



IMPLEMENTATION OF TRELLO AS A LEARNING MEDIA IN SOCIAL STUDIES AT JUNIOR HIGH SCHOOLS

IMPLEMENTASI TRELLO SEBAGAI MEDIA PEMBELAJARAN ILMU PENGETAHUAN SOSIAL (IPS) DI SEKOLAH MENENGAH PERTAMA (SMP)

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DOI: <https://doi.org/10.62567/micjo.v2i3.947>

Article info:

Submitted: 23/06/25

Accepted: 14/07/25

Published: 30/07/25

Abstract

This study examines the application of Trello as an educational instrument in Social Studies (IPS) courses in junior high schools. Trello is a collaborative platform that facilitates project-based learning and the development of contemporary skills. Although prior studies indicate that Trello enhances teamwork and student engagement in senior high schools, there remains a paucity of studies regarding its application among junior high school students. This study employed a qualitative case study methodology, using interviews and document analyses of social studies educators in Jakarta. The results showed that Teachers' successful use of Trello was hindered by inadequate knowledge, poor digital infrastructure, and difficulties integrating it into the curriculum. Still, teachers stayed open to the adjustments given direction and assistance. This study proposes enhancing teachers' digital literacy and offering continuous training as a preliminary measure to optimize the use of Trello in social studies education in junior high schools.

Keywords : *Trello, Social Studies, Digital Learning, Collaborative Learning, Educational Technology.*

Abstrak

Studi ini meneliti penerapan Trello sebagai instrumen pendidikan dalam mata kuliah Ilmu Sosial (IPS) di sekolah menengah pertama. Trello adalah platform kolaboratif yang memfasilitasi pembelajaran berbasis proyek dan pengembangan keterampilan kontemporer.



Meskipun studi sebelumnya menunjukkan bahwa Trello meningkatkan kerja tim dan keterlibatan siswa di sekolah menengah atas, masih ada kekurangan studi mengenai penerapannya di antara siswa sekolah menengah pertama. Studi ini menggunakan metodologi studi kasus kualitatif, menggunakan wawancara dan analisis dokumen pendidik studi sosial di Jakarta. Hasil penelitian menunjukkan bahwa keberhasilan penggunaan Trello oleh Guru terhambat oleh pengetahuan yang tidak memadai, infrastruktur digital yang buruk, dan kesulitan mengintegrasikannya ke dalam kurikulum. Namun, guru tetap terbuka terhadap penyesuaian yang diberikan arahan dan bantuan. Studi ini mengusulkan peningkatan literasi digital guru dan menawarkan pelatihan berkelanjutan sebagai langkah awal untuk mengoptimalkan penggunaan Trello dalam pendidikan studi sosial di sekolah menengah pertama (SMP).

Kata Kunci : *Trello, IPS, Pembelajaran Digital, Kolaborasi, Teknologi Pendidikan*

1. INTRODUCTION

Trello's complicated past calls for some debate. Trello's history is quite important since it provides a clear backdrop for the evolution of the program into a valuable tool for improving cooperation in learning environments. Initially developed in 2010 under Fg Creek Software's internal innovation initiative, Trello formally debuted at TechCrunch Disrupt in 2011. It has evolved constantly since then, with new mobile apps, global growth, and Atlassian's 2017 acquisition, among other things. These benchmarks show Trello's development from a planning prototype into a worldwide collaborative platform (Trello, 2025). Effective learning depends on the Virtual Learning Environment (VLE) being used in Project-Based Learning (PBL), claims Mansur et al. (2019). They emphasised that understanding the Trello development and usage process determines how successful the VLE is in an educational environment. According to a 2024 study by Reftyawati, group projects utilising Trello as a platform have been found to be clearly beneficial. This study also emphasises the need to learn new elements, which helps students engage actively in arguments and conversations.

One of the benefits of Trello is that it facilitates collaboration and task management in education. Stojanovic (2021) highlights that Trello enhances collaboration and task management in educational settings by providing a user-friendly platform that allows students to create personalized sheets, documents, and cards. According to Haryadi Salakay and Srivastava (2024), this circumstance enables learners to develop their responsibilities and development in a manner that is appropriate while simultaneously facilitating active participation and positive interaction between teachers and students.

Trello has great potential to support Digital Social Science education, as it can be used as a project management tool to enable top students to acquire lifelong learning skills, a vital ability in professions, including social science. This aligns with the growing demand in modern education for interactive and collaborative learning environments. Earlier studies on senior high school students have claimed that Trello helps visualize student progress and organize group projects, both of which are especially beneficial for Social Science projects that require cooperation and critical thinking (Shchetytnina et al., 2022). The 2019 Laksana et al. study highlights that the application also provides tools for building digital portfolios, allowing students to showcase their work and reflect on their educational journey. Research can be



conducted at the junior high school level using these results to evaluate the relevance of using Trello in a comparable environment, incorporating changes for the features and needs of younger students, as well as the different complexity of the material.

The gap in Trello's specific impact is evident in the limited research on its use in formal Social Studies education. Research shows that Information and Communication Technology, such as Trello, have a positive impact on students' engagement and involvement in Social Studies (Zaragoza-Alvarado et al., 2024). Research on the experience of using Trello boards in secondary schools for humanities topics is reportedly lacking (Shchetytnina et al., 2022). This topic still has considerable potential for further exploration.

The use of Trello to enhance the quality of Social Studies learning is based on the importance of collaborative activities and data collection. Teaching citizens about their rights and obligations inside a society depends on this kind of approach. It helps pupils incorporate technology into the Social Studies course with efficiency (Wright & Wilson, 2009). Similarly, Reftyawati (2024) demonstrated how Trello enhances student engagement and collaboration, highlighting its ability to create more dynamic and student-centred learning environments. Although senior students are the primary focus of these studies, there is a noticeable research gap concerning the use of this strategy in junior high school social studies instruction. This presents an opportunity to explore how Trello can be adapted to support younger learners in developing collaborative and critical thinking skills within the context of Social Studies.

Collaborative learning is grounded in social constructivist theory, as proposed by Vygotsky, which emphasizes the role of social interaction in the learning process. Recent literature notes that "the roles that highlight the social aspect of learning and the value of collaboration" are key foundations for this method. With this approach, collaborative learning encourages active participation as students support one another and work together to achieve common goals. Therefore, learning media such as Trello should be used to strengthen group work and social interaction among students in line with this theory.

The use of Trello in secondary education has been the subject of numerous studies conducted in Indonesia. Shely (2022) discovered, for instance, that junior high school eighth graders who used Trello to apply a Project-Based Learning (PBL) model showed notable gains in their communication and creative thinking skills. This finding suggests that Trello's task structure enhances teamwork and student creativity in group projects. In high schools, Shinta (2021) reported using Trello in online history learning and noted that Trello's features enabled students to collaborate as a team on group projects. Faiz tul Amalia et al. (2022) reported that Trello is capable of displaying and organizing multiple tasks in vocational schools (SMK), particularly in the context of collaborative learning for students. This statement emphasizes that Trello facilitates the management of group tasks, consistent with the principles of collaborative learning. Mansur et al. (2019) highlighted Trello's significance in collaborative projects, asserting that Trello "was disruptively essential for project organization" in Project-Based Learning (PBL) classes. The findings indicate that Trello effectively supports collaborative learning theory at the junior high school (SMP) level by facilitating social interaction, task distribution, and teamwork among students.

This research aims to analyze the application of Trello in junior high school Social Studies education, highlighting its advantages and challenges. This study examines the experiences of teachers and students to optimize Trello's role in Social Studies education, thereby contributing to innovative and engaging teaching strategies.



2. RESEARCH METHOD

a) Research Methodology

The research methodology uses a qualitative case study approach to analyze the implementation of Trello. The qualitative case study approach emphasizes an in-depth exploration of real-world phenomena within their natural context. For example, Lane et al. (2020) conducted a qualitative case study to explore teachers' experiences through semi-structured interviews, focusing on the inductive data analysis process. This approach is parallel with the qualitative research literature, which views case studies as holistic descriptions of specific events in the field rather than mere numerical generalizations.

b) Research Design

In qualitative research, document studies and interviews are often used in complementarity. In-depth interviews aim to gather rich, detailed data about teachers' experiences. At the same time, document studies collect and analyze various relevant documents—whether written, visual, or electronic—related to the research focus. According to Satori (2009), documentation complements observation and interviews, thus supporting the credibility of the findings. In the context of Trello, the research design may include an analysis of learning documents, such as lesson plans, modules, and digital tasks, along with interviews with teachers regarding the implementation of this tool.

c) Participant/Location Of Study

The relevance of the participants to the research objectives is taken into account upon their selection. When conducting qualitative research, the selection of participants is typically selected according to a set of predetermined criteria rather than being done at random. As an illustration, Lane et al. (2020) focused their selection on eight educators who possessed experience that was pertinent to the topic. The participants in this study were social studies teachers from junior high schools in Jakarta who used Trello. These teachers were chosen for participation based on their prior experience with technology, their willingness to use learning applications and their background. The selection process that was carried out in this manner is consistent with the recommendation made by Lodico (2010) to select participants who possess knowledge that is pertinent to the primary focus of the research.

d) Data Collection

The primary data collection techniques include document analysis and interviews. Document studies involve systematically reviewing pedagogical documents, including lesson plans, modules, digital materials, and collaboration notes on Trello. Bowen (2009) states that both printed and electronic documents are vital sources of data in qualitative research. Semi-structured interviews are then used to gain a deeper understanding of teachers' practices. Lane et al. (2020) conducted private interviews over two months with eight selected teachers, and the recordings were fully transcribed for analysis. Combining these techniques allows researchers to capture both the structure of learning and student collaboration in an integrated way.

e) Observation Guidelines

When analyzing learning documents, researchers observe components such as the learning structure (including objectives, materials, steps, and evaluation), student



collaboration, and the use of digital materials. For example, Shinta (2021) found that Trello facilitates team collaboration among students in project-based learning, which can be observed in documents like task instructions or digital project boards. Lesson plans and syllabi are reviewed to determine if collaborative activities and technology integration are incorporated. Additionally, the presence of digital teaching materials (e.g., links, videos, electronic modules) is noted as an indicator of digital media use in the learning process. Such guidelines help document how teachers organize project-based learning and collaboration within formal documents.

f) Analysis DATA

Qualitative data analysis is performed actively, beginning with data reduction and progressing to the development of themes. Interview and document data are initially reduced (summarized) by grouping relevant data segments. Coding is done bottom-up based on the collected data. As Lane et al. (2020) did, researchers identify patterns and similarities in teachers' responses. Categories are formed from related codes, and overarching themes are derived that reflect the research findings (Miles & Huberman, n.d.; Lodico, 2010). Themes such as lesson planning with Trello or student responses to digital collaboration may emerge from this process. This thematic approach enables researchers to synthesize results into a coherent, structured narrative.

g) Ethical Aspect Of The Research

In particular, qualitative research requires special attention to ethical issues. Personal information of the participants is kept private; for example, data is securely stored, and transcripts are kept under aliases. Lane et al. (2020) underline that they store notes and interview recordings in a safe and quiet area. Researchers also make sure participants give informed permission—either orally or in writing—before interviews. Data handling follows ethical standards, including anonymizing personal information. This agreement promotes ethical behaviour in research along with the protection of teachers' rights and interests.

h) Limitation Of Study

The limitation of this study is the lack of direct classroom observation, which could limit the depth of contextual data. Since the dynamics of teacher-student interactions during learning are not directly observed, the study might not fully capture the classroom experience. Satori (2009) suggests that documentation should complement observation and interviews, as findings are more credible when supported by related documents. With reliance solely on documents and interviews, researchers must exercise caution when concluding. Non-verbal cues and situational nuances in the classroom may be underrepresented; therefore, the findings should be considered as interpretations based on available sources related to the implementation of Trello as a learning medium in social studies at junior high schools.

3. RESULTS AND DISCUSSION

This study explored the perceptions of three junior high school Social Studies teachers regarding the use of Trello as a digital learning tool. Based on the interview data, it was found that the majority of respondents had limited prior knowledge of Trello, and none had



implemented it in their teaching practice. The following matrix summarizes the responses from each teacher across several key categories:

Table 1. The Summarizes the responses of interview

Question Category	Respondent 1	Respondent 2	Respondent 3
Initial knowledge about Trello	Never heard of it before.	Heard about it but never tried.	Not familiar, just learned from this interview.
Perception of its use in teaching	Interesting if it helps students stay organized.	Potentially good for managing student projects.	Looks practical, if there is a guide.
Belief that Trello can help students understand Social Studies content	Maybe, if it's taught step by step.	Useful for applied topics, not memorization.	If the visuals are clear, students may understand better.
Potential to enhance student collaboration	Can't imagine it yet, but could be useful.	Suitable for large group tasks.	Can clarify task division among students.
Perceived barriers to implementation	Students don't all have smartphones or data.	School infrastructure isn't ready.	I don't feel confident using it yet.
Readiness to use Trello	Need training first, then I can try.	If there's a workshop, I'd be willing.	Willing to try if guided properly.
Outlook for future use	Can be developed once it becomes a habit.	Worth piloting in project-based Social Studies classes.	Could work if there's technical support from IT staff.

The data in Table 1 show that all three respondents had little to no experience with Trello prior to the interview. Respondent 1 had never heard of it, Respondent 2 had heard about it but never used it, and Respondent 3 was only introduced to the platform through the interview. Despite this, there was a general sense of curiosity and openness toward its use in teaching, provided that appropriate training and support were given.

In terms of perceived usefulness, respondents highlighted that Trello could potentially help students stay organized, manage group projects, and divide tasks effectively. However, they also raised concerns about barriers such as lack of infrastructure, limited student access to devices or data, and their own unfamiliarity with the tool.

When asked about readiness to use Trello, all three respondents indicated that they would be willing to try it under certain conditions—such as attending a training session, receiving IT support, or being guided properly in its implementation. This cautious optimism suggests that while Trello is not currently a mainstream tool in Social Studies instruction, it holds promise for future use if systemic support is in place.

The majority of teachers of social studies in junior high schools have not utilized Trello as a learning tool, according to the information that was acquired from interviews. This lack of utilization is primarily attributable to a lack of awareness about Trello as well as a lack of training that is connected to the application of Trello in educational settings. Teachers have



indicated that they are more comfortable with more popular platforms: Worldwall, Google Classroom, or Kahoot. As a result, they are cautious to utilize new tools without prior instruction because they are more familiar with these platforms.

The lack of digital infrastructure in educational institutions is yet another big barrier for teachers. Many universities still have poor internet connectivity, insufficient resources for students, and limited gadgets available to them. Technical assistance is also frequently limited. This circumstance makes it impossible to include digital tools such as Trello, which require a steady connection and a sufficient number of devices to perform in cooperative learning.

Additionally, certain educators expressed uncertainty regarding the integration of Trello with the Social Studies curriculum and learning objectives. They encountered challenges in converting abstract or conceptual material into task-based projects that could be effectively managed on a Trello board. These apprehensions suggest the necessity of providing explicit models or examples of how Trello can be effectively integrated into a variety of themes in the Social Studies curriculum.

Despite these challenges, several teachers showed a positive attitude toward digital media and were open to trying new tools. They believed that if adequate training and support were provided, Trello could be a valuable addition to Social Studies instruction. Teachers have noted that collaborative platforms have the ability to improve student engagement, critical thinking, and teamwork, as well as a number of other skills that are crucial in the instruction of Social Studies.

Discussion

The findings of this study indicate that the use of Trello in Social Studies learning is still limited due to several key factors, including a lack of prior knowledge, inadequate training, and insufficient digital infrastructure. These results align with Vygotsky's sociocultural theory, particularly the concept of the Zone of Proximal Development (ZPD). Teachers' readiness to adopt Trello depends heavily on scaffolding in the form of technical support and professional training. This is evident from the respondents' expressions of willingness to try Trello if they receive proper guidance or attend a workshop. Vygotsky emphasizes that learning occurs most effectively when individuals are supported in their development process—mirroring the respondents' need for external help before they can independently integrate Trello into their classrooms.

Furthermore, the relevance of Trello to Project-Based Learning (PjBL) is acknowledged by some teachers, who believe that the platform could support student collaboration and project management in large group tasks. Trello's structure enables task division and tracking of progress, which are essential components of PjBL. However, some respondents expressed difficulty in aligning abstract or conceptual Social Studies content with project-based formats, suggesting that the integration of Trello into the curriculum requires pedagogical adjustments. This implies the necessity of providing concrete models or examples of how Trello can be effectively applied in Social Studies themes to ensure meaningful learning outcomes.

In general, while the perceptions toward Trello were mixed, there was a shared optimism among teachers that with the right infrastructure, training, and instructional design, Trello has the potential to enhance student engagement and collaboration in Social Studies. Therefore, successful implementation would require a systemic approach that includes not only digital



readiness but also curriculum alignment and teacher empowerment through continuous professional development.

4. CONCLUSION

The outcomes of document analysis and interview data point to most junior high school social studies teachers not using Trello as a teaching tool. This results from ignorance of knowledge on application use and lack of training. Furthermore, major challenges are the lack of digital infrastructure like poor devices and inconsistent internet connections. Usually, teachers find more ease using tools like Kahoot and Google Classroom. Still, teachers can adopt new digital tools like Trello with enough training and support.

These findings in the field of social studies education point to the need of better training for instructors in the use of digital media, particularly Trello, thereby enabling more participatory and group projects. Digital-based learning cannot be successful without linked parties also focusing on enhancing the technology setup of the institution. With this help, social studies education programs may better leverage technology to improve the quality of learning and equip students for the challenges of the twenty-first century.

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