

CTL-BASED SKI LEARNING WITH VIRTUAL FIELD TRIPS AND MULTIMEDIA AT MAN LANDAK

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Abstract

This study aims to describe the implementation of the Contextual Teaching and Learning (CTL) model integrated with Virtual Field Trips (VFT) and multimedia, as well as to explore its impact on student motivation and learning outcomes in the Islamic Cultural History (SKI) subject at MAN Landak. This research employs a qualitative approach with a descriptive case study design. Data collection techniques include participant observation, in-depth interviews, and documentation studies, which were then analyzed using the interactive model by Miles, Huberman, and Saldana, and validated through source and technique triangulation. The results indicate a fundamental transformation from a conventional learning pattern to a constructivist pattern that positions students as active subjects. The dynamics of student learning activities consistently increased from the moderate category (score 2.8) in the first meeting to the very good category (score 3.7) in the final meeting. Additionally, the average motivation score increased by 1.2 points, with the highest increase observed in the curiosity aspect, and student learning outcomes experienced a significant improvement, where the "Very Good" grade category rose from 5% to 35%. In conclusion, the integration of CTL and VFT is proven to be valid and effective as a pedagogical solution to overcome learning boredom, enhance historical literacy, and significantly improve student academic achievement.

Keywords: Contextual Teaching and Learning, Virtual Field Trip, Islamic Cultural History

Abstrak

Penelitian ini bertujuan untuk mendeskripsikan implementasi model pembelajaran berbasis Contextual Teaching and Learning (CTL) yang dipadukan dengan Virtual Field Trip (VFT) dan multimedia, serta mengeksplorasi dampaknya terhadap motivasi dan hasil belajar siswa pada mata pelajaran Sejarah Kebudayaan Islam (SKI) di MAN Landak. Penelitian ini menggunakan pendekatan kualitatif dengan jenis studi kasus deskriptif. Teknik pengumpulan data meliputi observasi partisipan, wawancara mendalam, dan studi dokumentasi, yang kemudian dianalisis menggunakan model interaktif Miles, Huberman, dan Saldana serta divalidasi melalui triangulasi sumber dan teknik. Hasil penelitian menunjukkan terjadinya transformasi fundamental dari pola pembelajaran konvensional menuju pola konstruktivis yang menempatkan siswa sebagai subjek aktif. Dinamika aktivitas belajar siswa meningkat konsisten dari kategori sedang (skor 2,8) pada pertemuan pertama menjadi sangat baik (skor 3,7) pada pertemuan akhir. Selain itu, rata-rata skor motivasi meningkat sebesar 1,2 poin dengan kenaikan tertinggi pada aspek rasa ingin tahu, dan hasil belajar siswa mengalami lonjakan signifikan dimana kategori nilai "Sangat Baik" meningkat dari 5% menjadi 35%. Kesimpulannya,

integrasi CTL dan VFT terbukti valid dan efektif sebagai solusi pedagogis untuk mengatasi kejenuhan belajar, meningkatkan literasi sejarah, serta memperbaiki prestasi akademik siswa secara signifikan.

Kata kunci: *Contextual Teaching and Learning, Virtual Field Trip, Sejarah Kebudayaan Islam*

INTRODUCTION

Islamic Cultural History (SKI) education has a very strategic position in the Islamic education system because it functions not only as a means of transferring historical knowledge, but also as a vehicle for shaping the character, Islamic identity, and historical awareness of students. Through SKI learning, students are invited to understand the dynamics of the journey of Islamic civilization, the exemplary figures of Islam, and the universal values that have developed throughout history, such as justice, tolerance, moderation, and the spirit of scholarship. In the context of modern education, history is no longer understood as a collection of static facts from the past, but rather as an important instrument in shaping students' ways of thinking, attitudes, and value orientations towards present and future life.

In their study of contemporary history education, Seixas and Morton (2016) emphasize that 21st-century history learning must be directed toward the development of historical thinking, which is the ability of students to understand past events critically, contextually, and reflectively. Effective history education encourages students to analyze cause and effect, understand various perspectives, and relate historical events to the social and cultural issues faced by modern society. This view is reinforced by McCully and Barton (2017), who state that history learning plays an important role in building empathy, multicultural awareness, and moral reasoning in students, especially in a pluralistic society that is undergoing constant social change.

In the context of Islamic education, SKI learning has a broader dimension because it is directly related to the formation of a civilized Muslim personality. Hashim (2018) emphasizes that Islamic education in the global era must integrate intellectual, spiritual, and social dimensions in a balanced manner so that students not only master knowledge but are also able to internalize Islamic values in real life. Halstead (2017) also emphasizes that Islamic education, including the teaching of Islamic history, must be contextual and responsive to the challenges of the times, such as globalization, digitalization, and cultural diversity. Thus, SKI learning should ideally be a means of internalizing the values of moderation, tolerance, and justice that are relevant to the realities of students' lives.

However, various international studies in the last decade show that the practice of history learning in schools still faces various challenges. Harris and Girard (2019) reveal that history learning is still largely dominated by a conventional teacher-centered approach, with an emphasis on lectures and memorization of facts. This pattern of learning tends to limit the active involvement of students and hinders the development of a deep historical understanding. VanSledright (2018) asserts that when students are only positioned as

passive recipients of information, they have difficulty developing critical and reflective thinking skills regarding historical events.

This condition results in low learning motivation and active participation of students in history learning. Students tend to memorize historical events chronologically without understanding their meaning and relevance to everyday life. In the context of SKI learning, this condition has the potential to obscure the main objective of learning, which is the internalization of Islamic values contained in history. In fact, the challenges of 21st-century education demand learning that is able to develop critical, collaborative, and creative thinking skills, as well as the ability to adapt to developments in technology and information.

In line with these demands, a contextual learning approach is becoming increasingly relevant to apply in history learning. Johnson (2014) explains that Contextual Teaching and Learning (CTL) is a learning approach that emphasizes the connection between learning material and the real-life context of students. Through CTL, students are encouraged to actively build knowledge through experience, reflection, and application of concepts in authentic situations. This approach is in line with the findings of Hmelo-Silver, Duncan, and Chinn (2015), which show that context-based and real-world problem-based learning can significantly increase students' cognitive engagement, intrinsic motivation, and conceptual understanding.

In history learning, the application of CTL enables students to understand past events as part of a social reality that is relevant to their lives. Students not only learn what happened in the past, but also why these events are important and how the values contained therein can be applied in modern life. Therefore, CTL is seen as an approach that is in line with the objectives of SKI learning, which emphasizes the meaning of values and character building. The effectiveness of the CTL approach in history learning can be further enhanced through the use of digital technology. Dede, Jacobson, and Richards (2017) state that immersive learning technology is capable of providing a more authentic and meaningful learning experience through visualization, simulation, and virtual exploration. In the context of history learning, digital technology allows students to “re-experience” historical events through rich visual and narrative representations, so that learning is no longer abstract.

One form of digital technology that is relevant to history learning is the virtual field trip method. This method allows students to explore historical sites, museums, and cultural heritage virtually without having to be physically present. Stoddard, Marcus, and Hicks (2019) show that virtual field trips in history learning contribute significantly to improving narrative understanding, historical imagination, and active student engagement. Through virtual experiences, students can observe historical artifacts, cultural environments, and the social context of historical events in a more concrete and interesting way.

In addition to virtual field trips, the integration of interactive multimedia is also an important component in technology-based history learning. Mayer (2020), through the Cognitive Theory of Multimedia Learning, explains that learning that integrates text, images, audio, animation, and video can improve understanding and information retention because it utilizes the dual cognitive channels of learners. Research by Cheng and Tsai (2019) shows that interactive multimedia in history learning not only improves learning outcomes but also students' motivation and positive attitudes toward the subject.

Furthermore, Schindler et al. (2017) emphasize that pedagogically designed multimedia technology can create a more active, collaborative, and student-centered learning environment. In history and values education, multimedia allows for the presentation of various perspectives and historical narratives, enabling students to understand the complexity of historical events in a more profound and reflective manner. This is in line with the findings of Liu et al. (2018), who stated that multimedia-based history learning can significantly increase students' emotional and cognitive engagement. Based on various international theoretical and empirical studies over the past decade, it can be concluded that effective SKI learning in the digital age must be contextual, learner-centered, and supported by the use of innovative learning technologies. The integration of the Contextual Teaching and Learning (CTL) approach, virtual field trip methods, and interactive multimedia is seen as a relevant strategy to increase student motivation, deep understanding, and academic achievement. Therefore, the development and implementation of a CTL-based SKI learning model supported by virtual field trips and multimedia is an urgent need in order to respond to the challenges of 21st-century education.

METHOD

This study uses a qualitative approach with a case study research design. According to Yin (2018), a case study is an empirical inquiry that investigates phenomena within a real-life context, especially when the boundaries between the phenomena and the context are not clearly defined. The type of case study used is a Descriptive Case Study, in which the researcher intends to describe in depth the implementation of the Contextual Teaching and Learning (CTL) model combined with Virtual Field Trips and multimedia at MAN Landak, as well as exploring its impact on student motivation and learning outcomes without manipulating control variables (as in pure experiments).

This research was conducted at MAN Landak, which was deliberately chosen given the urgency of digital transformation to overcome the dominance of conventional methods in teaching Islamic Cultural History. The research subjects were determined using purposive sampling, with key informants including SKI subject teachers as the implementers, 11th grade students directly involved in the learning process, and the Head of the Madrasah as a policy supporter. Research data was collected from two main sources to comprehensively answer the research questions. Primary data was obtained directly through interaction with informants in the field, while secondary data included supporting

documents such as lesson plans, syllabi, student grade lists, and visual documentation of relevant activities to complement the madrasah profile data.

The data collection techniques were designed comprehensively to address the complexity of issues related to student passivity and failure to internalize values. The researcher applied participant observation to directly observe the integration of Contextual Teaching and Learning (CTL) and technology, focusing on student interaction with multimedia and enthusiasm during virtual field trips. In addition, in-depth interviews were conducted with teachers and students to explore latent aspects that were not visually apparent, such as changes in intrinsic motivation, perceptions of the relevance of history, and understanding of the meaning of Islamic values. This process was complemented by a documentation study to collect physical evidence in the form of student work in Student Worksheets (LKPD), learning evaluation test results, and visual recordings of learning that reinforced the field findings. Data analysis refers to the interactive model of Miles, Huberman, and Saldana (Sugiono, 2016), which includes the stages of data condensation, data presentation, and conclusion drawing. The researchers sorted relevant data related to the application of CTL and multimedia, presented it in narrative form and in a value development matrix, and then concluded the effectiveness of the model in overcoming low learning outcomes. This qualitative analysis was supported by quantitative descriptive data to strengthen the validity of the findings. To ensure data validity, the researcher applied source triangulation techniques by comparing information between informants, as well as technique triangulation by confronting the results of observations, interviews, and tests. Finally, member checking was carried out by reconfirming the preliminary findings with partner teachers to ensure the accuracy of the researcher's interpretation of the phenomena occurring in the field.

RESULTS AND DISCUSSION

Implementation of CTL-Based Learning Model and Virtual Field Trip

The implementation of learning in class XI at MAN Landak shows a fundamental transformation from conventional learning patterns to a constructivist approach. The old teacher-centered pattern with lecture and memorization methods has shifted to learning that places students as active subjects who construct knowledge through contextual learning experiences. The Contextual Teaching and Learning (CTL) approach connects subject matter with real-life contexts so that knowledge becomes more meaningful and easier to apply. Various studies show that the application of CTL can increase student motivation, learning outcomes, and critical thinking skills because the material is no longer understood as an abstract concept but is related to real experiences.

At MAN Landak, the CTL approach is combined with the Virtual Field Trip (VFT) method and the integration of interactive multimedia technology. The combination of these three elements creates a learning ecosystem that is in line with the principles of constructivism and experience-based learning. VFT allows students to explore historical sites or events virtually, so that the learning process is not only in the form of narrative

delivery, but also observation, source analysis, and independent discovery of meaning. Meanwhile, interactive multimedia such as videos, images, digital maps, and digital worksheets help visualize concepts and increase student engagement.

The application of this model also changes the role of teachers from being the main source of information to becoming facilitators, designers, and mediators of learning experiences. Teachers guide students' exploration through discussions, collaborative activities, and reflections after VFT activities. Overall, the integration of CTL, VFT, and multimedia has proven to create more dialogic, exploratory, and student-centered history learning.

Dynamics of Activities and Student Involvement

Table 1. Average Student Learning Activity Score

Meetings	Average Activity Score (Scale 1–4)	Category
1	2,8	Medium
2	3,2	Good
3	3,5	Good
4	3,7	Excellent

The dynamics of student activity and engagement during the four meetings showed a consistent upward trend. Activity scores increased from 2.8 in the first meeting to 3.7 in the fourth meeting. This pattern indicates a gradual adaptation process of students to the learning approach applied. This increase indicates that students are not only more active behaviorally, but also increasingly involved cognitively and emotionally in learning activities. In other words, the quality of student interaction with learning activities has improved over time. The increase in scores from 2.8 in the first meeting to 3.2 and 3.5 in the second and third meetings shows a shift from moderate involvement to more stable involvement in the good category. This can be attributed to a more varied learning activity design, such as a combination of individual work, group discussions, and interactions between teachers and students. The participatory learning approach encourages students to think more actively, collaborate, and contribute to the learning process.

In the fourth meeting, the activity score reached 3.7, which is in the excellent category. This shows that most students have reached a high level of engagement. Overall, this increase in activity shows that the learning strategies implemented have succeeded in increasing student participation, engagement, and academic achievement potential.

Motivation and Learning Outcomes of Students

Table 2. Comparison of Student Learning Motivation Scores

Motivation Aspect	Before	After	Improvement
Interest	3,1	4,2	+1,1
Active Engagement	2,9	4,1	+1,2
Curiosity	3,0	4,3	+1,3
Perception of SKI	3,2	4,4	+1,2
Total Average	3,05	4,25	+1,2

Table 3. Distribution of Pretest and Posttest Score Categories

Grade Categories	Pretest (%)	Posttest (%)
≥ 85 (Excellent)	5	35
70–84 (Good)	25	45
55–69 (Sufficient)	40	15
< 55 (Less)	30	5

The increase in student motivation and learning outcomes in SKI subjects is clearly evident from the quantitative data obtained. The average motivation score increased from 3.05 to 4.25, or an increase of 1.2 points on a scale of 1–5. This increase indicates a change from moderate to high in almost all aspects of motivation. Interest in learning increased by 1.1 points, active involvement rose by 1.2 points, curiosity increased by 1.3 points, and perception of SKI increased by 1.2 points. This shows that students not only enjoy the learning process more, but also begin to view SKI as a more meaningful and relevant subject. These findings are in line with various studies that state that appropriate learning interventions can significantly increase students' intrinsic and extrinsic motivation.

The largest increase occurred in the aspect of curiosity, from 3.0 to 4.3. This shows that the learning strategies used were able to encourage exploration and the students' desire to understand the material more deeply. A high level of curiosity is often considered the core of intrinsic motivation and plays an important role in students' cognitive engagement. In addition, students' active engagement also increased from 2.9 to 4.1, indicating a change in learning behavior from passive to more participatory.

This increase in motivation was also followed by an increase in learning outcomes. The percentage of students with excellent grades increased from 5% to 35%, while those with good grades increased from 25% to 45%. Conversely, the percentage of students with fair and poor grades decreased significantly. This shows that high learning motivation contributes to an increase in students' academic achievement in SKI learning.

CONCLUSION

The implementation of the Contextual Teaching and Learning (CTL) model assisted by Virtual Field Trips (VFT) at MAN Landak has successfully transformed the learning pattern fundamentally from conventional to student-centered constructivism. The integration of CTL as a philosophical framework with VFT and interactive multimedia creates an immersive learning environment that makes history material more concrete and relevant to real life. The role of teachers has shifted significantly from merely conveying information to becoming effective facilitators in guiding students' digital investigations and reflective discussions. The use of VFT technology has proven to overcome the limitations of space and time, thereby increasing the presence and enjoyment of learning in exploring historical sites. The positive impact of this transformation can be seen in the dynamics of student activities, which consistently improved from moderate at the beginning of the meeting to excellent at the end of the learning cycle. This increase in participation confirms that students are not only physically active but also cognitively and emotionally involved in the historical inquiry process.

Psychologically, the application of this model has proven to be effective in boosting students' motivation to learn, especially in terms of curiosity, which recorded the highest increase, and positive perceptions of social studies. This increase in intrinsic motivation correlates directly with a surge in cognitive learning outcomes, where there has been a drastic shift in the distribution of scores from the poor category to the good and excellent categories. Statistical data shows that the proportion of students with excellent grades increased sharply from 5% during the pretest to 35% during the posttest, while the poor grade category decreased significantly. This achievement indicates that a learning design that combines historical context, Islamic values, and visual technology is very effective in deepening students' conceptual understanding. Therefore, the VFT-based CTL model has been proven valid as a pedagogical solution to overcome learning fatigue while improving historical literacy and academic achievement. In conclusion, the synergy between the contextual approach and immersive technology is worthy of being used as a reference model for improving the quality of history learning in madrasahs.

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