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AN OUTDOOR LEARNING APPROACH THROUGH THE USE OF CULTURAL HERITAGE SITES TO IMPROVE STUDENTS' CULTURAL LITERACY

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Abstract

This study develops an outdoor learning model utilizing cultural heritage sites to enhance students' cultural literacy. Several nearby sites—such as Pamotan Temple 1 and 2, Lemah Duwur Temple, Pari Temple, and Sumur Temple—serve as contextual learning resources. Using a design-based research (DBR) approach, the development process includes analysis, design, and evaluation stages. Data were collected through literature review, expert review, and model validation. The resulting model comprises five core components: impact, syntax, teacher roles, support systems, and learning principles. The model is deemed feasible for implementation and relevant to promoting meaningful, contextual cultural learning.

Keywords: Cultural Heritage, Outdoor Learning, Cultural Literacy, Design-Based Research, Outdoor Learning Model

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INTRODUCTION

Learning resources in the educational process are essential to develop, as they are closely related to students' learning motivation and interest in the subject matter being delivered. Duffy and Jonassen assert that utilizing a variety of learning resources is an effective strategy to solve problems encountered during the learning process. These learning resources can be identified as messages, people, materials, tools, techniques, and settings. (Duffy & Jonassen, 1992, p. 22). According to Percival and Ellington, in conventional learning settings, the only learning resource utilized by students aside from the teacher is the textbook, while other available learning resources have not yet been optimally utilized. (Percival & Ellington, 2003). To enhance interaction and feedback between teachers and students, it is necessary to utilize learning resources beyond the textbook. Several types of learning resources that can be employed for this purpose include educational radio, television, computers, email, interactive videos, satellite communication, and multimedia computer technology (Mclsaac & Gunawardena, 1996, p. 78).

Contextual learning, also known as Contextual Teaching and Learning (CTL), is an instructional strategy in which the concepts being taught are presented within real-life situations, enabling students to understand the concepts and recognize their relevance and application in everyday life (Hamruni, 2009). In the learning process, the teacher emphasizes students' active engagement in discovering the subject matter and connecting it to real-life situations, thereby encouraging them to apply what they have learned in their daily lives (Hamruni, 2009).

The learning resources used in contextual learning are not limited to textbooks provided by the school. In a study conducted by Prihantoro at SMPN 2 Kedungbanteng, Banyumas Regency, it was found that Social Studies learning was carried out in a monotonous manner and failed to maximize the potential of the surrounding environment as a source of learning (Prihantoro, 2007). Meanwhile, in the current educational context in Indonesia, the learning process generally places greater emphasis on contextual learning, which highlights student engagement in the learning process and the meaningfulness of the subject matter, making it more beneficial and relevant to students' lives.

Social Studies learning within the *Merdeka Curriculum* includes learning outcomes (*Capaian Pembelajaran* or CP) that allow for broad development of instructional components, including learning resources, media, and subject content. When categorized into key thematic focuses, these learning outcomes encompass: self-existence, the relationship between society and its surrounding environment, social and economic change and development, the potential and challenges of Indonesia's development, and the role of individuals as part of both Indonesian and global society in contributing positively to regional and global issues.

With such broad learning outcomes, teachers are granted the flexibility to design instruction based on specific needs—namely, the characteristics of students, the surrounding environment, and the relevance of content deemed meaningful for students' lives. Learning within the *Merdeka Belajar* curriculum emphasizes the development of each student's potential according to their individual interests and talents. Therefore, teachers must recognize that students possess varying abilities in processing and understanding the material (Naufal, Irkhamni, & Yuliyani, 2020). To maximize the achievement of learning objectives, teachers must design engaging instructional experiences that motivate students and foster an enjoyable learning process (Ningrum, 2015).

One effort to create an engaging learning process within a joyful learning environment is to conduct instruction in outdoor settings. Outdoor learning prioritizes students' experiences as the primary outcome of the learning process, allowing them to learn directly through sensory

engagement with the natural environment around them (Nisa, 2015). Outdoor learning is highly suitable for instructional approaches that require students to interact with their surrounding environment—both natural and social—such as in Social Studies subjects. Cultural heritage sites serve as valuable learning resources for a variety of subjects within the context of outdoor learning. In general, *Cultural Heritage* refers to tangible cultural assets in the form of Cultural Heritage Objects, Cultural Heritage Buildings, Cultural Heritage Structures, Cultural Heritage Sites, and Cultural Heritage Areas, located on land and/or in water, which must be preserved due to their significant value for history, science, education, religion, and/or culture through a formal designation process (Undang-Undang, 2010). The term "cultural heritage objects" is used to avoid limitations in the scope of the research, thereby allowing the study to encompass all types of tangible cultural heritage.

In Social Studies education, cultural heritage objects hold significant potential as learning resources, as each regency or city in Indonesia possesses its own unique heritage sites. These cultural heritage objects broaden the scope of learning—not only in relation to the present and the future, but also in terms of understanding how the past influences the present and can be utilized to prepare for the future. The relationship between cultural heritage objects and their surrounding environment embodies core elements of Social Studies concepts, such as the concepts of development, change, and continuity.

Based on observations conducted at several cultural heritage sites in Sidoarjo Regency—namely Pari Temple, Sumur Temple, Tawangalun Temple, Dermo Temple, Pamotan Temple 1 & 2, Medalem Temple, Lemahduwur Temple, Tulangan Sugar Factory, and the Tomb of Raden Husain—it was found that the utilization of these cultural heritage objects as learning resources remains suboptimal. Teachers, as facilitators during the learning process, have shown limited active involvement in linking the cultural heritage objects used as learning sources with the theoretical concepts taught in the classroom. During site visits, the teacher's role was mostly evident in the introductory phase, providing explanations about the purpose of the visit and giving instructions regarding the assignments to be completed by students during and after the visit. The actual learning process related to the cultural heritage sites was largely taken over by the site caretakers. However, their presentations often blended scientific findings with folklore or oral traditions. In certain locations, such as the Tomb of Raden Husain, Pari Temple, and Medalem Temple, explanations tended to rely more heavily on oral traditions and folk narratives rather than scientific explanations.

The existence of cultural heritage objects in relation to cultural identity is highly important for students to study. It is not merely about understanding their historical background, but also about exploring the relationship between these heritage sites and the surrounding community, as well as recognizing the importance of their preservation for the sustainability of community life, including the lives of the students themselves. This aligns with the findings of Tulay Ocal, who stated that to ensure cultural heritage is passed on to future generations, educational institutions hold significant responsibility—particularly within Social Studies subjects at the secondary school level—by emphasizing content related specifically to cultural heritage (Ocal, 2016).

Based on the aforementioned issues, it is essential to design an instructional model that can support both teachers and students in implementing learning activities that utilize cultural heritage sites as learning resources, thereby maximizing the achievement of the intended learning outcomes. The framework of this learning model is developed using cultural heritage sites namely Pari Temple, Sumur Temple, Lemah Duwur Temple, Pamotan Temple 1, and Pamotan Temple 2 as primary learning resources visited during the outdoor learning process.

LITERATURE REVIEW

The utilization of cultural heritage sites as learning resources has been widely implemented in Social Studies subjects at the junior high school level and in History subjects at the senior high school level or their equivalents. The use of cultural heritage refers to the empowerment of such heritage for the greatest benefit of public welfare while maintaining its preservation (Undang-Undang, 2010). This implies that the utilization of cultural heritage must consider a balance between academic, ideological, and economic interests.

A study conducted by Khofifah Nur Rahmah et al., in an article titled *"Utilization of the Cultural Heritage Site 'SDN 14 Pontianak' as a Source for History Learning in Grade XI at Bawari Islamic Senior High School"*, demonstrates that the cultural heritage site was utilized by creating a documentary video about SDN 14 Pontianak, which has been designated as a cultural heritage site. The material was integrated into lessons on colonialism and imperialism. Students were not required to visit the site directly, as the teacher provided videos and photographs to be used during the learning process.

Tiara Nadalia Agutin et al. also conducted a study titled *"A Study on the Potential of Kampung Lawas Maspati as a Source for Social Studies Learning in Surabaya City."* The findings of the study indicate that the Kampung Lawas Maspati area, which has been designated as a cultural heritage site, holds significant potential as a Social Studies learning resource through an outdoor learning model. In this model, students visit the location and use photographs and videos as classroom learning materials during discussions. The study emphasizes that this potential can be maximized if the teacher actively facilitates the learning process by linking the conditions observed in the field with the content of the curriculum. However, the study is limited to identifying potential uses of the site and proposing ideas for its application in the learning process; it does not yet present an actual implementation of the learning activities.

Usnul Khatimah, in her article titled *"Utilization of the Lambung Mangkurat Museum as a Learning Resource on Social Studies"* published in *The Innovation of Social Studies Journal* in 2022, explains that the Lambung Mangkurat Museum, as a building housing various collections related to the life of the Banjar community, can be utilized as a Social Studies learning resource. It is particularly relevant for topics such as the Dynamics of Indonesia's Population, the Role of Science and Technology in Economic Activities, and the Life of Indonesian Society during the Prehistoric, Hindu-Buddhist, and Islamic periods in South Kalimantan. Contextualized Social Studies learning enables students to absorb the material more easily, as the collections of the Lambung Mangkurat Museum represent the cultural artifacts of the Banjar people that are closely connected to everyday life.

Rahmi Niswanti et al., in their article titled *"Utilization of Jelekong Art Village as a Research Source of Social Studies"* published in the *International Journal Pedagogy of Social Studies*, discuss the development of a Social Studies teaching module titled *"Wonderful of Jelekong Village Arts"* for seventh-grade students at the junior high school level. Prior to developing the module, a detailed mapping of the core competencies was conducted in relation to the collections and experiences students would encounter during their visit to Jelekong Art Village, allowing its potential as a learning resource to be clearly identified. The module was then subjected to expert validation three times before being deemed suitable for instructional use. The selection of Jelekong Art Village as a student research and learning resource was based on its strong cultural identity, where art and culture are integrated into the community's daily life. In the context of Social Studies education, this represents a concrete integration of interdisciplinary content, including geography, sociology, history, and economics (Niswanti, Ruhimat, & Tarmedi, 2019).

The urgency of learning based on cultural heritage preservation is discussed in *"Cultural Heritage and Methodological Approaches—An Analysis through Initial Training of History Teachers (Spain–England)"*, published in the journal *Sustainability* by Cosme J. Gómez-Carrasco et al. In their study, Cosme emphasizes the importance of *heritage education* in classroom instruction. The use of historical evidence as a learning resource plays a bridging role between students and their surrounding environment, thereby enabling meaningful contextual learning. Contextual learning that incorporates heritage as a learning resource allows for the implementation of instructional methods such as problem-based learning, inquiry learning, and case studies. Moreover, such learning integrates historical objects with the conceptual framework of historiographical thinking, which directs students toward critical thinking. The *heritage education* approach presented in this study significantly influences students' understanding of identity, both as individuals and as citizens (Gómez-Carrasco, Martinez, Fontal, & Etxeberria, 2020).

RESEARCH METHOD

This study focuses on the development of a Two-Days Outdoor Learning Model. It employs a qualitative approach using Design-Based Research (DBR), which is commonly applied in developmental research. This method was chosen because it enables the resolution of both individual issues and those involving multiple participants. (Easterday, Lewis, & Gerber, 2024). This study aims to design an outdoor learning model by utilizing the potential of cultural heritage sites located near schools to enhance students' cultural literacy. Design-Based Research (DBR) involves a cyclical process of analysis, design, evaluation, and revision to produce a well-developed instructional model. Prior to the analysis phase, a literature review was conducted using various academic sources to gather theoretical foundations relevant to the design of this study.

The first stage in Design-Based Research (DBR) is the analysis phase. This stage involves an in-depth exploration of theories and concepts related to the research subject. The results of this exploration serve as the foundation for data analysis, enabling a comprehensive understanding of the problems that need to be addressed in this study. The second stage is design and construction. Following the analysis, a learning model is developed, consisting of: (1) learning principles; (2) theoretical foundations; (3) syntax; (4) social system; (5) support system; and (6) teacher's role. The outcome of this stage is a draft of the outdoor learning design. The third stage is evaluation and reflection. Evaluation is carried out by involving two experts in the field of Social Studies to assess any weaknesses in the proposed learning design. Reflection is then conducted based on the evaluation results in order to produce an optimized instructional design.

The scope of this research is limited to cultural heritage sites that serve as destinations for outdoor learning activities. The selected sites include Pari Temple, Sumur Temple, Pamotan Temple 1, and Pamotan Temple 2. These sites were chosen based on their location within the same area, which facilitates student mobility during the field visit. Additionally, all sites are located within close proximity to the school, with a travel time of approximately 15 minutes by motor vehicle. Data collection in this study involved several methods: (1) literature review, including analysis of relevant journal articles and conference proceedings; (2) expert review; and (3) validation sheets for the draft learning design. The validation sheets used in the study included expert comments, which were used to further develop the draft design. Once deemed feasible for implementation, the model was revised and finalized into a prototype of the outdoor learning instructional model. The data analysis employed in this study follows a qualitative–verificative approach. The qualitative–verificative design is inductive in nature and guides the overall research process. Therefore, this research design differs from a typical qualitative descriptive

approach. It prioritizes the construction of the research framework and field data collection strategies, following an inductive model. (Bungin, 2003).

This study contributes to addressing a gap in the literature within the field of Social Studies, particularly in the development of place-based education that integrates local contexts as learning resources. To date, Social Studies literature in Indonesia has remained limited in its exploration of the potential of cultural heritage sites as platforms for cultivating cultural literacy and reflective civic awareness. The teaching module developed in this study utilizes cultural heritage sites—such as Pari Temple, Sumur Temple, and Pamotan Temple—as pedagogical spaces that holistically connect historical, ecological, and social dimensions. In doing so, this research expands the epistemological framework of Social Studies education through an interdisciplinary approach that emphasizes the importance of spatial awareness, identity, and civic responsibility in fostering students' critical consciousness toward cultural heritage and environmental sustainability.

This study was developed with reference to prior research conducted by Nuansa Bayu Segara, Agus Suprijono, and Muhammad Ilyas Marzuqi, titled "Outdoor Learning Model by Utilizing Mount Penanggungan Cultural Heritage to Realize Education for Sustainable Development." The novelty of the present study lies in its focus on the Candi Pari area, which encompasses several cultural heritage sites within a single region. In contrast to the previous study, this research places greater emphasis on enhancing cultural literacy by correlating cultural heritage preservation with the conservation of natural resources as part of a broader effort to support sustainable development. This approach is expected to contribute new insights into the use of outdoor learning as a means of achieving educational goals rooted in cultural literacy.

RESULTS AND DISCUSSION

The following section presents the results of developing an outdoor learning model that utilizes cultural heritage sites located near the school, including Pari Temple, Sumur Temple, Lemah Duwur Temple, Pamotan Temple 1, and Pamotan Temple 2. The instructional design consists of a two-day outdoor learning program. The most suitable theme for this learning model is the preservation of natural resources through cultural heritage. The content covered includes Indonesia's natural and social diversity, the utilization of natural resources, human resources and natural resource management, the role of social institutions in environmental conservation, and the geographical characteristics and interactions with foreign nations. The use of cultural heritage in this model aims to enhance students' cultural literacy by fostering their understanding and connection—as younger generations—to the nation's cultural identity. In the long term, this understanding is expected to encourage students' active participation in the preservation of cultural heritage

There are three main aspects that serve as the focus in formulating the development of this model: the planning stage, the implementation of learning activities, and the assessment process. The model is structured around competencies related to the learning process, encompassing five key components: (1) the effects or outcomes produced; (2) the steps or syntax of its implementation; (3) the role of the educator in facilitating the learning process; (4) the support systems required for the model's success; and (5) the fundamental principles that guide the overall learning process.

The expected outcomes of implementing the two-day outdoor learning activity can be categorized into two types: immediate impacts that emerge at the beginning of the activity, and accompanying impacts that develop during or after the learning process. Two immediate impacts are identified at the initial stage of the activity: (1) Concrete experiences gained by students.

Outdoor learning provides students with the opportunity to construct theoretical concepts from textbooks independently, based on their observations and direct engagement at the learning site. (2) Value construction. The presence of cultural heritage objects, which are closely related to cultural identity, is crucial for students to explore. This goes beyond merely understanding their historical background and involves examining the relationship between the heritage site and the local community, as well as the importance of preserving such heritage for the sustainability of both community life and the students' own lives. From this awareness, the development of cultural literacy is expected to emerge. The accompanying impacts that arise during or after the learning process include the growth of curiosity, critical thinking skills, collaboration abilities, and communication skills. These soft skills are enhanced through the use of guiding questions and structured discussions facilitated by the teacher throughout the learning activity..

The instructional steps designed for this outdoor learning process consist of three main activities: (1) Exploration, (2) Discussion and Verification, and (3) Communication and Conclusion Drawing. The first stage, exploration, involves the collection of information by students. This includes making observations, taking notes, and formulating questions about various elements encountered during the field visit. The process is facilitated by the teacher, who guides the activity using student worksheets (*Lembar Kerja Peserta Didik* or LKPD) distributed prior to the visit. Supporting information may be obtained from on-site information boards; however, it is ideal for students to have prepared background knowledge about the sites in advance. Teachers can assist by providing introductory materials in the form of a brief summary to ensure that outdoor learning begins with students already equipped with relevant basic knowledge.

The second stage is discussion and verification, which takes place after students have recorded their findings in the LKPD. At this stage, students also verify the questions they previously formulated based on their field observations. This is done through open discussion facilitated by the teacher, during which students are encouraged to critique and refine each other's information and inquiries. The teacher, acting as a facilitator, provides clarification and ensures the accuracy of the data and questions presented, thus guiding the learning process in an academically valid direction.The third stage is communication and conclusion drawing, which involves interaction between the teacher and students, as well as among students themselves. This stage aims to foster shared understanding of the learning outcomes and to explore the values related to cultural literacy acquired during the outdoor learning experience. Conducted in an open and student-centered manner, this activity encourages students to develop personal awareness of the meaning of cultural literacy. The teacher acts as a moderator in the discussion and provides validation of students' opinions or reflections to ensure accurate comprehension. Toward the end of the activity, the teacher guides students in drawing conclusions based on their learning experiences, particularly those directly related to cultural literacy.

Teachers play a crucial role in the outdoor learning process. As instructional planners, teachers assume multiple responsibilities to ensure that the learning design is implemented as intended. In the two-day outdoor learning model, the teacher holds at least two key roles: 1) Tour Guide – The teacher is responsible for determining the routes and paths taken during the site visits. This role requires the teacher to possess factual knowledge of the field conditions, including the social context of the communities that students will observe. 2) Facilitator – The teacher guides the learning process, including leading discussions and managing student inquiries. The teacher must also provide introductory material to stimulate the learning process at the visited sites. As a facilitator, the teacher encourages students to explore deeper meanings, ensuring that the intended values and learning outcomes particularly those related to cultural understanding are effectively achieved.

The two-day outdoor learning process can be implemented in the following stages. On the first day, the activities are focused on exploration at three cultural heritage sites: Pamotan Temple 1, Pamotan Temple 2, and Lemah Duwur Temple. The information-gathering activities are directed toward topics related to natural resources and the surrounding environment. The environments of Pamotan Temple 1 and 2, which show signs of being partially buried, indicate the possibility of historical flooding events, thereby offering an opportunity to examine the relationship between environmental conditions and historical developments. Meanwhile, Lemah Duwur Temple, situated in the middle of a rice field, allows students to explore various aspects ranging from natural features to resource potential and disaster risks in the area. The proximity of these three temples to the Brantas River and the Gempol–Surabaya toll road also makes them relevant to Social Studies content, particularly in discussions of natural resource conservation and sustainable development across different eras, which can be integrated into the learning process.

On the second day, learning activities continue with exploration at Sumur Temple and Pari Temple. Unlike the first day, the focus of exploration on the second day shifts to the sociocultural and economic aspects of the local communities who interact directly with the presence of these cultural heritage sites. The separation of content focus between the two days aims to minimize student fatigue during the outdoor learning activities. Visiting too many locations in a single day may lead to exhaustion, which can decrease the effectiveness of the learning experience, especially toward the end of the activity. By differentiating the thematic focus for each day, students are given the opportunity to explore the topics more deeply on-site, thereby enhancing their understanding of the material. This approach also provides a more structured and memorable learning experience for the students. During the implementation of the two-day outdoor learning program, several key principles must be upheld to ensure the success of the activities: 1) Active Student Participation – Throughout the learning process, students must be encouraged to actively seek information, ask questions, and engage in discussions. Such active engagement is essential to foster students' cognitive development and enhance their critical thinking skills in response to real-world conditions encountered in the field. 2) Independent Knowledge Construction – The learning process is designed to enable students to construct knowledge independently. In this context, the teacher acts as a facilitator, providing guidance and responding to students' needs throughout the learning activities. Students are expected to reconstruct their knowledge by connecting their basic understanding, theoretical concepts, and real-world observations through in-depth open discussions. 3) Meaningful Learning – The two-day outdoor learning program must provide meaningful experiences, particularly in cultivating cultural literacy. Students are expected to gain a deep understanding of the concept of cultural literacy, which serves as the core of this activity. To achieve meaningful learning, teachers must guide students in connecting instructional content, issues observed in the field, and the relevance of those issues to the students' own lives. These principles are designed to ensure that outdoor learning is not merely informative but also transformative, producing a significant impact on students' intellectual growth and cultural awareness.

The planning of an outdoor learning model requires careful attention to several key aspects to ensure the success of the activity. First, the learning objectives must be aligned with the main focus namely, the enhancement of students' cultural literacy—so that all instructional activities contribute to achieving this goal. Second, clear indicators of cultural literacy that students are expected to understand must be formulated to serve as a guide for evaluating learning outcomes. Third, learning materials relevant to the targeted locations must be prepared in advance to help students connect field conditions with the theoretical concepts studied in class. Fourth, the learning objectives, content, and the potential of each site should be contextualized to

create meaningful learning experiences. Fifth, learning objectives must be formulated based on the expected outcomes, the goals of the activity, the instructional content, and the unique characteristics of each cultural heritage site being visited.

To address these five aspects, teachers need to conduct a site survey as an initial step. This survey aims to ensure the feasibility of the location, including road access, travel routes, transportation arrangements, and the duration of time spent at each site. In addition, teachers must prepare appropriate instructional materials after the learning model has been designed, such as student worksheets (LKPD), teaching materials, and implementation guides. With thorough planning, outdoor learning can be carried out optimally and generate a positive impact on students' cultural literacy. A sample two-day outdoor learning plan is presented in Table 1.

Table 1. Two-Day Outdoor Learning Plan

Activity Objective	To enhance students' cultural literacy through outdoor learning at cultural heritage sites
Learning Objective	To understand the preservation of natural resources through the conservation of cultural heritage
Social Studies Theme	Natural Resource Conservation
Activity Locations	Candi Pamotan 1, Candi Pamotan 2, Candi Lemah Duwur, Candi Sumur, dan Candi Pari
Learning Potentials	Geology, Geohistory, Mythology, Archaeology, Community Economy, Local Wisdom
Duration	2 days
Support System	Cultural heritage map, student worksheet, lesson summary
Partners	Site caretakers, accompanying teachers

More specifically, the implementation over the two days can be detailed through the Day 1 and Day 2 learning modules as follows:

Table 2. Day 1 Learning Module

Activity	Duration	Location and Supporting Materials
Opening (Pre-Activity) • Students gather in the designated classroom to prepare for the outdoor learning visit.	45 minutes	School classroom Teacher and student learning module

• Students assemble according to their assigned groups. • Students receive a briefing on the Day 1 activities: visiting Pamotan Temple 1, Pamotan Temple 2, and Lemah Duwur Temple. • Students prepare the teaching module provided in advance. • The teacher explains the rules and etiquette for visiting cultural heritage sites. • The teacher distributes a pre-test to assess students' cultural literacy prior to the visit. • Students board the designated transportation to the first site.		
Main Activity • Students arrive at the first site: Pamotan Temple 1. • Students conduct observations on the potential of natural resources and environmental issues surrounding the heritage site. • Data collection: students record their findings in the provided worksheet. • Students walk to Pamotan Temple 2. • Students repeat observation and data collection activities. • Students walk to Lemah Duwur Temple. • Students repeat observation and data collection activities. • Small group discussion based on Day 1 exploration findings.	90 minutes	Pamotan Temple 1, Pamotan Temple 2, Lemah Duwur Temple Student learning module, worksheet, writing tools

• Students share preliminary findings within their groups. • The teacher provides guidance for further exploration on the following day.		
Closing (Post-Activity) • The teacher provides an overview of the activities planned for Day 2. • Students summarize their findings regarding the potential of natural resources, environmental conservation, and cultural heritage preservation observed at the sites. • Students return to school.	30 minutes	Worksheet, student learning module

Table 3. Day 2 Learning Module

Day 2 Activities

Activity	Duration	Location and Supporting Materials
Opening (Pre-Activity) • Students gather in the designated classroom to prepare for the second day of outdoor learning. • Students assemble according to their assigned groups. • Students receive a briefing on the Day 2 agenda: visits to Sumur Temple and Pari Temple. • Students prepare the teaching modules previously distributed. • The teacher reminds students of the rules and etiquette for visiting cultural heritage sites. • The teacher explains the key focus of Day 2: the relationship between cultural heritage sites, natural resources, and the surrounding communities.	45 minutes	School classroom Teacher and student learning module

• Students board the designated transportation to the first location.		
Main Activity • Students arrive at the first site: Sumur Temple. • Students analyze the connection between the natural resource potential and the preservation of cultural heritage. • Data collection: students record their observations in the provided worksheet. • Students walk to Pari Temple. • Students observe local communities and how they utilize natural resources in relation to the existence of the cultural heritage site. • Data collection: students record their observations in the worksheet. • Group discussion to formulate the relationship between cultural and natural resource preservation. • Students write a brief report on their findings. • Group discussion to present their reports in a concise manner.	90 minutes	Candi Pamotan 1, Candi Pamotan 2, Candi Lemah Duwur Student worksheet, student learning module, writing tools
Closing (Post-Activity) • Students summarize their findings related to natural resource potential, environmental preservation, and cultural heritage conservation observed at the sites. • The teacher provides feedback and facilitates a final reflection session. • The teacher distributes a post-test to assess	30 minutes	Worksheet, reflection notes, post-test form

students' cultural literacy after the visit. • Students return to school.		

Assessment in the learning process is conducted by evaluating both the students' learning process and outcomes in a comprehensive manner. In the context of this activity, the recommended form of assessment is authentic assessment, which emphasizes students' ability to apply their knowledge and skills in real-life situations. This approach aims to provide a more comprehensive picture of learning achievements while ensuring the relevance of the assessment outcomes to the learning context.

The assessment instruments that can be utilized include worksheets and performance activity rubrics. The worksheets are designed to evaluate the learning process through pre-prepared questions or tasks. As a complement, these worksheets may be accompanied by supporting tools such as maps, observation sheets, or other relevant media used during outdoor learning, making them essential components that students must carry throughout the learning activity.

Meanwhile, the performance activity rubric is used to assess students' activeness and participation throughout the learning activities. Teachers may develop specific criteria relevant to the learning objectives, such as the level of engagement in discussions, collaboration skills, or accuracy in completing field-based tasks. Accordingly, the rubric helps ensure that the assessment comprehensively addresses cognitive, affective, and psychomotor domains, thereby supporting more meaningful and authentic learning.

Table 4. Student Performance Activity Assessment Rubric

Criteria	Score			
	1	2	3	4
Participation	Did not participate at all during the outdoor learning activity	Participated 1–2 times during the outdoor learning activity	Participated 3–4 times during the outdoor learning activity	Consistently proactive throughout the outdoor learning activity
Enthusiasm	Showed no interest or participation during the outdoor learning activity	Showed slight interest when involved in the outdoor learning activity	Appeared interested during the outdoor learning activity	Always appeared highly interested throughout the outdoor

				learning activity
Focus on Task	Did not participate or focus at all during the outdoor learning activity	Occasionally focused during the outdoor learning activity	Remained focused during the outdoor learning activity	Consistently focused throughout the entire outdoor learning activity
Quality of Work	Did not participate or demonstrate any effort during the outdoor activity	Occasionally showed effort during the outdoor learning activity	Demonstrated effort during the outdoor learning activity	Consistently demonstrated strong effort throughout the outdoor learning activity

The completed draft of the learning model was then reviewed internally by a Social Studies education expert, Dr. Nuansa Bayu Segara, S.Pd., M.Pd. At this stage, an in-depth analysis was conducted on the initial draft of the learning model. Revisions were made based on the results of this internal review to refine the draft. Subsequently, the model was subjected to a feasibility assessment by a social studies education expert and cultural heritage specialist from East Java, Prof. Wisnu, M.Hum. This process aimed to ensure that the developed model was not only pedagogically relevant but also aligned with the context of cultural heritage preservation. The feasibility assessment was conducted qualitatively. The feasibility results of the two-day outdoor learning model—designed to visit five cultural heritage sites near the school and to integrate the themes of natural resource conservation and cultural heritage preservation, with the primary goal of enhancing students' cultural literacy are presented in Table 5.

Table 5. Review Results of the Outdoor Learning Model

Reviewed Aspect	Development Suggestions	Status
Theoretical Foundations of the Learning Model	Reaffirm the theoretical foundations to be used, especially those related to	Revised

	Contextual Learning and Outdoor Learning.	
Components of the Learning Model	The components of the learning model are not clearly outlined. Refer to: Outdoor Learning Model by Utilizing Mount Penanggungan Cultural Heritage to Realize Education for Sustainable Development.	Revised
Syntax	Provide more detailed breakdowns for each session (e.g., Session 1, Session 2, etc.).	Revised
Assessment Methods	Simplify the assessment; adjust to essential needs only.	Revised
Learning Materials	Summarize the materials. No need to strictly follow textbook content. Adapt materials to the field context.	Revised
Worksheet (Student Worksheet)	Sufficient as is.	No Revision Needed

Table 6. Review Results of the Outdoor Learning Model in the Context of Cultural Heritage Preservation

Reviewed Aspect	Development Suggestions	Status
Learning Model	The learning model is appropriate for implementation in outdoor learning within cultural heritage environments.	No Revision Needed
Components of the Learning Plan	Overall, the components are adequate. Guiding questions and the teacher's role are	No Revision Needed

	clearly defined to ensure the learning remains aligned with heritage preservation.	
Learning Objectives	The learning objectives are already distinguished from the activity objectives. However, the objectives should be made more explicit and aligned with the lesson theme.	Revised
Learning Activities	The learning activities are appropriate and engage students in reflective thinking related to the existence of cultural heritage.	No Revision Needed
Assessment	The assessment is systematic.	No Revision Needed
Worksheet (Student Worksheet)	Worksheets are provided for each site visited. No changes are necessary.	No Revision Needed

After receiving input from expert reviews, the draft of the outdoor learning model was reanalyzed. Each aspect that received recommendations for improvement was thoroughly evaluated to identify potential areas for development and necessary adjustments. This process was carried out to ensure that the designed learning model would be more effective, relevant, and aligned with both instructional needs and the intended learning objectives.

Discussion. According to Johnson, contextual learning is an educational process aimed at helping students find meaning in the subject matter they are studying by connecting it to the context of their daily lives whether personal, social, or cultural environments. (Kunandar, 2007). Contextual learning emphasizes instruction that promotes the development of skills within real-life contexts, enabling students not only to learn from textbook content but also to understand subject matter through their own observations and interpretations of issues in their immediate environment. Learning becomes a meaningful activity because students are directly involved—as subjects, objects, or close observers of local issues. Furthermore, contextual learning fosters a learning environment that encourages collaboration, discussion, mutual correction, and shared understanding among peers. These interpersonal dynamics contribute to a sense of comfort and enjoyment, making learning a pleasant and engaging process.

In contextual learning that utilizes cultural heritage sites as learning resources, students are able to explore various aspects of the heritage site and are not limited to studying only the historical background or the oral traditions of the surrounding community.

The learning process is developed by connecting observable phenomena around cultural heritage sites with theoretical explanations, enabling the integration of theory and real-world practice. The expected outcome of this ability to make connections is that students will be able to plan or design solutions to problems identified around the heritage sites, particularly those related to heritage preservation. The solutions proposed by students emerge from their understanding of the issues and the specific environmental context of the heritage site, which means that each student's proposed solution may differ.

The existence of cultural heritage sites cannot be separated from their surrounding environment. Students can observe various types of social activities occurring in the vicinity of these sites. Such observable activities may include social interactions, conflict and its resolution, spatial changes, economic development and creative economy practices, as well as tangible manifestations of globalization and the digital era. This makes the use of cultural heritage sites as learning resources highly adaptable and expandable to a wide range of subject matter, depending on the instructional goals set by the teacher as the learning facilitator.

Incorporating cultural heritage sites into classroom instruction can make learning more engaging. A study by Jumardi and Soeprijanto titled "Digital Mapping of Cultural Heritage as a Learning Source for Local History in Indonesia", published in the Proceedings of the First International Conference on Science, Technology, Engineering and Industrial Revolution (ICSTEIR 2020), explains that classroom learning becomes more compelling when local history content is grounded in tangible cultural heritage objects found in the surrounding environment. This approach can stimulate students' interest in studying history on a broader scale. To support teachers in utilizing cultural heritage themes in classroom learning, mapping or the systematic identification of heritage sites becomes essential. (Jumardi & Musnir, 2021).

CONCLUSION

The two-day outdoor learning model that utilizes the potential of cultural heritage sites near the school namely Pamotan Temple 1, Pamotan Temple 2, Lemah Duwur Temple, Pari Temple, and Sumur Temple was designed based on the specific characteristics of each site. This model was developed with input from subject-matter experts. Key components emphasized in the model's development include the learning theory applied, model structure, objectives, syntax, assessment, and student worksheets.

The outdoor learning model has been deemed suitable for limited trial implementation. Its execution is grounded in experiential learning theory, which requires a strong understanding by the teachers who will implement it. Several critical factors must be considered during implementation, including support from the school, teacher competency, and thorough technical preparation. These three elements are essential in ensuring a smooth and effective learning process.

The primary strength of this model lies in its emphasis on exploratory, collaborative, and reflective approaches, aiming to provide students with meaningful and in-depth learning experiences. Well-structured learning activities are expected to help uncover the educational potential of the visited cultural heritage sites— Candi Pamotan 1, Candi Pamotan 2, Candi Lemah Duwur, Candi Pari, and Candi Sumur. Through these activities, students are expected to enhance their cultural literacy in terms of historical understanding, cultural values, and the relevance of heritage preservation in contemporary life. This structured learning approach is intended not only to provide academic insight but also to foster students' awareness of the importance of preserving cultural heritage.

REFERENCES

Bungin, B. (2003). *Analisis Data Penelitian Kualitatif: Pemahaman Filosofis dan Metodologis ke Arah Penguasaan Model Aplikasi.* Jakarta: PT. Raja Grafindo Persada.

Duffy, T. M., & Jonassen, D. H. (1992). Constructivism and The Technology of Instruction. New Jersey: Lawrence Erbaum Associates.

Easterday, M. W., Lewis, D. R., & Gerber, E. M. (2024, 12 08). *Design-Based Research Process: Problems, Phases, and Applications.* Diambil kembali dari Northwestern University: https://bpb-us-e1.wpmucdn.com/sites.northwestern.edu/dist/3/3481/files/2012/11/DesignBasedResearch_Gerber.pdf

Gómez-Carrasco, C. J., Martinez, P. M., Fontal, O., & Etxeberria, A. I. (2020). Cultural Heritage and Methodological Approaches—An Analysis through Initial Training of History Teachers (Spain–England. *Sustainability* , 1 - 21.

Hamruni. (2009). *Strategi dan Model-Model Pembelajaran Aktif Menyenangkan.* Yogyakarta: Fakultas Tarbiyah UIN Sunan Kalijaga Yogyakarta.

Jumardi, & Musnir, S. D. (2021). Digital Mapping of Cultural Heritage as a Learning Source for Local History in Indonesia. *the First International Conference on Science, Technology, Engineering and Industrial Revolution* (hal. 39 - 41). Jakarta: Atlantis Press.

Kunandar. (2007). *Guru Profesional Implementasi Kurikulum Tingkat Satuan Pendidikan dan Sukses Dalam Sertifikasi Guru.* Jakarta: PT. Raja Grafindo Persada.

Mclsaac, M. S., & Gunawardena. (1996). Handbook of Research for Educational Communications and Tecgnology. New York: AECT.

Naufal, H., Irkhamni, I., & Yuliyani, M. (2020). PENELITIAN PENERAPAN PROGRAM SISTEMKREDIT SEMESTER MENUNJANG TEREALISASINYAMERDEKA BELAJAR DI SMA NEGERI 1PEKALONGAN. *Jurnal Konferensi Ilmiah Pendidikan*, 142.

Ningrum, A. S. (2015). Pengembangan Perangkat Pembelajaran Kurikulum Merdeka Belajar (Metode Belajar). *Pendidikan Dasar*, 171.

Nisa, J. (2015). Outdoor Learning Sebagai Metode Pembelajaran IPS dalam Menumbuhkan Karakter Peduli Lingkungan. *SOSIO DIDAKTIKA*, 8.

Ocal, T. (2016). Necessity of Cultural Historical Heritage Education in Social Studies Teaching. *Creative Education*, 396 - 406.

Percival, F., & Ellington, H. (2003). A Handbook of Educational Technology. London: Kogan Page.

Prihantoro. (2007). Meningkatkan Minat Belajar IPS Dengan Memanfaatkan Lingkungan Sekitar Sebagai Sumber Belajar di SMPN 2 Kedungbanteng Kabupaten Banyumas. *Jurnal Pendidikan dan Evaluasi*, 90.

Undang-Undang. (2010). *Undang - Undang No.11 Tahun 2020 tentang Cagar Budaya.* Yogyakarta: BPCB.