

From Urban Space to Pedagogical Space: Exploring the Educational Potential of the Yogyakarta Philosophical Axis Area through Experiential Learning

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ABSTRACT

Purpose – This study explores the educational potential of the Yogyakarta Philosophical Axis Area and examines how experiential learning transforms the area into a pedagogical space for history learning.

Methodology – This study employed a qualitative case study approach. Data were collected through field observations, semi-structured interviews, and document analysis, involving 10 students, 1 history teacher, 1 heritage educator, 1 cultural heritage expert, and 1 academic expert. Data were analyzed using Miles, Huberman, and Saldaña's interactive model, in which thematic analysis was conducted during the data condensation stage and validated through source and methodological triangulation.

Findings – The findings reveal that the Yogyakarta Philosophical Axis Area offers meaningful, contextual learning experiences through direct engagement with heritage environments. Students demonstrated higher learning engagement, developed historical interpretation skills, strengthened cultural awareness, and connected historical knowledge with contemporary social and cultural realities. Learning activities encouraged observation, interpretation, reflection, and collaborative knowledge construction.

Contribution – This study contributes to educational research by explaining how an urban heritage landscape can be transformed into a pedagogical space through experiential learning. It proposes a conceptual understanding of this transformation based on a four-phase mechanism that progresses from encounter to situated observation, interpretation, and, finally, reflection and reconstruction. In doing so, it highlights how direct engagement fosters meaningful knowledge construction in heritage-based learning.

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INTRODUCTION

Twenty-first-century education places contextual, participatory, and student-centered learning experiences at the core of knowledge construction processes (Adiputra & Hidayah, 2025). This paradigm shift has encouraged the use of learning environments beyond the classroom, as they enable students to gain more authentic and meaningful learning experiences (Ansori & Heriansyah, 2025). From this perspective, learning is not merely a process of information transmission. However, knowledge construction occurs through interactions with the environment, lived experiences, and available learning resources (Handayani et al., 2026). Consequently, schools have increasingly utilized museums, historical sites, and cultural environments as components of contextual learning, allowing students to connect classroom concepts with real-life situations.

Despite this shift, history education in Indonesian secondary schools remains textbook-centered and oriented toward memorizing chronologies, figures, and dates. As a result, historical knowledge is often experienced as something detached from the places students inhabit (Hartati, 2020). The difficulty is not confined to what is taught. It also lies in how teaching proceeds. Instruction continues to rely on the lecture method, in which the teacher delivers a prepared account, and students receive it, so that the evidence a class can examine is bounded by the knowledge the teacher brings into the room. Classroom research reports the same pattern, because teaching discourse in history lessons tends to settle into contextualization at the expense of activities that require students to reason critically about the past (Miralles-Sánchez et al., 2025). Under these conditions, students have few occasions to question, compare, or verify an account against anything outside it. This condition weakens two outcomes targeted by the national curriculum, namely historical consciousness and historical interpretation. Both outcomes require students to encounter historical evidence directly, not merely to read summarized accounts of it. In Yogyakarta, therefore, what is lacking is not cultural heritage but instructional designs that convert proximity to heritage into meaningful learning.

One environment with significant potential to support contextual learning is the cultural heritage landscape. Cultural heritage landscapes not only preserve historical, social, cultural, and philosophical values but also represent diverse forms of knowledge that have evolved within communities over time (Amanda & Wijayati, 2026). In educational contexts, heritage areas can be understood as pedagogical spaces, namely environments that facilitate observation, exploration, reflection, and interpretation through direct experience (Fibiona et al., 2026). With these characteristics, cultural heritage serves not only as an object of preservation but also as an educational resource that supports more active, contextual, and meaningful learning.

The concept of pedagogical space becomes increasingly relevant when associated with the experiential learning approach, which positions experience as the primary foundation of knowledge construction (Yurniati et al., 2023). According to this approach, learning occurs through a cycle of concrete experience, reflection, conceptualization, and the application of acquired knowledge in broader situations. Through direct engagement with learning environments, students not only acquire factual knowledge but also develop interpretive skills, problem-solving abilities, and deeper understandings of their experiences. Therefore, experiential learning is considered an effective means of bridging academic knowledge and real-world contexts through firsthand experiences (Ismail, 2026).

These three concepts are frequently discussed together, but they are rarely articulated as a single explanatory chain. A heritage landscape provides the conditions for learning because it presents dense and multi-layered evidence within a living environment whose meanings are produced through everyday use and are not fixed in its physical fabric (Smith, 2020). Pedagogical space refers to the outcome: a configuration in which space becomes a constitutive element of learning rather than merely its container (Cleveland & Mahat, 2026). Experiential learning, in turn, provides the mechanism that links the two (Kolb, 2014). Taken together, these relationships yield a proposition: a heritage landscape becomes a pedagogical space only when experiential learning is deliberately organized within it (Nowacki, 2021).

In the Indonesian context, the Yogyakarta Philosophical Axis constitutes a cultural heritage landscape with considerable potential for development as a pedagogical space. Extending from Tugu Yogyakarta

(Yogyakarta Monument) through the Yogyakarta Palace (Keraton Yogyakarta) to Panggung Krapyak, this cultural corridor embodies the cosmological concept of Javanese society, illustrating the relationship between human beings, life, and the universe (Pratama, 2025). These values are reflected in the area's spatial organization, architectural features, and various cultural practices maintained by local communities. The significance of this area was further strengthened by its inscription on the UNESCO World Heritage List under the title *The Cosmological Axis of Yogyakarta and Its Historic Landmarks* through Decision 45 COM 8B.39 on 18 September 2023, recognizing its Outstanding Universal Value (Rachmawati et al., 2025; UNESCO, 2023). Beyond its profound philosophical and cultural significance, the presence of historical buildings, cultural symbols, and ongoing social activities makes the area a rich source of historical learning. These characteristics provide opportunities for students to engage in contextual, authentic, and meaningful learning experiences through direct interaction with a cultural heritage environment.

In addition to representing the philosophical and cultural values that form Yogyakarta's identity, the Philosophical Axis also records a long history of social, political, economic, and urban development from the colonial period to the contemporary era (Haq, 2023). The presence of historical landmarks along the corridor, such as Yogyakarta Railway Station, Fort Vredeborg, Beringharjo Market, Gedung Agung, and the Central Post Office, reflects multiple historical layers, illustrating changes in spatial functions and the dynamics of community life over time. This rich cultural heritage makes the Philosophical Axis relevant not only as a source of historical learning but also as a potential interdisciplinary learning space supporting studies in culture, geography, economics, language, and civic education through contextual and environment-based learning experiences (Hartati, 2020).

Numerous studies have examined the use of historical sites, cultural districts, and heritage resources as learning media across various educational levels and contexts, and their results converge on several points. A systematic review of place-based education reports gains in academic achievement, stronger attachment to place, and greater civic participation among students (Yemini et al., 2025). Field visits structured as a sequence of guided activities produce measurable improvements in attainment when compared with classroom-only instruction (Labib & Abdelsattar, 2025). Authentic historical inquiry into local heritage leads students to adopt an investigative stance towards evidence rather than accepting a given account (Van Doorselaere, 2025), and eliciting oral testimony from community members helps them recognize both continuity and change in the values they study (Dölek et al., 2025). Taken together, these studies indicate that cultural heritage supports the preservation of cultural values, the strengthening of collective identity, and the conduct of contextual learning activities (Smith, 2020).

In the case of the Yogyakarta Philosophical Axis, scholarly attention has primarily focused on its cosmological aspects, symbolic meanings, cultural spatial structure, and recognition as a UNESCO World Heritage Site. However, studies specifically investigating students' learning experiences through direct interaction with the Yogyakarta Philosophical Axis as a pedagogical space remain limited. Research exploring the relationship between field-based experiences, the construction of historical knowledge, and the interpretation of heritage spaces as active learning environments has also received relatively little attention. This situation highlights the need for a deeper understanding of the potential of cultural heritage areas as pedagogical spaces that support experiential, student-engaged history learning (Kolb, 2014).

Read together, this body of work falls into two groups. Research on the Yogyakarta Philosophical Axis is dominated by heritage, architectural, and philosophical readings that treat the corridor as an object of interpretation rather than as an environment in which learning occurs (Syahdani & Kardanardi, 2023). The few educational studies available fall outside the field of history. Kurniawan (2019) mapped the plant species along the axis onto tenth-grade biology competencies, Mentaru et al. (2023) identified six fundamental mathematical activities in its spatial arrangement, and Alfaqi et al. (2025) built its philosophical values into a pop-up book on regional resilience. In each case, the axis supplied content that was then relocated to a classroom, a worksheet, or a printed medium. Research on place-based and heritage-based learning forms the second group. It demonstrates that field learning yields positive outcomes, but it treats place as a teaching

setting rather than analyzing it as an agent in the learning process (Yemini et al., 2025). What most of this work addresses, therefore, is either the meaning of a heritage site or the effect of bringing students to it. What it leaves unaddressed is the process by which a site acquires a pedagogical function in the first place, and the two groups have not been brought into contact. The present study is positioned in that gap, because no empirically grounded account yet exists of how a UNESCO-inscribed heritage landscape comes to function as a pedagogical space.

In response to this gap, the present study aims to explore the educational potential of the Yogyakarta Philosophical Axis through the lens of experiential learning. Specifically, it examines how this heritage area serves as a pedagogical space that facilitates meaningful, contextual learning through direct interaction with the cultural heritage environment. Thus, this study positions the area not merely as a source of historical learning but also as a conceptual framework for understanding the relationship between space, learning experiences, and knowledge construction in heritage-based education. It is expected that the findings will contribute to the growing discourse on the use of cultural heritage landscapes as learning environments and provide insights for the development of more contextual, participatory, and experience-oriented history education practices (Nowacki, 2021; Kolb, 2014).

Accordingly, this study addresses three questions: (1) What characteristics of the Yogyakarta Philosophical Axis Area give it the capacity to function as a pedagogical space for history learning? (2) What learning experiences emerge when students engage with it through experiential learning? (3) Through what processes does it shift from an urban heritage space into a pedagogical space? The theoretical novelty lies not in applying experiential learning to a heritage site, which is an established practice, but in specifying the mechanism linking the two bodies of literature. Where existing work treats pedagogical space as a property a site possesses or lacks, this study argues that it is relationally produced, emerging from the interaction between a landscape's affordances and the learning cycle enacted within it. This extends Kolb (2014), who explains how experience becomes knowledge but not how environments enable or constrain each phase, and the pedagogical space literature (Cleveland & Mahat, 2026), which has developed around designed school interiors and not inherited, publicly shared, and contested urban landscapes.

METHODOLOGY

Research Design

This study employed a qualitative case study design. A qualitative approach was selected because the study aimed to understand students' experiences and interpretations of the Yogyakarta Philosophical Axis through direct interaction with the cultural heritage environment. This approach enables researchers to explore how students construct meaning through firsthand experiences and engagement with the socio-cultural environment that serves as the learning context (Mardhiyah, 2026; Saputri et al., 2026).

A case study design was adopted to examine how the Yogyakarta Philosophical Axis functions as a pedagogical space and how its characteristics support learning processes within the framework of experiential learning. The study focused on students' learning experiences during educational activities, their interpretations of cultural heritage, and the area's potential as a learning environment that fosters contextual and meaningful learning. By investigating a specific heritage landscape in depth, the study sought to develop a comprehensive understanding of the relationship among place, experience, and learning in a real-world educational setting.

The activity examined here was a co-curricular program organized by the school in support of the history subject, rather than an additional procedure designed for research purposes. Indonesian curriculum policy defines co-curricular activity as learning conducted to reinforce, deepen, or enrich intracurricular activity in the interest of developing students' character and competence, and it allows schools to design such activity with partners outside the school (Ministry of Education, Culture, Research, and Technology, 2024). The program accordingly followed the learning outcomes of the history subject while drawing on the interpretive

resources of the heritage educator and the site managers, which places it within the enrichment function that the policy provides.

Research Site and Participants

The study was conducted in the Yogyakarta Philosophical Axis, which extends from Tugu Yogyakarta (Yogyakarta Monument) to Panggung Krapyak. This area was selected because it represents a cultural heritage landscape that integrates historical, philosophical, social, and cultural values within a single spatial entity that remains actively used and inhabited by local communities. In addition to its inscription as a UNESCO World Heritage Site in 2023, the area contains diverse spatial elements with significant potential to serve as educational resources across various learning contexts. Previous studies have shown that cultural heritage sites can function as learning spaces that support the development of historical understanding, cultural identity, and students' interpretive skills through authentic field-based experiences (Fibiona et al., 2026).

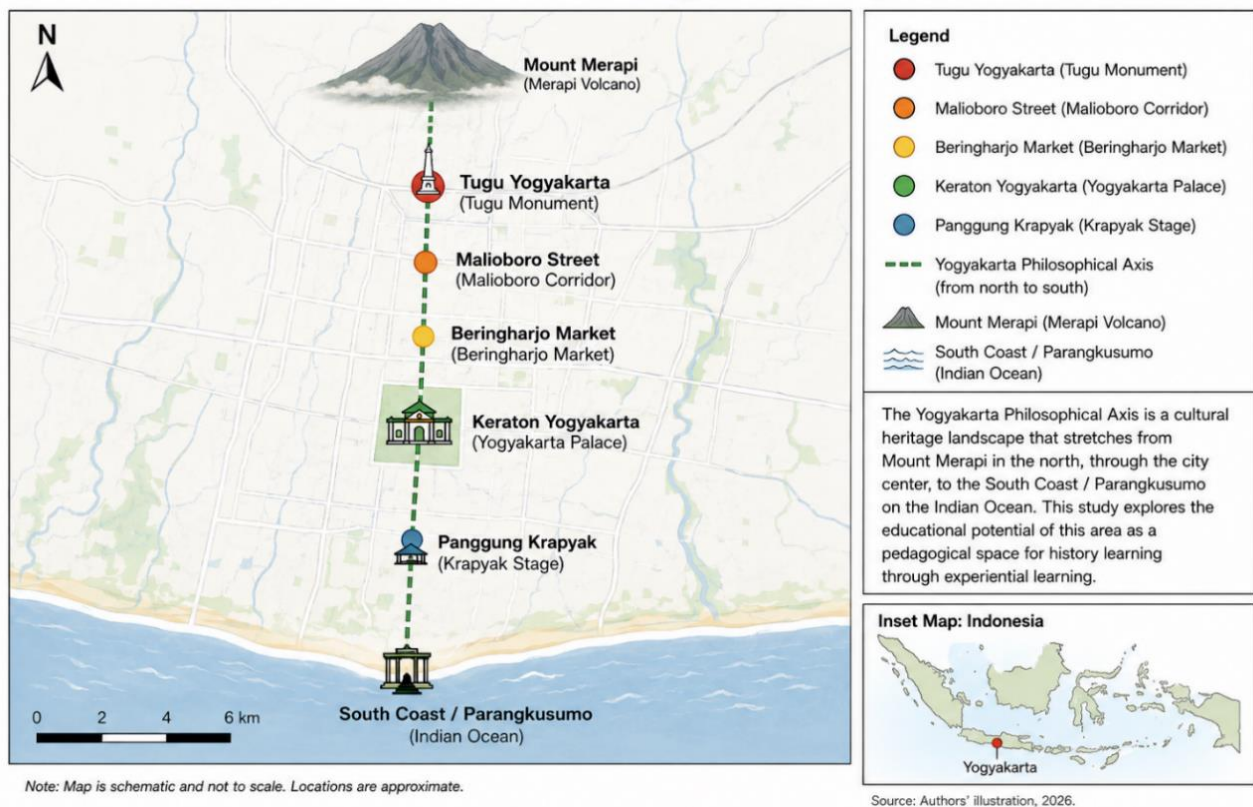


Figure 1. Research Sites within the Yogyakarta Philosophical Axis Area

Source: Adapted by the authors based on UNESCO (2023) and field observations (2026).

As illustrated in Figure 1, the study area forms part of the cosmological axis of Yogyakarta, connecting Mount Merapi in the north, Tugu Yogyakarta, the Yogyakarta Palace (Keraton Yogyakarta), Panggung Krapyak, and Parangkusumo on the southern coast. Parangkusumo marks the southern terminus of the axis, while the adjoining beach at Parangtritis is better known among students and is the name they use for this stretch of coast. This axis embodies the cosmological worldview of Javanese society, which serves as the foundation of Yogyakarta's spatial organization. At the same time, it provides a rich learning environment that encompasses historical, cultural, and philosophical values, supporting experiential and place-based learning.

Participants were selected through purposive sampling, in which informants were chosen for their level of involvement, experience, and knowledge relevant to the research focus. The study involved 14 participants: ten twelfth-grade students from SMA Negeri 9 Yogyakarta, one history teacher, one heritage educator from the Jogja Heritage Track, one cultural heritage expert, and one academic with expertise in history, education,

and heritage studies related to the Yogyakarta Philosophical Axis. The inclusion of these participants was intended to capture diverse perspectives on the area's educational potential, students' learning experiences, and the use of cultural heritage landscapes as pedagogical spaces. To ensure confidentiality, each participant was assigned a code: students (S1-S10), history teacher (HT), heritage educator (HE), cultural heritage expert (CHE), and academic expert (AE). The research was conducted between February and May 2026, encompassing field observations, learning activities, and interviews with all participants.

Students were selected because they had participated in field-based learning activities within the study area. The history teacher was included to provide insights into the planning and implementation of the learning program. Meanwhile, the heritage educator, cultural heritage expert, and academic expert were engaged to provide perspectives on the area's educational value, its potential as a learning resource, and its relevance as a pedagogical space within the context of experiential and heritage-based education.

Data Collection

Data were collected through field observations, semi-structured interviews, and document analysis. Field observations were participatory. The researcher accompanied the group for the full duration of the field program, moving with the students along the route, and recorded what took place in real time rather than reconstructing it afterward. This position gave access to the sequence in which activities unfolded, to the questions students raised at each site, and to exchanges with residents and site managers that interviews alone would not have captured. Observation focused on students' engagement in the learning process, their interactions with the cultural heritage environment, and the various experiences that emerged throughout the field-based learning activities. Observation data were used to complement and enrich the information obtained from interviews and documentary sources.

Semi-structured interviews were conducted with students, the history teacher, the heritage educator, the cultural heritage expert, and the academic expert to obtain a deeper understanding of students' learning experiences, the educational value of the heritage area, the function of the site as a pedagogical space, and its potential utilization as an experiential learning resource. The semi-structured format allowed participants to elaborate on their perspectives while enabling the researcher to explore issues relevant to the study objectives in greater depth.

Documentation served as supporting data and included photographs of learning activities, field notes, student worksheets, reflective learning reports, and other documents related to the research implementation. These documentary materials were used to verify, strengthen, and supplement the findings obtained through observations and interviews, thereby contributing to a more comprehensive understanding of the educational potential of the Yogyakarta Philosophical Axis as a pedagogical space.

Research Procedure

The study was conducted through four main stages. The first stage involved preparation, including developing learning materials, selecting observation routes and key sites within the Yogyakarta Philosophical Axis, and designing research instruments. The second stage involved implementing an experiential learning program conducted directly within the study area. During this stage, students participated in various activities, including field observations, environmental exploration, identification of cultural heritage elements, and group discussions to interpret findings gathered throughout the learning process. Students' active engagement in authentic learning contexts reflects the core principles of experiential learning, which emphasize concrete experience as the foundation for knowledge construction through processes of observation, reflection, conceptualization, and meaning-making (Tania & Dianti, 2026).

The third stage involved data collection through observations, interviews, and documentation conducted during and after the learning activities. The fourth stage consisted of reflection and evaluation, aimed at identifying students' learning experiences, their understanding of cultural heritage, and the educational opportunities that emerged through direct interaction with the learning environment.

Data Analysis

The data were analyzed using the interactive model proposed by Miles, Huberman, and Saldaña, which comprises three interrelated processes: data condensation, data display, and conclusion drawing/verification (Miles et al., 2014). Interview data were transcribed, reviewed, and selectively coded to focus on information relevant to the study's objectives. The resulting data were then organized into matrices, thematic categories, and descriptive narratives to facilitate interpretation. Conclusions were drawn and continuously verified by comparing emerging interpretations across multiple sources of evidence to ensure the consistency and credibility of the findings (Miles et al., 2014; Flick, 2023).

Thematic analysis was employed to systematically identify patterns of experience, meaning, and interpretation emerging from participants' narratives (Braun & Clarke, 2021). This procedure was positioned within the interactive model and not alongside it. Coding and theme development were carried out as operations of the data condensation stage. The resulting themes were then arranged through data display and subsequently tested during conclusion drawing and verification (Miles et al., 2014). Through coding, categorization, and theme development, the analysis focused on students' learning experiences, their interpretations of cultural heritage, the development of interpretive skills, and the potential of the Yogyakarta Philosophical Axis as a pedagogical space. This approach enabled a deeper understanding of how direct engagement with a cultural heritage environment contributes to the formation of contextual, reflective, and meaningful learning experiences (Kolb, 2014).

The interview excerpts presented in the following section were selected because they express the recurring patterns of the participant group in the clearest available formulation. The quotations, therefore, function as representative illustrations of shared patterns, and they are not intended to exhaust the corpus. Consequently, the absence of a particular participant code in the excerpts does not indicate that the participant's data were excluded from the analysis.

Trustworthiness of the Data

The trustworthiness of the data was ensured through source triangulation and methodological triangulation. Source triangulation was conducted by comparing information obtained from different participants, while methodological triangulation involved cross-checking data derived from observations, interviews, and documentary evidence. These strategies were employed to enhance the credibility, dependability, and confirmability of the research findings (Creswell, 2013; Flick, 2023).

Ethical Considerations

The field activity was an outing class within the school's regular history program and not an additional research procedure. Written permission was obtained from SMA Negeri 9 Yogyakarta, which acted in loco parentis. Students were informed of the purpose of the study and the intended use of the findings, and their assent was obtained in advance. Participation was voluntary, and students could withdraw without any consequence for their assessment. The teacher and the three expert participants were interviewed only after giving informed consent. Identifying information was removed during transcription, and participants are referred to by code (S1-S10, HT, HE, CHE, AE). Photographs were presented without identifiable images of students.

FINDINGS

The Yogyakarta Philosophical Axis Area as a Pedagogical Space

In response to the first research question, the findings indicate that the Yogyakarta Philosophical Axis functions as a pedagogical space rather than merely a heritage area or tourist destination. Its educational potential derives not only from the historical buildings along the corridor but also from the philosophical, historical, social, and cultural values embedded in the landscape.

One of the area's primary strengths lies in the philosophical values embodied in its spatial organization. The heritage educator explained that the uniqueness of the Yogyakarta Philosophical Axis extends beyond its physical features, encompassing fundamental messages about the human journey through life. According to the informant, the area serves as a reminder of human origins and ultimate destiny, as reflected in the Javanese philosophical traditions that continue to shape Yogyakarta's cultural identity.

"The main uniqueness of the Philosophical Axis concerns the fundamental aspects of human life. It reminds us of where we come from and where we will ultimately return." (HE)

The academic participant expressed a similar perspective. According to the informant, the Yogyakarta Philosophical Axis is distinguished by its cosmological spatial arrangement that links key landmarks such as Panggung Krapyak, the Yogyakarta Palace, Tugu Yogyakarta, and Mount Merapi. This spatial configuration embodies the Javanese concepts of *Sangkan Paraning Dumadi* (the origin and purpose of existence) and *Manunggaling Kawula Gusti* (the unity between humanity and the Divine), which convey philosophical values concerning the relationships among human beings, God, society, and the natural world (Permono, 2021).

Beyond its philosophical significance, the area also possesses extensive educational value, as it reflects multiple layers of Yogyakarta's historical development. The cultural heritage expert explained that the area can be used to study the founding of Yogyakarta, traditional urban planning, land-use changes, and various historical events that have shaped the city's development.

"The Philosophical Axis contains important meanings related to the history of Yogyakarta's establishment. In addition to history and life philosophy, students can also learn about urban planning, past disasters, land-use changes, and culture." (CHE)

The interview findings suggest that the area provides not only historical learning resources but also opportunities for multidisciplinary learning. According to the participants, various locations along the corridor can be used to study history, geography, culture, language, religion, sociology, and urban planning. The heritage educator noted that the area can even support learning about the Javanese script and religious values embedded in Javanese philosophy. This view was reinforced by the academic participant, who described the Yogyakarta Philosophical Axis as an open learning environment where students can gain a deeper understanding of multiple dimensions of life through direct engagement with a heritage landscape.

"This area can be understood as an open cultural laboratory that enables students to learn directly about the relationships among space, history, culture, and community life." (AE)

These perspectives indicate that the area's educational potential extends beyond the acquisition of historical knowledge. It also supports the development of interdisciplinary understanding by connecting spatial, cultural, environmental, and social dimensions of human life. Such characteristics enable the area to function as a rich learning environment that fosters contextualized learning experiences.

This interpretation is consistent with the experiences of the history teacher who utilized the area as a learning site. According to the teacher, the Yogyakarta Philosophical Axis was selected because it offers a cultural environment rich in historical and philosophical values that cannot be fully conveyed through textbook-based instruction alone.

"The Yogyakarta Philosophical Axis was selected because it is a cultural space rich in historical, philosophical, and cultural values that cannot be obtained solely from textbooks." (HT)

The history teacher further explained that each spatial element along the route from Tugu Yogyakarta to Panggung Krapyak carries meanings that can help students develop a more authentic understanding of history, local wisdom, and Yogyakarta's cultural identity. Moreover, the presence of numerous historical sites and heritage buildings throughout the corridor allows students to explore Yogyakarta's development across different historical periods, from the early Sultanate era to the present day.

Another characteristic supporting the pedagogical function of the area is its accessibility and the interconnectedness of its learning resources. Both the history teacher and the heritage educator emphasized

that the area is centrally located in Yogyakarta, making it easily accessible to students. Furthermore, the presence of historic buildings, museums, public spaces, interpretive information boards, and ongoing community activities provides students with direct opportunities to observe the connections between the past and the present.

"Along the Philosophical Axis, there are many layers of history that can be interpreted and discussed, so students learn not only about the Axis itself." (HE)

"The location is easily accessible from the school and has great potential as a learning resource. Moreover, every corner contains cultural and historical values from different periods." (HT)

The participants' perspectives demonstrate that the pedagogical function of the Yogyakarta Philosophical Axis is supported not only by its heritage values but also by its accessibility, the diversity of learning resources, and its strong connections to contemporary community life. These conditions enable students to relate concepts learned in the classroom to social, cultural, and historical realities that can be directly observed and experienced.

Overall, the findings suggest that the Yogyakarta Philosophical Axis possesses characteristics that strongly support its role as a pedagogical space. This potential is shaped by the integration of philosophical, historical, cultural, and spatial values, as well as by a living social environment that continues to evolve. Participants emphasized that the educational value of the area lies not merely in the presence of heritage objects and sites, but also in its capacity to provide learning experiences that enable students to directly understand the interrelationships among space, history, culture, and community life. As highlighted by the academic participant, the area can be viewed as an open cultural laboratory that offers opportunities for learning through interaction with an authentic environment (AE).

With these characteristics, the area functions not only as a site for heritage preservation but also as an authentic learning environment where students construct understanding through observation, exploration, interpretation, and reflection on the phenomena they encounter. The findings indicate that the area's pedagogical function emerges from the dynamic relationship between the space's characteristics and students' learning experiences. Therefore, the Yogyakarta Philosophical Axis should be understood not only as a cultural space but also as a pedagogical space that supports contextual, participatory, and meaningful history learning. Selected sites along the corridor, the historical periods they represent, and their curriculum alignment are presented in Table 1.

Table 1. Selected Heritage Learning Sites within the Yogyakarta Philosophical Axis Area and Their Alignment with the Indonesian History Curriculum

No.	Site / Location and Establishment Period	Historical Period(s) Represented	Curriculum Alignment**)	Historical Significance and Learning Potential
1.	Tugu Yogyakarta (formerly Tugu Golong Gilig, rebuilt as De Witte Paal after the 1867 earthquake)	Islamic Kingdoms, Colonial Period, Independence, New Order, Reform Era	IPS Phase E; History Phase F	Symbol of the Yogyakarta Sultanate and the Philosophical Axis; it can be used to study the establishment of Yogyakarta, Javanese cosmology, urban development, and continuity and change across historical periods.
2.	Tugu Station (1887)	Colonial Period, National Movement, Japanese Occupation, Independence	History Phase F	Represents colonial transportation modernization, railway development, economic mobility, and wartime logistics.
3.	Former Hotel Toegoe (early 20th century)	Colonial Period, National Movement, Independence	History Phase F	Illustrates the development of colonial urban facilities,

No.	Site / Location and Establishment Period	Historical Period(s) Represented	Curriculum Alignment**)	Historical Significance and Learning Potential
4.	Grand Hotel de Djokja (early 20th century)	Colonial Period, National Movement, Independence	History Phase F	tourism, and economic activities along Malioboro. One of the oldest modern hotels in Yogyakarta reflects colonial urban life, tourism, and social interaction between Europeans and indigenous communities.
5.	Jogja Library Center (former N.V. Boekhandel en Drukkerij Kolff-Buning) (c. 1920s)	Colonial Period, National Movement	History Phase F	Represents the development of literacy, publishing, print culture, and the dissemination of nationalist ideas.
6.	Regional House of Representatives of Yogyakarta Special Region (DPRD DIY) / Former Loge Mataram Building (19th century)	Colonial Period, Independence, New Order, Reform Era	History Phase F	Demonstrates governmental administration, bureaucratic development, regional governance, and democratization processes.
7.	Pasar Beringharjo (1758)	Islamic Kingdoms, Colonial Period, Independence, Reform Era	IPS Phase E; History Phase F	Illustrates traditional and modern trade networks, economic continuity, and urban growth.
8.	Gedung Agung (1824)	Colonial Period, Independence	History Phase F	Former presidential residence and government center during the Indonesian Revolution; relevant to independence and state formation.
9.	Fort Vredeburch (1760–1787)	Colonial Period, National Movement, Japanese Occupation, Independence	History Phase F	Important site for studying colonial control, resistance movements, nationalism, and the Indonesian Revolution.
10.	Kampung Kauman (late 18th Century)	Islamic Kingdoms, National Movement, Independence	IPS Phase E; History Phase F	Important for studying Muhammadiyah, Islamic reform movements, and Indonesian nationalism.
11.	Keraton Yogyakarta (1755–present)	Islamic Kingdoms, Colonial Period, Independence, Reform Era	IPS Phase E; History Phase F	Political and cultural center of the Yogyakarta Sultanate. Supports learning about the Gadjah Mada Agreement, Javanese kingship, cultural heritage, colonial relations, national identity, and Yogyakarta's role during the Indonesian Revolution.
12.	Panggungruko (c. 1760)	Islamic Kingdoms, Colonial Period, Independence, Reform Era	IPS Phase E; History Phase F	An integral component of the Philosophical Axis representing the human life cycle in Javanese cosmology. Provides opportunities to explore spatial symbolism, cultural heritage interpretation, environmental

No.	Site / Location and Establishment Period	Historical Period(s) Represented	Curriculum Alignment**)	Historical Significance and Learning Potential
				history, and the relationship between culture and landscape.

Note:

*) Table 1 presents selected examples of heritage sites located within the Yogyakarta Philosophical Axis Area. Additional sites along the corridor also possess historical and educational potential relevant to the Indonesian history curriculum.

**) Based on the learning outcomes stipulated in the Decree of the Head of the Agency for Standards, Curriculum, and Educational Assessment No. 046/H/KR/2025 (Badan Standar, Kurikulum, dan Asesmen Pendidikan, 2025).

Source: Authors' compilation based on field observations, interviews, and documentation (2026).

The sites presented in Table 1 demonstrate that the Yogyakarta Philosophical Axis encompasses multiple layers of history representing various periods, ranging from the era of Islamic kingdoms to the Reform Era. This historical diversity gives the area significant potential to support history learning across multiple curriculum outcomes, while also providing opportunities for students to develop understanding through direct experiences and interactions with the cultural heritage environment.

Students' Learning Experiences Through Experiential Learning

In response to the second research question, which concerns the learning experiences that emerge when students engage with the area through experiential learning, analysis of the observation, interview, and documentation data generated five major themes that characterize students' learning experiences during educational activities conducted in the Yogyakarta Philosophical Axis. These themes include learning engagement, historical interpretation, meaningful and contextual learning, cultural heritage awareness, and social interaction and collaborative learning. These learning experiences emerged from students' direct engagement with the cultural heritage environment, enabling them to construct understanding through field-based activities. A summary of the identified themes is presented in Table 2.

Table 2. Key Themes of Students' Learning Experiences within the Yogyakarta Philosophical Axis as a Pedagogical Space

No.	Theme	Indicators	Key Findings	Educational Implications
1.	Learning Engagement	Participation in observation, discussion, field exploration, and questioning activities	Students demonstrated higher levels of engagement and enthusiasm compared to classroom-based learning.	Encourages active learning and strengthens students' connection with historical content
2.	Historical Interpretation	Ability to connect space, historical events, cultural meanings, and philosophical values	Students were able to interpret heritage spaces as part of historical processes and understand the relationships between space and past events.	Develops historical thinking and historical interpretation skills
3.	Meaningful and Contextual Learning	Ability to relate learning content to direct field experiences	Learning experiences became more concrete, easier to understand, and more relevant to students' lives	Enhances conceptual understanding and meaningful learning
4.	Cultural Heritage Awareness	Understanding of cultural values, the philosophy of the	Students demonstrated appreciation for cultural heritage and awareness of the	Strengthens cultural identity and awareness of heritage preservation

No.	Theme	Indicators	Key Findings	Educational Implications
	and Cultural Understanding	area, and the importance of preservation	importance of preserving historical sites	
5.	Social Interaction and Collaborative Learning	Group work, communication, interviews, and interaction with the surrounding community	Students developed communication, collaboration, and social interaction skills through field-based activities.	Supports the development of social and collaborative competencies in learning

Source: Authors' compilation based on field observations, interviews, and documentation (2026).

As shown in Table 2, students' learning experiences in the Yogyakarta Philosophical Axis extended beyond merely enhancing their understanding of historical content. Direct interaction with the cultural heritage environment generated learning experiences encompassing cognitive, affective, and social dimensions. Students demonstrated greater engagement in the learning process, improved abilities to interpret historical spaces, a more meaningful understanding of the subject matter, and increased awareness of the importance of cultural heritage preservation. These findings suggest that experiential learning within heritage environments can create more contextualized and meaningful learning experiences for students (Yudha, 2025).

Student Learning Engagement and Historical Interpretation

The findings indicate that learning activities conducted within the Yogyakarta Philosophical Axis fostered higher levels of student engagement than conventional classroom-based instruction. Nearly all students reported that direct learning experiences provided greater opportunities for observation, exploration, discussion, and interaction with the surrounding environment. Under these conditions, students were not merely recipients of information but became actively involved in information seeking, environmental exploration, and knowledge construction. One student explained that field-based learning provided more opportunities for communication and collaboration with peers than classroom learning:

"I was much more active because in the field we could communicate more with our team members. In the classroom, it feels more monotonous because usually only the teacher explains the material." (S1)

Similar views were expressed by other students, who stated that direct learning experiences enabled them to observe objects and explore the environment more freely, making the learning process more engaging.

"I felt more actively involved in learning when studying directly in the area than when learning in the classroom because I could directly observe objects and physically explore the site." (S2)

"Experiencing Yogyakarta's historical trail together with my classmates made me more actively engaged because my curiosity increased when I could directly see Yogyakarta's historical heritage." (S3)

The increased engagement was also observed by the history teacher who accompanied the learning activities. According to the teacher, students displayed greater enthusiasm when learning in the field because they were directly confronted with the objects and places they were studying.

"Student engagement was significantly higher when learning in the area compared to the classroom. They appeared more enthusiastic, asked more questions, and were emotionally engaged because they interacted directly with the objects being studied." (HT)

A similar perspective was expressed by the heritage educator, who noted that students tended to ask more questions and demonstrate greater curiosity when learning directly on-site rather than through textbooks or classroom explanations.

"Many participants are more enthusiastic when learning directly at the site because they do not have to imagine where the location is while the material is being explained." (HE)

These findings suggest that student engagement increases when learning occurs in environments that enable direct interaction with authentic objects, spaces, and learning resources.

Beyond enhancing engagement, direct experiences within the Yogyakarta Philosophical Axis also contributed to the development of students' historical interpretation skills. Interview data revealed that students did not merely observe the buildings and spaces they visited but also began connecting these places with historical events, cultural values, and the philosophical meanings embedded within them.

Several students reported that the field activities helped them understand meanings that they had not previously recognized.

"I learned that Yogyakarta's imaginary axis actually contains very profound philosophical meanings." (S4)

"I gained a deeper understanding of the meaning of the human life journey reflected in the arrangement of the Philosophical Axis." (S8)

Similar responses emerged from other students, who began to relate the area's spatial organization to the philosophical values that shaped its formation.

"I came to understand that the Philosophical Axis symbolizes the balance between worldly and spiritual life." (S2)

"I gained a better understanding of the relationship between Mount Merapi, the Yogyakarta Palace, and Parangtritis Beach, which reflects the philosophy of human life, including the concept of Sangkan Paraning Dumadi." (S5)

In addition to understanding the philosophical significance of the area, students also began linking the physical characteristics of buildings and spaces to the historical processes that shaped them.

"By observing the buildings, I could understand why their history developed the way it did." (S1)

This perspective aligns with that of the academic participant, who argued that the spatial organization of the Yogyakarta Philosophical Axis contains symbols, narratives, and cultural representations that help students understand the relationship between space and historical processes. According to the academic, the area enables students to read historical traces embedded in the urban landscape, allowing learning to move beyond the acquisition of factual knowledge toward the interpretation of the broader historical and cultural contexts that shaped those realities (AE).

The development of these interpretive abilities demonstrates that students acquired not only factual information about the area's history but also a deeper understanding of the relationships among space, history, culture, and the philosophical meanings that contribute to the area's identity. These findings indicate that direct interaction with cultural heritage environments can foster the development of historical interpretation skills through observation, meaning-making, and the integration of spatial elements into broader historical contexts.

Meaningful and Contextual Learning

Direct experiences within the Yogyakarta Philosophical Axis also contributed to more meaningful, contextual learning than learning that relied solely on textbooks or classroom instruction. Students' physical presence at the site made the learning content more concrete, easier to understand, and more memorable. One student explained:

"In the classroom, I could only imagine what it was like. By going directly to the site, I was able to understand it much better." (S1)

A similar view was expressed by another student, who emphasized that visual and sensory experiences gained through direct observation during field activities helped deepen understanding of the subject matter.

"Learning directly in the area provides visual and sensory experiences that offer new perspectives." (S2)

"Learning directly in the area provides a more authentic experience and is easier to remember." (S8)

The history teacher explained that the learning program was designed through a sequence of activities, including preliminary orientation, field observation, interviews, documentation, group discussions, and post-

activity reflection. Through these stages, students were given opportunities to construct understanding based on their firsthand experiences.

"Students do not merely listen; they experience, engage with, and personally interpret the values embedded within the area." (HT)

These findings suggest that concrete experiences gained through direct interaction with the cultural heritage environment contribute to more contextualized and meaningful learning. Direct observation of spaces, buildings, and cultural activities provides learning experiences that are difficult to achieve through textbook-based instruction or classroom lectures alone. Such experiences enable students to connect abstract concepts with real-world contexts, thereby facilitating deeper understanding and long-term retention of knowledge.

Cultural Heritage Awareness and Cultural Understanding

Another dimension emerging from students' learning experiences was the development of cultural heritage awareness and a deeper understanding of the values embedded within the heritage landscape. Interview findings revealed that students not only acquired historical knowledge but also gained insights into the cultural meanings underlying the area's existence. One student stated:

"I have become more proud of my cultural heritage and have gained a greater understanding of the importance of preserving and protecting it." (S5)

Another student explained that the field activities helped them understand the relationships among human beings, culture, and the environment, as reflected in the area's philosophy.

"The area does not only possess historical value, but also embodies cultural values such as balance in life and the relationships among humans, God, society, and nature." (S8)

These findings were reinforced by the heritage educator, who noted that participants in educational activities generally developed a stronger understanding of the importance of safeguarding and preserving cultural heritage after learning about the values embedded in the area (HE). This perspective is consistent with the history teacher's assessment:

"The development of patriotism, appreciation for ancestral heritage, tolerance, and awareness of the importance of preserving local culture are among the outcomes generated through these learning activities." (HT)

Overall, the findings suggest that experiential learning in cultural heritage environments contributes not only to students' historical understanding but also to the development of cultural appreciation and a heightened awareness of the importance of preserving cultural heritage for future generations. Through direct engagement with heritage sites and their associated meanings, students are encouraged to develop a stronger sense of cultural identity and responsibility toward the conservation of cultural resources.

Social Interaction and Collaborative Learning

Another theme emerging from the interview data was the development of social interaction and collaborative skills among students during field-based learning activities. Unlike classroom instruction, which is often teacher-centered, learning activities in the Yogyakarta Philosophical Axis provided opportunities for students to collaborate, engage in discussions, conduct interviews, and interact with local communities and site managers.

One student explained that one of the most memorable aspects of the learning experience was interacting directly with residents and site administrators:

"We interacted with residents and site managers to request permission to collect information. From that experience, I learned that activities like this require proper ethics in the field." (S1)

Another student similarly stated that interviews with community members were among the most valuable activities for understanding the learning material.

"I had the opportunity to meet residents directly and conduct interviews with people living in the area." (S7)

"Yes, I was more actively involved because there was a lot of direct interaction with the community." (S7)

In addition to community interaction, students emphasized the importance of teamwork in supporting the learning process.

"Through group discussions, I was able to exchange ideas and gain new perspectives on different issues." (S9)

Similar views were expressed by other students who believed that the field activities helped them develop responsibility and cooperation with their peers.

"This activity taught us to be responsible and to work together with our classmates." (S3)

"We helped one another and learned together, which made the activities more enjoyable." (S4)

These findings are consistent with the history teacher's perspective, who explained that field-based learning helped students develop communication skills, teamwork, critical thinking, and the ability to discuss and interpret findings from field observations (HT).

Overall, the findings indicate that experiential learning within the Yogyakarta Philosophical Axis supports not only the acquisition of historical knowledge but also the development of social and collaborative competencies essential to twenty-first-century learning (Adiputra & Hidayah, 2025). Through direct interaction with peers, local communities, and heritage practitioners, students engaged in collaborative knowledge construction while strengthening interpersonal and communication skills in authentic learning contexts.

From Urban Space to Pedagogical Space

In response to the third research question, the findings indicate that the educational function of the Yogyakarta Philosophical Axis is not determined solely by heritage sites, historic buildings, or embedded cultural values. It emerges from the interaction between the characteristics of the space and students' learning experiences, whereby an urban heritage space undergoes a functional transformation when used as a learning environment that enables observation, exploration, interpretation, and reflection (AE).

This transformation illustrates that space is not merely an object of study but also a medium that actively facilitates knowledge construction. Such a perspective aligns with the concept of pedagogical space, which views space as integral to learning and meaning-making through interactions among learners, the environment, and educational activities (Cleveland & Mahat, 2026). Consequently, the educational value of the area lies not only in its physical heritage assets but also in the learning experiences generated through students' active engagement with the environment, consistent with experiential learning theory, which emphasizes direct experience as a primary source of knowledge construction (Kolb, 2014).

The transformation occurs through a series of interconnected processes. The initial stage begins when students directly engage with the space and its various elements, including historic buildings, public spaces, cultural symbols, and ongoing community activities. Such interactions stimulate observational processes that enable students to identify information previously encountered only through textbooks or classroom instruction. Based on the interview findings, direct observation helped students develop a more concrete understanding of the relationships among space, history, culture, and community life. In this context, urban space is no longer a passive backdrop to historical events but rather a learning resource that offers opportunities to construct understanding through authentic experiences.

The observation process subsequently develops into interpretation and meaning-making. The findings reveal that students not only recognized the objects they observed but also began to connect spatial elements to the philosophical meanings, cultural values, and historical events underlying them. This ability was evident when students explained the significance of Yogyakarta's imaginary axis, the concept of *Sangkan Paraning Dumadi*, and the relationship among Mount Merapi, the Yogyakarta Palace, and Parangkusumo on the southern coast within the framework of Javanese cosmology. These findings indicate that learning experiences in the area extend beyond recognizing historical facts and evolve into interpretive processes that enable

students to develop a deeper understanding of the meanings embedded in the landscape and its historical significance.

In addition to fostering interpretive abilities, learning experiences in the area also promote reflective processes that strengthen knowledge construction and cultural awareness. Through discussions, interviews, documentation activities, and post-visit reflections, students had opportunities to connect their experiences with prior knowledge. Participants' perspectives suggest that this process resulted in more meaningful learning because students were able to recognize the relationships among history, cultural heritage, and contemporary life. At the same time, students developed a greater awareness of the importance of safeguarding and preserving the area as a living cultural heritage and an integral part of cultural identity. Consequently, the learning experiences generated within the area contributed not only to cognitive understanding but also to the development of affective dimensions that support historical consciousness and cultural awareness.

Taken together, these findings suggest that the transformation of urban space into a pedagogical space can be understood as a process that unfolds through students' direct engagement, observation, interpretation, and reflection during learning activities. Under these conditions, space no longer functions merely as the setting in which learning takes place but becomes an integral component of knowledge construction. The authentic, contextual, participatory, and reflective characteristics of the Yogyakarta Philosophical Axis facilitate learning experiences that go beyond information transmission and foster deeper understanding. These findings demonstrate that cultural heritage landscapes can function as active learning environments that effectively support experiential learning.

DISCUSSION

From Historical Space to Pedagogical Space in History Learning

The findings are interpreted here against three frameworks. The first is the experiential learning cycle proposed by Kolb (2014), in which concrete experience, reflective observation, abstract conceptualization, and active experimentation form a sequence through which experience is converted into knowledge. The second is place-based education, which treats the locality itself, along with the community members and practitioners who inhabit it, as a source of curriculum rather than a backdrop for instruction (Yemini et al., 2025). The third is the provision in Indonesian curriculum policy that allows schools to enrich subject learning through co-curricular activity designed with external partners (Ministry of Education, Culture, Research, and Technology, 2024), which is the policy space within which the program examined here was possible at all.

Read against the first of these, the findings indicate that students' learning experiences within the Yogyakarta Philosophical Axis reflect the core characteristics of experiential learning: learning constructed through direct experience and reflection on that experience. Unlike classroom-based instruction, which often emphasizes the transmission of information, learning activities in the area enabled students to observe objects, interact with the environment, explore, and construct understanding from their own experiences. This was evident in students' increased engagement, the development of historical interpretation skills, and a more meaningful understanding of the learning material. These findings suggest that direct experience serves as a bridge between academic concepts and the realities students encounter in the field.

This claim rests on convergent evidence from three participant groups and not on student self-reports alone. Students described a change in their roles during the lesson, moving from receiving an account to producing one. S1 contrasted field learning with classroom instruction in which only the teacher explains the material, whereas S2 reported being able to observe objects and physically explore the site. The history teacher independently corroborated this shift, noting that students asked more questions and were more emotionally engaged because they interacted directly with the objects under study (HT). The heritage educator attributed the change to the removal of a specific imaginative burden, because participants no longer had to picture an absent location while an explanation was being delivered (HE). This convergence of student, teacher, and

practitioner accounts on the same mechanism is analytically important. Engagement gains reported in field-learning studies are frequently vulnerable to novelty effects, in which enthusiasm reflects a break from routine rather than the learning environment itself. The account given by HE, however, is difficult to explain by novelty alone, because it identifies a particular cognitive load that the site removes, namely, the effort of mentally constructing an absent referent.

The results are consistent with experiential learning theory, which positions experience as the primary foundation of knowledge construction. In this study, concrete experiences were gained through students' direct interaction with spaces, buildings, cultural symbols, and social activities within the area. These experiences were followed by observation, discussion, interpretation, and reflection, enabling students to develop new understandings of Yogyakarta's history and culture. Consequently, learning was no longer a passive process of receiving information but rather an active process of knowledge construction shaped by experience and interaction with the learning environment.

Beyond promoting deeper understanding, learning experiences within the area also demonstrate how environments outside the classroom can expand students' learning spaces. The findings suggest that experiential history learning not only enhances content mastery but also provides opportunities for students to develop curiosity, critical thinking, and reflective skills, as well as the collaborative and communicative capacities associated with twenty-first-century learning (Adiputra & Hidayah, 2025). Therefore, the use of cultural heritage environments in the learning process can be viewed as an effort to create more authentic, contextual, and student-centered learning experiences (Yudha, 2025).

The collaborative dimension of these experiences warrants separate attention because it operated through two channels that placed different demands on students. Within the group, work was organized around shared tasks. Students reported that the discussion gave them access to perspectives they would not have reached on their own (S9) and that the activity required responsibility toward their classmates (S3, S4). Beyond the group, students negotiated directly with residents and site managers in order to obtain permission and gather information (S1, S7). This second channel produced an outcome that classroom instruction rarely provides, as one student reported learning that fieldwork of this kind carries ethical obligations toward the people who hold the information (S1). Eliciting testimony from community members is documented as a means by which students come to grasp the values they study (Dölek et al., 2025), and the present data indicate that such encounters also teach the conduct this form of inquiry requires.

Heritage Landscape as a Pedagogical Space

One of the most significant findings of this study is the emergence of the Yogyakarta Philosophical Axis's pedagogical function beyond its role as a cultural heritage site. The findings demonstrate that the area functions not only as an object of study but also as an environment that actively supports learning processes. This characteristic is reflected in the presence of various spatial elements that enable students to engage in direct observation, interpretation, discussion, and reflection. In this context, space becomes an integral component of learning rather than merely a setting for educational activities.

This finding is consistent with the concept of pedagogical space, which views space as a factor shaping students' learning experiences. From this perspective, physical, social, and cultural environments are regarded as essential components of education because they influence how learners understand and construct meaning. Within the Yogyakarta Philosophical Axis, the interconnectedness of space, history, culture, and community life creates a learning environment that provides experiences difficult to achieve through textbook-based instruction alone. Consequently, the heritage landscape can be understood as a medium that connects academic knowledge with real-world contexts.

The findings also support previous studies that emphasize the importance of place-based learning in history and cultural education. However, this study demonstrates that the mere presence of historical sites or heritage places does not automatically lead to meaningful learning. The pedagogical function of the area emerges when students are given opportunities to interact with the environment actively, interpret the

meanings embedded in it, and reflect on their experiences throughout the learning process. In other words, a space becomes pedagogical not simply because of its physical characteristics, but because of the learning processes that occur within it.

At this point, the findings depart from the existing literature instead of confirming it. Studies of heritage as a source of local history learning typically infer pedagogical value from the historical density of the site itself (Hartati, 2020), and the present data do not support that inference. Participants described the same corridor as a tourist destination, a commuting route, a commercial district, and a learning environment. Its pedagogical function appeared only where a route had been selected, tasks assigned, questions posed, and reflection scheduled. This result is consistent with evidence that the educational effect of a site depends on mediation (Nowacki, 2021) and with scholarship that treats heritage as a practice (Smith, 2020). The present study extends that scholarship by locating the practice in the learner and not in the interpreter.

Developing Historical Understanding Through Direct Engagement with Heritage

The findings demonstrate that students' direct engagement with the cultural heritage landscape contributed to a deeper understanding of history. Students not only acquired information about past events but also began to recognize the relationships among space, culture, and history that shape a place's identity. This was evident when students connected various spatial elements with philosophical values, Javanese cosmology, and the historical development of Yogyakarta. These findings suggest that history learning grounded in direct experience enables students to understand history as a process embedded in everyday spaces rather than merely as a collection of facts to be memorized.

These results are consistent with studies on historical thinking, which emphasize the importance of interpretive skills in history education. From this perspective, history learning is intended not only to enhance factual knowledge but also to develop students' abilities to interpret evidence, understand historical contexts, and construct meaning from diverse historical sources. Cultural heritage environments provide favorable conditions for this process because students can directly observe historical traces still visible in the urban landscape. Consequently, heritage sites can function as valuable learning resources that support the development of contextual and reflective historical understanding.

The evidence for this interpretive development is traceable in the data. Students moved from describing what they saw to explaining why it was arranged as it was. S4 recognized the philosophical meanings carried by the axis; S5 articulated the relationship among Mount Merapi, the Palace, and the southern coast through Sangkan Paraning Dumadi; and S2 formulated the axis as a balance between worldly and spiritual life. The clearest instance of causal-historical reasoning was expressed by S1, for whom observing the buildings made it possible to understand why their history developed as it did. The limits of this development are also evident, as students interpreted meanings made available to them through prior instruction.

Furthermore, the findings indicate that learning experiences within the area helped students recognize the connections among the past, present, and future. Understanding the philosophical meanings of the area, changes in spatial functions over time, and the importance of cultural heritage preservation encouraged students to view history as relevant to contemporary life. These findings suggest that experiential history learning can strengthen students' historical consciousness by linking historical knowledge to the social realities they encounter in everyday life.

Heritage Education and Cultural Awareness

Beyond contributing to historical understanding, this study demonstrates that learning activities within the Yogyakarta Philosophical Axis also support students' cultural awareness. Direct interaction with the cultural heritage environment enabled students to understand the values embedded within the area, including philosophies of life, cultural identity, and the relationships among individuals, society, and the environment. These experiences not only enhanced students' knowledge of local culture but also fostered a greater appreciation of cultural heritage as an integral part of contemporary community life.

These findings are consistent with studies in heritage education, which emphasize the importance of direct experience in developing an understanding of and concern for cultural heritage. Through active engagement with heritage sites and cultural landscapes, students have opportunities to explore the values embedded in these sites and landscapes more deeply than conventional instructional media alone would allow. In the context of this study, the processes of observing, discussing, and reflecting upon the meanings associated with the area encouraged students to view cultural heritage as a valuable resource worthy of preservation and protection.

The development of cultural awareness observed in this study also suggests that history education can contribute to the formation of students' cultural identities. As students gained a deeper understanding of the historical and philosophical meanings embedded in their surroundings, they not only acquired new knowledge but also developed emotional connections with the cultural heritage they encountered. Therefore, the use of heritage landscapes as learning spaces has the potential to support educational experiences that extend beyond cognitive outcomes and contribute to the development of values, attitudes, and cultural awareness.

Contextual Conditions Enabling and Constraining the Pedagogical Function of the Area

The pedagogical function described above was conditioned by contextual factors that determine the model's transferability. Four enabling conditions were evident. The first is spatial accessibility. The corridor is located in the city center. It is accessible from the school at no cost or logistical complexity (HT), allowing a complete cycle to be conducted within one school day. The second is instructional scaffolding. The activity was structured as a sequence of orientation, observation, interviewing, documentation, discussion, and reflection. The third is expert mediation. The heritage educator and the site managers supplied interpretive resources that students could not have reconstructed on their own. The fourth is the living character of the heritage itself, as the corridor remains inhabited and ritually used.

The constraining conditions are equally important. The corridor is simultaneously a tourist destination and a commercial artery, and the resulting crowding, traffic, and noise restricted sustained observation and discussion. The activity was also time-bound, so that reflection was compressed into a single post-visit session rather than alternating with experience, as the model assumes (Kolb, 2014). In addition, access costs and permissions apply unevenly across the corridor. The layered and contested meanings that make the area interpretively rich also raise the risk of superficial readings. Transferability, therefore, depends on the co-presence of accessibility, instructional design, and interpretive support. Both the enabling and constraining conditions are summarized in the lower-right panel of Figure 2.

The 2023 inscription of the corridor is another factor, and its effect is ambivalent (UNESCO, 2023). On the one hand, the inscription generated documentation, signage, and management attention, all of which supported the activity. On the other hand, it foregrounds an authorized account of Outstanding Universal Value. Such an account can narrow interpretation toward a single sanctioned reading, precisely at the point where history education seeks to develop the capacity to weigh competing interpretations.

Conceptual Contribution: From Urban Space to Pedagogical Space

The primary contribution of this study lies in its explanation of how urban space is transformed into a pedagogical space through experiential learning. The findings indicate that this transformation does not occur automatically merely because an area possesses historical significance or cultural heritage status. Rather, it emerges through a series of interconnected processes that involve students' direct engagement with the environment, observation, interpretation of spatial meanings, and reflection on learning experiences. Through these processes, urban space becomes an active component of knowledge construction rather than merely a location for learning.

The mechanism through which this transformation occurs can be specified more precisely than the general claim that experience produces learning. The weakness of that claim is that it leaves the constitution

of the concrete experience itself underspecified (Morris, 2020). Stated at such a level of generality, the claim is difficult to falsify and offers little guidance to a teacher. It does not indicate which features of a setting are doing the work, when in the lesson they matter, or what would be lost if they were absent. A mechanism, by contrast, must identify the components involved, the order in which they operate, and the dependency between them. The failure of one step should then predict a determinate failure downstream, not a diffuse reduction in quality. The data indicate a four-phase sequence. In each phase, the learner draws on a distinct affordance of the landscape, understood as an action possibility that the environment offers to a perceiver who is equipped to take it up (Gibson, 1986). Each phase produces the condition for the next. The phases are described below in the order in which they were observed. The affordances and outcomes of each phase are specified so that the account can be tested against other sites and does not remain a description of this one site.

In the first phase, encounter, the student is bodily present in the corridor and stands before the buildings, open spaces, cultural symbols, and everyday community activity. The affordance at work is materiality, that is, the availability of historical evidence as a tangible object of attention and not as a printed or projected substitute for one. The outcome is a concrete referent that removes the imaginative labor of holding an absent place in mind while an account of it is delivered. This is the mechanism identified by the heritage educator, who explained that participants respond more readily on-site because they no longer need to picture the location. In contrast, the material is being explained (HE). It also corresponds to what students reported when they contrasted imagining the site in the classroom with standing in it (S1). This phase finds its closest parallel in the object-based learning literature, which locates the pedagogical work in direct contact with material evidence rather than in its description (Hannan et al., 2013).

In the second phase, situated observation, the student's attention is directed toward particular features by the task's structure, including the route selected in advance, the worksheet, and the guiding questions posed by the teacher and the heritage educator. The affordance is the corridor's evidentiary density. A large number of legible historical traces are concentrated within a short and walkable stretch of the city, so that a single morning yields more observable evidence than a dispersed itinerary would. The outcome is a set of selected features available for interpretation, and these are the features to which the following phase refers. Observation of this kind does not follow automatically from presence. It depends on a well-designed inquiry that gives the student a reason to attend to one feature rather than another. Research on authentic historical inquiry into local heritage reports the same dependency, as students adopt an investigative stance only when the task provides a purpose for looking (Van Doorsselaere, 2025).

In the third phase, interpretation, the student relates these features to historical events, cultural values, and philosophical schemes, thereby converting observation into inference. Classroom research shows that this move cannot be assumed, as teaching discourse in history lessons tends to settle into contextualization at the expense of activities requiring students to reason critically about the past (Miralles-Sánchez et al., 2025). The affordance in this phase is the layering of the corridor, in which multiple periods are legible within a single sightline, yielding historical meaning. In the fourth phase, reflection and reconstruction, the student relates the interpretation to prior knowledge and to the present through discussion, interviewing, and post-visit review. The affordance is the space's inhabited character, and the outcome is an integrated understanding accompanied by an affective commitment to the heritage. This coupling is documented in classroom work in which students who elicit testimony from older community members come to grasp both the continuity and the alteration of the values they are studying (Dölek et al., 2025).

Figure 2 summarizes the four-phase mechanism together with the affordances on which each phase depends. The left-hand panel locates the mechanism in the corridor, distinguishing the inscribed property that formed the study area, which runs from Tugu Yogyakarta through the Kraton to Panggung Krapyak, from the cosmological reference points of Mount Merapi and the southern coast, which are aligned with the axis but lie outside the inscribed boundary. It aligns each phase with one moment of the experiential learning cycle, pairing encounter with concrete experience, situated observation with reflective observation, interpretation with abstract conceptualization, and reflection and reconstruction with active experimentation, and states the

affordance and outcome attaching to each. The right-hand panel separates the two properties of the resulting pedagogical space, its relational and its temporary and reversible character, from the three conditions under which the sequence completes, namely sequencing, mediation, and task structure. It sets out the contextual conditions that enabled and constrained the sequence in this case.

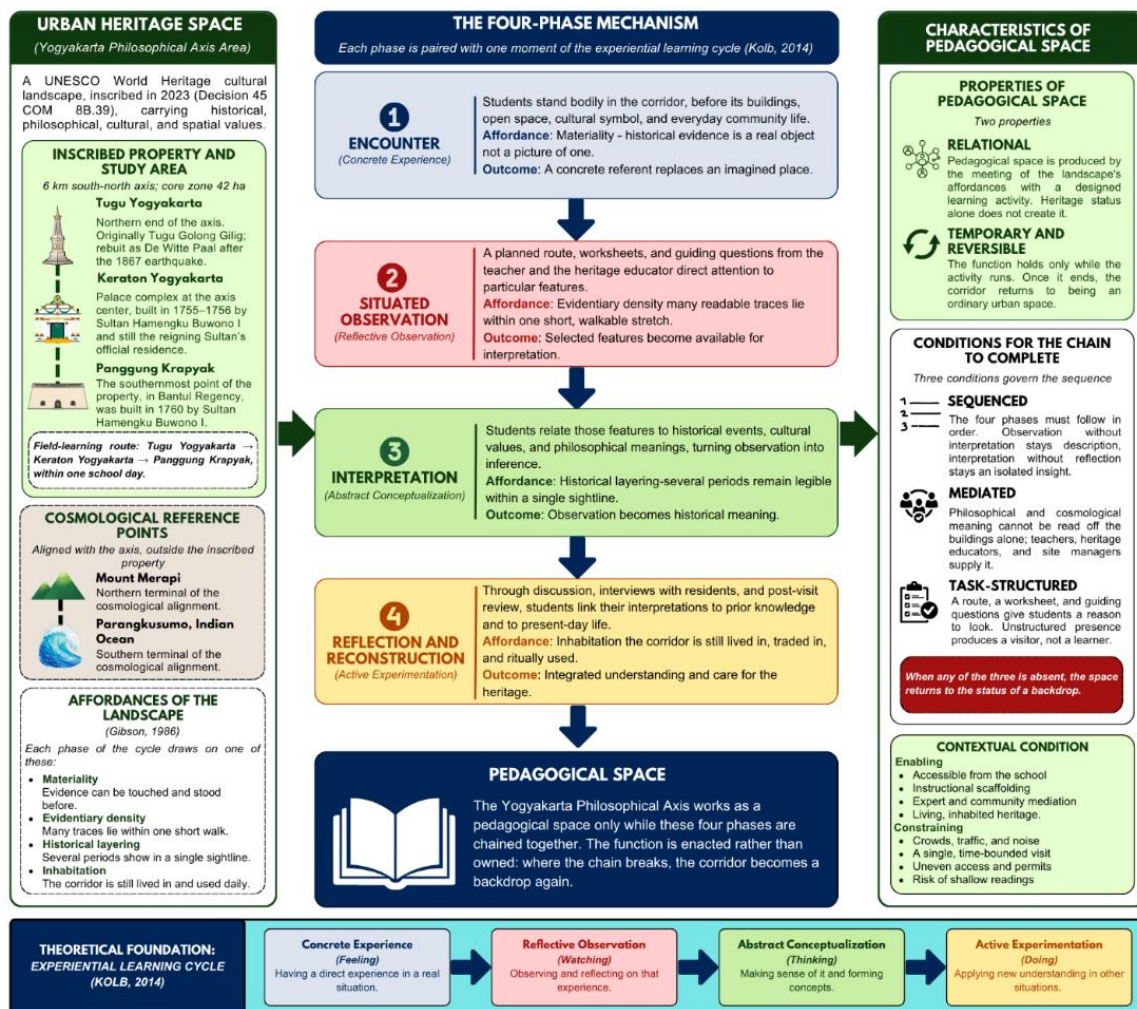


Figure 2. Transformation of Urban Heritage Space into Pedagogical Space through Experiential Learning
Source: Adapted from Kolb's experiential learning theory (Kolb, 2014) and the concept of affordance (Gibson, 1986); developed by the authors (2026).

Space becomes pedagogical when these phases are chained together, because each depends on a property of the environment that a classroom cannot provide. Three conditions govern whether the chain completes. The first is sequencing: observation without interpretation yields description, and interpretation without reflection yields an isolated insight, whereas visits designed to traverse the four stages in order report corresponding gains in attainment (Labib & Abdelsattar, 2025). The second is mediation, because the corridor's cosmological content cannot be recovered through inspection alone (Nowacki, 2021). The third is task structure, because an unstructured presence produces a visitor rather than a learner (Van Doorselaere, 2025). Absent any of the three, the space returns to the status of a backdrop. Figure 2 distinguishes these conditions from the two properties set out below.

Two properties of pedagogical space follow. First, it is relationally produced, arising from the meeting between the landscape's affordances and a designed learning activity, rather than from heritage status, historical density, or inscription. Second, it is temporary, reversible, and therefore non-cumulative, since the function is enacted for the duration of the activity and lapses when the activity ends. Pedagogical space is thus better modeled as a temporary state of a space, a learner, and an activity system than as an attribute of a

location (Cleveland & Mahat, 2026). A further implication is theoretical rather than definitional: this account supplies the environmental dimension that the experiential learning cycle leaves unspecified. Kolb (2014) treats the setting of experience as undifferentiated, whereas the present findings indicate that specific affordances, namely materiality, evidentiary density, historical layering, and inhabitation, attach to specific phases. An environment is pedagogically productive to the extent that it supplies affordances matched to each phase a teacher intends to enact.

These findings contribute conceptually to the fields of pedagogical space and heritage education by demonstrating that a space's pedagogical function is shaped by the interaction between environmental characteristics and students' learning activities. In the context of the Yogyakarta Philosophical Axis, the heritage landscape provides diverse experiential resources that enable students to develop historical understanding, strengthen cultural awareness, and connect knowledge with real-world contexts. Accordingly, pedagogical space can be understood as the outcome of a relational process in which space, experience, and learning activities operate simultaneously.

Based on these findings, this study suggests that urban cultural heritage landscapes have significant potential to be developed as pedagogical spaces that support more contextual, participatory, and meaningful history learning. This perspective expands current understandings of the educational use of heritage areas by positioning them not only as learning resources but also as environments that actively shape students' learning experiences and knowledge-construction processes.

CONCLUSION

The significance of this study lies in its contribution to addressing a problem that history education in Indonesia has not resolved: how to move learning beyond the delivery of accounts that students have no means to test. It demonstrates that a heritage landscape can serve as more than an illustration of the curriculum, placing students in a position to examine evidence, question what they see, and arrive at their own conclusions. The contribution is therefore both practical and conceptual. For teachers, the study offers a basis for designing field learning that provides what a classroom cannot supply: the experience of meeting the past as something material, contested, and still inhabited. For schools and for the institutions that manage inscribed heritage, it indicates that partnership is a condition of that experience and not an accessory to it, because the interpretive resources such learning requires lie outside the school. In terms of policy, it suggests that the co-curricular provision already available to Indonesian schools has educational value that is not yet widely recognized. These contributions rest on a single corridor and one group of participants, and the study cannot establish how far they extend. Comparative work in other inscribed landscapes, together with studies that follow students beyond a single activity, would test whether such experience produces the durable historical understanding that the present study can observe only at the moment of its formation.

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