in the experimental class was 68.5, while the control class only reached 52.8. Statistical analysis using an independent sample t-test revealed a significance value of 0.000 (<0.05), indicating a significant difference between the experimental and control classes. This strengthens the assumption that Powtoon, as an interactive animation-based medium, can spark student interest, enhance engagement, and stimulate active participation in learning accountancy.

Furthermore, the study found that students' learning styles also influenced their motivation. Visual learners had an average motivation score of 68.3, while non-visual learners (auditory and kinesthetic) only reached 50.1. This suggests that visual-based media like Powtoon are particularly effective for students with a dominant visual learning style, though they still provide positive contributions for all learning types. Thus, the application of audiovisual media such as Powtoon not only increases overall learning motivation but also enriches students' learning experiences across various learning styles. These findings highlight the importance of innovation in selecting learning media to create a more dynamic, personalized, and impactful academic environment.

In response to the ongoing demand for innovation in education, this research confirms that the use of Powtoon as a learning medium has a tangible impact on improving student learning outcomes. Novitasari and Pratiwi (2022) reported that Powtoon media significantly influenced the learning outcomes of finance and accounting students, with a t-value of 3.184 (greater than the t-table value of 2.002) and a significance level of 0.002 (<0.05). This animation-based medium transformed the delivery of material from rigid and monotonous to more communicative, engaging, and easily understood by students, especially during online learning in the pandemic.

Beyond media, learning discipline also plays a crucial role in academic success. Discipline showed a significant influence, with a t-value of 2.650 and a significance of 0.010. Students with high discipline—those who consistently attend lessons, complete assignments on time, and maintain order during learning—achieve better academic performance compared to those with lower discipline. Additionally, the learning environment is an important variable. Analysis revealed a significant influence of the learning environment on student outcomes, with a t-value of 3.136 and a significance of 0.004. A conducive environment, whether at home or school, forms the foundation that supports students' learning spirit, facilitates understanding, and encourages higher achievement.

Simultaneously, the three variables—Powtoon learning media, learning discipline, and learning environment—significantly influence learning outcomes, as evidenced by an F-value of 4.908 (greater than the F-table value of 2.76) and a

significance of 0.004 (<0.05). The combined contribution of these three factors to learning outcomes is 20.5%, with the remainder influenced by other variables outside this study. This research confirms that effective learning cannot rely solely on media innovation; it must also be supported by the development of student discipline and the creation of a positive learning environment. The collaboration of these three factors is a strategic path toward optimizing learning outcomes in modern education.

CONCLUSION

Based on a review of the literature, it can be concluded that the use of Powtoon media in teaching accounting at the upper secondary school level has demonstrated both the application and effectiveness of this tool in enhancing students' learning experiences. Analysis of various studies indicates that students' learning outcomes and motivation in accounting significantly improved with the use of Powtoon. This is evident from the increased levels of understanding and higher achievement scores observed in Cycle II, compared to Cycle I, where students initially struggled to grasp the material. Research by several scholars consistently supports the conclusion that implementing Powtoon media in accounting instruction at the upper secondary level is effective in improving student engagement and comprehension.

However, there are several limitations to note. Most studies reviewed were conducted in limited geographic areas and often involved small sample sizes, which may affect the generalizability of the findings. Additionally, the effectiveness of Powtoon may be influenced by factors such as teacher proficiency with the technology, students' prior familiarity with digital media, and varying levels of access to devices and internet connectivity. Furthermore, most research focused on short-term outcomes, leaving the long-term impact of Powtoon media on learning retention and skill development less explored. Future research should address these limitations by conducting studies with larger and more diverse populations across different regions.

Longitudinal studies are also recommended to assess the sustained impact of Powtoon media on students' learning outcomes over time. Moreover, comparative studies examining Powtoon alongside other digital learning tools could provide deeper insights into its relative effectiveness. Finally, exploring the integration of Powtoon with other pedagogical approaches and its impact on different learning styles would further enrich the understanding of its role in modern accounting education.

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