

LIVING HISTORICAL MEMORY (LHM) THE CATASTROPHIC ERUPTION OF MOUNT MERAPI IN 2010: A PEDAGOGICAL CONCEPT OF LOCAL HISTORICAL MEMORY FOR STUDENTS OF THE HISTORY EDUCATION PROGRAM

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Abstract

The LHM catastrophic eruption of Mount Merapi in 2010 holds valuable historical and local wisdom, but it has not been widely used to support local historical pedagogy. In history pedagogy, problems are often encountered, such as the pedagogical process being insufficiently contextual, historical material being overly dominated by official historical narratives that tend to be politic-power centrist, and being irrelevant to today's context. There is a need for transformative local historical pedagogy that leverage the potential of the surrounding locality which has an emotional connection to the community. This research endeavours to identify, analyze, and describe the process of local historical memory pedagogy based on the LHM catastrophic eruption of Mount Merapi in 2010 at the university. It employs a qualitative approach with a case study method. Data were collected through direct observation, in-depth interviews, and documentation. While analyzed using Miles and Huberman's model triangulation. The results illustrate the pedagogical process of local historical memory pedagogy based on the LHM catastrophic eruption of Mount Merapi in 2010 consists of four stages: (1) delivering material about Mount Merapi with its historical and volcanic cultural potential constructed through LHM. (2) Students explore LHM in the hamlets through guidance and direction from lecturers. (3) Students present the results of their LHM exploration through presentations in class or zoom meeting. (4) Students work on final projects such as eduvlog videos, infographics, and mini field research reports.

Keywords: Living Historical Memory (LHM), Catastrophic Eruption, Mount Merapi, Local Historical Memory Pedagogy, Students

INTRODUCTION

Living historical memory (LHM) is an elaboration of the concept of collective memory Maurice Halbwachs (Halbwachs, 1992). LHM is the construction of collective memory in families, communities, institutions, and countries about the conditioning of past events based on the current context within the last 80-100 years, thereby contributing to the discourse on the lives of the wider community. Early 2020s, LHM became one of the variants of collective memory studies developed to: (1) identifying national identity and social domination in 40 countries through the acceptance and interpretation of the three most influential historical events for them (Liu et al., 2021). (2) Analyze the perceptions of people in Egypt and Morocco regarding their acceptance and interpretation of the three most influential historical events for them (Zeineddine & Qumseya, 2021). Both illustrate a tendency of LHM hegemony to emerge top-down and based on the official historical narratives within a politic-power centrist. However, LHM can also emerge bottom-up and based on the local history surrounding the lives of peripheral communities. One example of LHM that emerged bottom-up is the collective memory of the local community in Sleman regarding the catastrophic eruption of Mount Merapi in 2010. However, the LHM catastrophic eruption of Mount Merapi in 2010 has not been widely used to support local historical pedagogy in universities. This LHM encompasses a wealth of history and local wisdom that needs to be empowered, as it is an important part of the cultural system that shapes the characteristics of "living in harmony with catastrophe" for local communities living around Mount Merapi.

Turning to the process of historical pedagogy, three fundamental problems are often found, such as: (1) history is less important because it is not relevant to the current context of life (Harris & Reynolds, 2014; Miguel-Revilla, 2021). (2) The dominant history pedagogy curriculum contains a chronological sequence of official historical narratives that are politic-power centrist, so that it is less able to penetrate the social life of peripheral communities or the existing curriculum has not fully realized the potential of history and local wisdom in the surrounding area as a formative discourse for the communities life and collective culture (Straaten et al., 2015). (3) History pedagogy has not been fully optimized to equip students with important skills such as source analysis, critical interpretation, and evidence-based reasoning (Ofianto et al., 2023; Seixas, 2017; Tirado-Olivares et al., 2021). This condition is not surprising, considering that history pedagogy in Indonesia is still focused on presenting official historical narratives to be read, understood, and tested as material for formative and summative evaluation. However, it is not supported by further exploration and deep understanding of these historical narratives (Lévesque, 2018; Thorp & Persson, 2020). Therefore, historical pedagogy will only important and meaningful if it encourages individuals to understand, interpret, and reflect on the connections between past events that shape discourse on his life and the wider community.

To answer the previous question, a transformative approach can serve as a breakthrough offering a new nuance of historical pedagogy at the university level. Can reflect a transformative approach through critical pedagogy to build a more comprehensive and contextual understanding (Hidayat, 2013; Hoggan & Finnegan, 2023). Critical pedagogy is closely related to the construction of education and cultural formation that develops within community (Hidayat, 2013). In the context of historical pedagogy, students should not only be positioned as active subjects who understand history, but also encouraged to interpret and reflect on history in accordance with the current context. Through critical pedagogy, historical sources do not only serve as objects of memorization through textual reading, but are also conditioned as a field of socio-historical-cultural exploration and critical interpretation for students (Torres, 2024). In critical pedagogy, lecturers act as facilitators of discussion, field exploration, and final project work, thereby encouraging students to construct their historical knowledge, foster a spirit of teamwork, and initiate new creations in producing the results of local historical memory pedagogy that have broad benefits. Therefore, the implementation of local historical memory pedagogy based on the LHM catastrophic eruption of Mount Merapi in 2010 in local history courses is an illustration of the actualization of transformative historical pedagogy at the university level.

The LHM catastrophic eruption of Mount Merapi in 2010 provides a diversity of historical sources in the form of a community of survivors (historical actors) across generations, traditions, perspectives, values, and volcanic museum, which is entirely constructed from interpretations and attitudes of the local community towards the 2010 eruption. This LHM not only historical narratives reconstructed through scientific methods and preserved in written texts, as in conventional historical studies. However, this LHM emphasizes how a historical event (the 2010 eruption of Mount Merapi) underwent a process of transmission and acculturation by the community, giving rise to a new culture to commemorate it. Jan Assmann terms this condition as 'mnemohistory' (Assmann & Ebeling, 2020; Maulana, 2025; Tamm, 2008, 2024). The local historical memory pedagogy based on the LHM catastrophic eruption of Mount Merapi in 2010 offers a different perspective. If conventional historical pedagogy encourages us to understand historical narratives chronologically and examine their truth, but local historical memory pedagogy encourages us to explore socio-historical-cultural aspects, critically examine how historical events can shape a strong collective culture, and explore the roles of individuals and communities as agents of LHM. The process of local historical memory pedagogy includes four stages: (1) lecturers deliver material on the LHM catastrophic eruption of Mount Merapi in 2010, divide students into groups, and assign students to conduct field exploration. (2) Students, under the guidance and supervision of lecturers, conduct field exploration in several hamlets on the slopes of Mount Merapi. (3) Students report the results of LHM exploration LHM through presentations in class or zoom meeting. (4) Students work on final projects, including eduvlog videos, infographics, and mini field research reports on the LHM catastrophic eruption of Mount Merapi in 2010.

RESEARCH METHOD

This research employs a qualitative approach with a case study method to explore, identify, analyze, and describe the process of local historical memory pedagogy based on the LHM catastrophic eruption of Mount Merapi in 2010. This pedagogical process involved three classes from the Bachelor of History Education Study Program at Universitas Negeri Yogyakarta, with a total of 115 students (40 in class A, 36 in class B, and 39 in class C). This research was conducted in two locations: in the classroom to deliver LHM material on the LHM catastrophic eruption of Mount Merapi in 2010 and presentation of the LHM exploration results. Furthermore, in three hamlets (Pelemsari Hamlet, Petung Hamlet, and Turgo Hamlet) which are included in the level III catastrophe-prone area category in Sleman Regency, Yogyakarta. Data for this research were collected through direct observation of the pedagogical process, in-depth interviews with several informants (students, lecturers, and hamlet community), and documentation of relevant documents.

The data analysis process followed the triangulation framework developed by Miles and Huberman (Miles et al., 2014). Important stages in this research included data verification, organization, coding, classification, and correction of interview results. The data obtained was systematically coded using a structured system and analyzed in depth. The findings were then tested through source triangulation, using a process of confirmation and comparison between data from interviews, observations, and documentation to ensure credibility. Credible data was then used as a reference to conclude this research.

RESULTS AND DISCUSSION

1.1 The Concept of LHM and Catastrophic Eruption of Mount Merapi in 2010 as Its Topic

The concept of LHM based on the Jan Assmann's theory which divides two types of collective memory. Communicative memory is the process of daily communication between individuals and communities across generations to convey a collective perspective of historical events (Assmann, 2010). Through communication process, memory transmission occurs forming an oral historical framework for understanding historical events (Halbwachs, 1992). Next, cultural memory is the process of culturalization historical events through mnemonic objects including: the implementation of traditional customs or commemorative ceremonies, mass media coverage, documentary video recording, photographic photography, painting images, writing scientific or non-scientific papers, filmmaking, and the establishment of museums or monuments (Assmann, 1995, 2010, 2011). There are six characteristics of cultural memory: (1) concretization of identity, that cultural memory is a source of knowledge that contains a system of consciousness, symbolism, and meaning that creates cultural identity. (2) Flexibility of reconstruction, that the process of cultural memory connects its substance with the current context. (3) Formation, that the transmission of cultural memory undergoes a process of culturalization in community. (4) Organization, that cultural memory is institutionally accommodated. (5) Responsibility, that cultural memory is a reflection of normative-collective self-image relationships that create a value system. (6) Reflective, that cultural memory is always reflective (Assmann, 1995).

The two previous forms of memory are important components of the LHM concept. LHM is a collective memory of historical events that have been experienced, widely influenced, transmitted across generations, and culturalized thereby shaping societal discourse (Choi et al., 2023; Liu et al., 2021). LHM can include official or local historical memory. In addition, LHM focuses on contemporary historical events from the last 80-100 years (Rimé et al., 2015). This distinguishes it from historical memory, which focuses on older historical events and can survive for centuries even when the generation of survivors is no longer alive (Hakoköngäs et al., 2021). As long as human life continues, various events that arise will be recorded through memory, culture, and historical records. In LHM, personalized historical memory certainly has a profound cognitive and emotional impact on survivors (Hirst et al., 2015, 2018). When historical memory is transmitted across generations, it can foster awareness, meaning, and collective phenomena as markers of the culturalization of historical memory (Páez et al., 2007). Therefore, LHM can

become historical memory that lasts for centuries after reaching the 100 year or forgotten by the community even before reaching it.

As explained earlier, the concept of LHM is also related to the aspect of locality, as evidenced by the 2010 Mount Merapi eruption, which devastated the local community of Sleman. Merapi is one of the most frequently erupting volcanoes in Indonesia, posing risks and threats to the surrounding area. Located between Central Java and Yogyakarta provinces, Mount Merapi experienced a 4 VEI (large-scale) eruption in 2010, which was the worst in the 21st century. According to the head of PVMBG (2003-2006) Surono in Priyambodo (2010), the 2010 eruption of Mount Merapi was the most severe since 1870, or in the last 140 years. The 2010 eruption of Mount Merapi claimed 277 fatalities, including the legendary caretaker Mbah Maridjan, and caused 12,839 residents of Sleman living around Mount Merapi to evacuate (BNPB & BAPPENAS, 2011). However, the deep bond between the local community of Sleman and Mount Merapi has become an important factor in shaping their perspectives, interpretations, behaviors, and cultural identities, which reflect “living in harmony with catastrophe” (Cho et al., 2016; Donovan et al., 2012). In this context, the local community of Sleman has used spiritual, historical, and cultural understandings as a unified framework to understand the dynamics of Mount Merapi.

The catastrophic eruption of Mount Merapi in 2010 as a topic of LHM, focusing on the construction of the process of transmission and acculturation of the perspectives, interpretation, behaviors, and cultural identities of the local community of Sleman. The construction of LHM through the transmission of communicative memory across generations includes the transfer of the understanding of the symbolization of Mount Merapi as the concretization of God’s grace, which provides a source of livelihood for the surrounding community and euphemisms (verbal ethics) as a form of empathy towards the condition of Mount Merapi when it erupts (Interview Mr “A”, 2025; Interview Mrs “K”, 2025; Interview Mr “MRS”, 2025; Interview Mr “M”, 2025; Interview Mr “MJ”, 2025; Interview Mr “P”, 2025; Interview Mrs “PY”, 2025; Interview Mr “R”, 2025; Interview Mr “SR”, 2025; Interview Mr “S”, 2025). The process of transferring symbolization and euphemism is divided into two stages: through the family a small social unit with biological, ideological, social, and cultural ties that facilitate the transmission of understanding through casual conversation, stories passed down from generation to generation, and cultural doctrine. There is a slight difference, in older families the transmission process tends to occur conservatively through stories passed down from generation to generation and cultural doctrines (Interview Mr “A”, 2025; Interview Mr “MRS”, 2025; Interview Mr “P”, 2025; Interview Mr “SR”, 2025). Meanwhile, in younger families with progressive mindsets, the transmission process tends to occur flexibly through casual conversation and occasionally through stories passed down from generation to generation (Interview Mr “MJ”, 2025; Interview Mr “S”, 2025).

Through the community, with its traditional leaders as large social units with social, ideological, and cultural ties, it facilitate transmitting an understanding of symbolism and euphemism through cultural doctrine and in strengthening cultural identity. As the driving force behind the social system, the community controls all individuals across generations through knowledge transfer, habituation, and the reinforcement of cultural identity through symbolism and euphemisms on Mount Merapi (Interview Mr “A”, 2025). In addition, the presence of caretakers of Mount Merapi and other traditional figures is an important aspect of the social system in the communities of Pelemsari Hamlet, Petung Hamlet, and Turgo Hamlet. The caretakers and traditional figures with their special cultural roles, serve as role models for the community in their behavior and speech regarding the cultural doctrines of symbolism and euphemism on Mount Merapi.

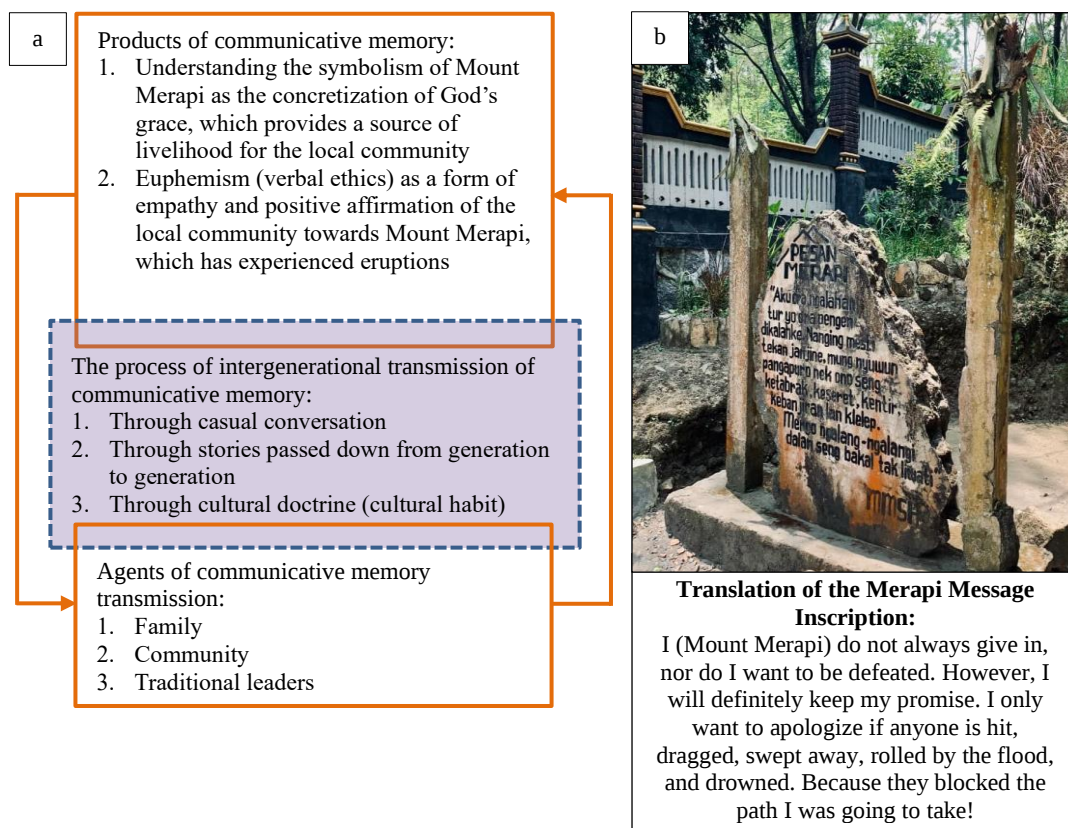


Figure 1. (a) Conceptualization of the Process of Communicative Memory Transmission through LHM; and (b) Merapi Message Inscription in Front of the Sisa Hartaku Museum as a Concretization of Symbolization and Euphemism (Oral Ethics) of the Local Community

Furthermore, the construction of LHM is not only through the transmission of communicative memory across generations, but also through the culturalization of cultural memory, including the implementation of four volcanic traditions: (1) 'Dandan Kali' is a tradition of cooperation to clean the river that is the source of water for the community, which is concluded with a feast (*slametan*) at the river. (2) 'Mapag Tanggal' is a tradition carried out at the beginning of the month of *Suro* (*Muharam*) to express the communities gratitude by offering gifts of produce paraded from the springs around the Boyong River to the tomb of Kyai Turgo (Syeikh Jumadil Kubra) and concluding with a feast (*slametan*). (3) 'Merti Dusun' is a tradition to express the communities gratitude by carrying offerings of agricultural produce in a parade, holding a feast (*slametan*), and concluding with a wayang performance. (4) 'Labuhan Merapi' is a tradition of the Yogyakarta Palace, led by the caretaker who throws offerings onto Mount Merapi and concludes with a feast (*slametan*). These four volcanic traditions also reflect the local communities belief system regarding Mount Merapi based on the communication, cooperation, and coordination aspects (Hudayana, 2012). The communication aspect focuses on the language structure in the recitation prayers (in Islamic and Javanese versions), Javanese songs, and noble messages that reflect an understanding of Mount Merapi and its surrounding environment, the relationship between humans, nature, and God, and the feelings of the local community (Interview Mr "A", 2025). The cooperation aspect focuses on volcanic traditions as a means of fostering solidarity among the local community (Interview Mr "A", 2025). The coordination aspect focuses on volcanic traditions as a encouraging the local community to understand and accept discourse surrounding Mount Merapi (Interview Mr "A", 2025).



Figure 2. (a) Dandan Kali tradition; (b) Labuhan Merapi tradition; and (c) Merti Dusun tradition

In addition to upholding volcanic traditions, the local community of Sleman also converted land and former homes belonging to several residents who were swept away by the hot clouds of the 2010 Mount Merapi eruption into a volcanic museum. In 2011, the Petilasan Mbah Maridjan Museum was established in Pelemsari Hamlet by his son, who is now also the new caretaker of Mount Merapi. The Petilasan Mbah Maridjan Museum has become a space for the wider community to memorialize and understand the devastation of the 2010 Mount Merapi eruption, to understand the rebirth of the Pelemsari Hamlet community after experiencing the eruption and understand the role of Mbah Maridjan as a representative of the Yogyakarta Palace who devoted his life to maintaining harmony between the local community with Mount Merapi (Interview Mr “A”, 2025). In Petung Hamlet the Museum Sisa Hartaku was also established in 2011 and the Museum Omahku Memori in 2013. The existence of both museums also serves as a shared memorial space for the wider community to understand the devastation of the 2010 Mount Merapi eruption. Both museums uphold values of perseverance, the spirit of local community revival, and respect for Mount Merapi (Interview Mr “A”, 2025). These three volcanic museums are also rich in educational and historical value for people who want to know about the impact of the 2010 Mount Merapi eruption.

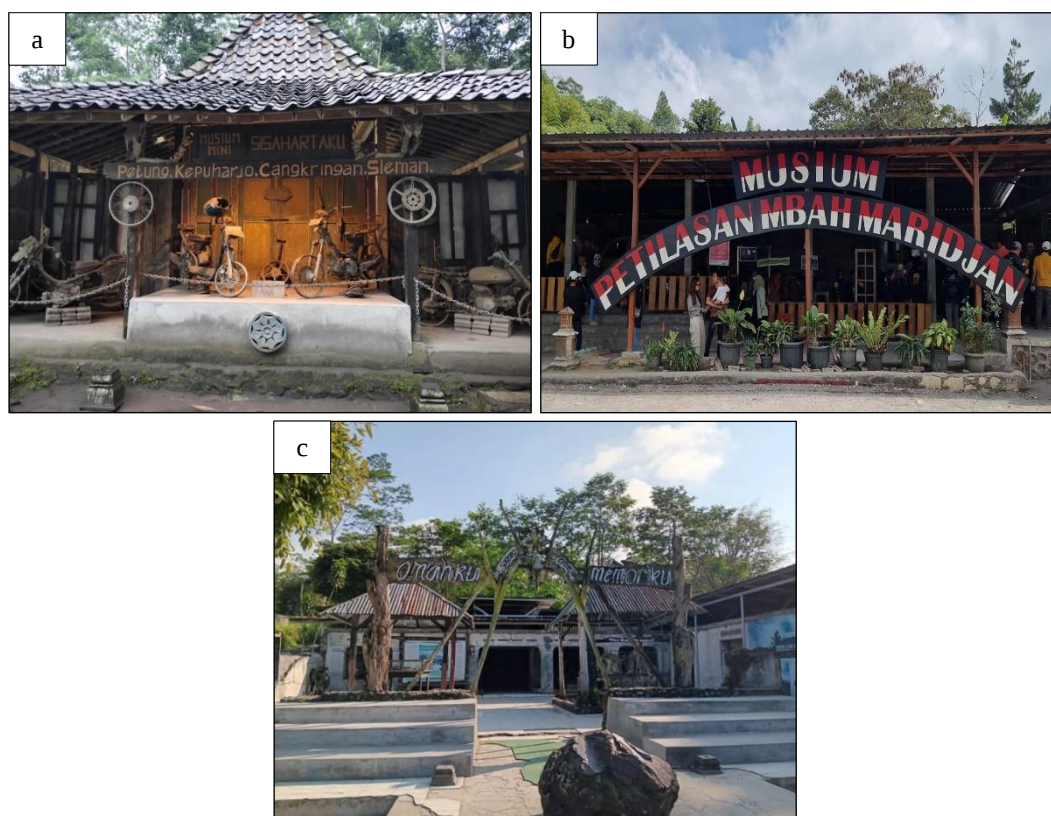


Figure 3. (a) The Sisa Hartaku Museum; (b) The Petilasan Mbah Maridjan Museum; and (c) The Omahku Memoriku Museum

The establishment of volcanic museums in Pelemsari Hamlet and Petung Hamlet as shared memorial spaces and symbols of the 2010 Mount Merapi eruption relevant with Maurice Halbwachs perspective. According to Halbwachs, as cited in G r me Truc (2012), collective memory (LHM) comprises memories and mental representations of past events embedded in space (former buildings that have been turned into volcanic museums). In addition, the volcanic museum, as the former site of the catastrophic 2010 eruption of Mount Merapi, is socially significant and rich in symbolic meaning. When visitors can experience spontaneous memorialization that marks a dimensional shift in space and time, as a structure coherent with the collective image. Therefore, the volcanic museum as a socio-mnemonic space that teaches us how to respond to, interpret, and establish an inner connection between the local community and Mount Merapi (Interview Mr "A", 2025; Interview Mr "S", 2025).

1.2 Implementation of Local Historical Memory Pedagogy Based on the LHM Catastrophic Eruption of Mount Merapi in 2010

The local historical memory pedagogy based on the LHM catastrophic eruption of Mount Merapi in 2010 was conducted from the end of September to mid-November 2025. This pedagogy was carried out in classrooms and three hamlets around Mount Merapi in Sleman, Yogyakarta. In the first stage, lecturers provided explanations about Mount Merapi and its historical and volcanic cultural potential as constructed by the local community through LHM. The details of the material presented: (1) the definition of collective memory, identification of its differences from critical history, and classification of types of collective memory. (2) LHM as a deepening of the concept of collective memory. (3) The catastrophic eruption of Mount Merapi in 2010 as a local-centric LHM topic and its suitability for the scope of local history. (4) The catastrophic eruption of Mount Merapi in 2010 as a space and source of local historical memory pedagogy.

LHM catastrophic eruption of Mount Merapi in 2010, which is integrated into local history material, is an actualization of the points in the ‘Semester Learning Plan’ for the local history course, including: (1) ‘local history studies in Yogyakarta’; and (2) ‘local history development projects in Yogyakarta’. The local historical memory pedagogy based on the LHM catastrophic eruption of Mount Merapi in 2010 also represents a transformative ethnopedagogy (Interview Mrs “DT”, 2025). Through ethnopedagogy, students are invited to study, explore, and analyze the connection between the historical narrative of the catastrophic eruption of Mount Merapi in 2010 and the volcanic cultural reality that has been shaped, perceived, and implemented by the local community of Sleman to this day (Interview Mr “TA”, 2025; Interview Mrs “DT”, 2025). The integration of ethnopedagogy into local historical pedagogy can certainly optimize the pedagogical process (Pattiasina et al., 2025; Widja, 2018; Yasa et al., 2025). This indicates that the catastrophic eruption of Mount Merapi in 2010, when viewed from a historical and cultural perspective, can critique the relationship between past events and the discourse and living conditions of community today. In addition, for students, local history material about the catastrophic eruption of Mount Merapi in 2010 presents a new perspective, local history is not always based on the narratives about politic-power centrist and the struggles of great figures, but also the role of peripheral communities in constructing and preserving their own history through the process of communicative memory transmission across generations and culturalization through cultural memory (Student Interview “RAS”, 2025; Student Interview “EAF”, 2025; Student Interview “KK”, 2025; Student Interview “ZAGL”, 2025; Student Interview “AS”, 2025; Student Interview “DW”, 2025). After explaining the material, the lecturer will then guide the distribution of student groups and instruct them to explore LHM to Pelemsari Hamlet, Petung Hamlet, and Turgo Hamlet according to the predetermined schedule.

Table 1. Example of Student Group Distribution for the LHM Assignment
From History Education Class (A)

No	Division	Total 40 Students	Jobdesk	Equipment
1.	Research	4 students	Interviews with survivors of the 2010 Mount Merapi eruption catastrophe	➤ Mobile phone
		4 students	Observing the volcanic museum	➤ Voice recorder
		4 students	Collecting and recording archives related to the 2010 Mount Merapi eruption catastrophe	➤ Loudspeaker
		5 students	Writing reports on the results of field research	➤ Writing tools
2.	Content Writer	3 students	Creating a video script for an eduvlog on the 2010 Mount Merapi eruption catastrophe based on the analysis of data collected by the field research team	-
	Cameraman	4 students	Conducting interview shoots with informants	➤ DSLR camera
		4 students	Filming the volcanic museum and talent	➤ Mobile phone
		3 students	Filming footage of the hamlet and talent	➤ Tripod
3.	Editing	5 students	Editing the video footage recorded by the cameraman team to be used in the LHM eduvlog video	➤ App for video editing
		2 students	Editing LHM infographics	➤ Laptop/ computer/ mobile phone
4.	Talent	1 students	Presenting the opening, content, and closing of the eduvlog on the 2010 Mount Merapi eruption catastrophe	-
5.	Dubber	1 students	Providing voice-over to explain the points of information in the LHM eduvlog video	-

The distribution of roles among students in completing an assignment on the LHM catastrophic eruption of Mount Merapi in 2010 is a represents 21st-century pedagogical practices that are student-centered, transformative, and emphasize collaboration. In this case, local historical memory pedagogy emphasizes cooperation among individuals to achieve pedagogical goals through task completion, initiating problem-solving, and creativity, conducting joint exploration and deepening, and being responsible for group's success (Gillies, 2014; Nokes-Malach et al., 2015). This is certainly relevant to Lev Vygotsky's 'zone of proximal development' theory, which holds that pedagogy based on collaboration supports individual cognitive development through the help of peers and more competent educators (Chuang, 2021; Narayan et al., 2013). This distribution of roles also facilitates the development of cognitive skills among heterogeneous history education students (Cavas & Cavas, 2020; Duarte, 2024). Students with linguistic intelligence potential who can process words (verbally and in writing) and improvise communication are directed to take on the role of researcher (interviewing eruption survivors and compiling mini field research reports), the role of content writer compiling LHM storyboards for eduvlog video and infographics, and the role of talent-dubber explaining LHM points in video eduvlogs. Students with visual-spatial intelligence potential who can understand visual information and have high creativity are directed to take on the role of cameraman to capture video footage and photos during LHM exploration in the field (hamlet and volcanic museum), then the role of editor who edits the LHM eduvlog video and infographics. Students with naturalistic intelligence potential who can identify, analyze, and critically describe an object are directed to take on the role of researcher (by observing the volcanic museum and archives).

In the second stage, lecturers provided guidance and sent students to the research location. The exploration of the 2010 Mount Merapi eruption catastrophe in several hamlets was carried out over two weeks. In the first week, the class A student group was sent to Pelemsari Hamlet. Meanwhile, in the second week, the class B student group was sent to Turgo Hamlet and the class C student group was sent to Petung Hamlet. The student groups deployed to the research locations included: the research division (except for the author of the mini field research report), cameramen, and talent to conduct interviews, observations, shooting footage of the hamlet and volcanic museum, and convey important points about the LHM catastrophic eruption of Mount Merapi in 2010 (Interview Mr "TA", 2025; Interview Mrs "DT", 2025). Meanwhile, the research division in charge of writing mini field research reports for the initial work steps prepared reference literature. The content writer, editing, and dubbing divisions start working after receiving the field exploration data from the research division (Interview Mr "TA", 2025; Interview Mrs "DT", 2025).

Table 2. Example of Interview Survivors, Volcanic Museum Observations, and Archive Observations Instruments From History Education Class (C)

No	Items Questions
1.	What was your testimony and experience when facing the 2010 eruption of Mount Merapi in Petung Hamlet?
2.	How do you transfer on your testimony and experience when facing the 2010 Mount Merapi eruption in Petung Hamlet?
3.	How do you respond to interpreting Merapi as having two faces, as a source of livelihood for the local community (positive interpretation) and as a reminder for the community through the eruption (negative interpretation)?
4.	Do the local people in Petung Hamlet still practice volcanic traditions (such as Merti Dusun, Dandan Kali, and Slametan) as an effort to maintain harmony humans, nature, and God?
5.	Do the local people in Petung Hamlet still practice euphemisms (verbal ethics) to respect Mount Merapi when it erupts?
6.	What is the role of the caretaker and community leaders in Petung Hamlet in dealing with the eruption of Mount Merapi?
7.	What is the reason for turning former residents houses into the Sisa Hartaku Museum?

No	Items Observation
1.	Location of the Sisa Hartaku Museum and Omahku Memoriku Museum
2.	Facilities and infrastructure of the Museum Sisa Hartaku and Museum Omahku Memoriku
3.	Collections of the Museum Sisa Hartaku and Museum Omahku Memoriku
4.	Landscape of the Houses of Petung Hamlet residents affected by the 2010 Mount Merapi eruption
5.	The role of the Sisa Hartaku Museum, Omahku Memoriku Museum, and catastrophe landscape as a space for transferring information on the 2010 Mount Merapi eruption catastrophe

No	Type of Archive/Author's Name/Edition & Year of Publication/Publisher	News Description	Main Points of the News
1.	?	The 2010 Eruption of Mount Merapi	?
2.	?	Mount Merapi as a source of livelihood for the local community	?
3.	?	Local wisdom in responding to the condition of Mount Merapi (volcanic traditions and euphemisms)	?
4.	?	community efforts to restore conditions after the 2010 Mount Merapi eruption	?
5.	?	The Sisa Hartaku Museum and the Omahku Memoriku Museum as spaces for transferring memories of the 2010 Merapi Eruption	?



Figure 4. (a) Students From History Education Class (B) Conducted Interviews with the Head of Turgo Hamlet; and (b) Students From History Education Class (A) Conducted Archival Observations at the Jogja Library Center (JLC)

During the LHM exploration process, each group of students made three visits to the hamlet and the archive center. The first visit was a full exploration lasting 6-7 hours. While the second and third visits were conducted if LHM data remained incomplete. In addition, lecturers are required to provide guidance and supervision to students at the research site during the first visit, but during the second and third visits, they are not required to provide guidance and supervision, as these visits are only to complete the data collection. Lecturers also assess and evaluate student

group assignments, assisted by the coordinator of each division, to determine whether a student group needs another visit or one visit is sufficient (Interview Mr “TA”, 2025; Interview Mrs “DT”, 2025).

For the students, the exploration activities (interviews and observations) on the LHM catastrophic eruption of Mount Merapi in 2010, carried out in the affected hamlets and archives, encouraged them to construct local historical knowledge from a new perspective. According to them, studying various historical materials usually focuses on deepening through discussion and presentation or reinterpreting certain historical narratives, as in conventional historical studies which are entirely textual-oriented, but LHM is more contextual-oriented focusing on how a historical event (the 2010 eruption of Mount Merapi) experiences a process of communicative memory transmission across generations and culturalization of cultural memory (through the implementation of volcanic traditions and the establishment of a volcanic museum) by the local community organically, thus giving birth to a new culture to remember, interpret, and prove the high level of local historical consciousness of the local community (Student Interview “RAS”, 2025; Student Interview “JA”, 2025; Student Interview “PA”, 2025; Student Interview “ZAGL”, 2025; Student Interview “DRN”, 2025; Student Interview “PP”, 2025; Student Interview “AR”, 2025; Student Interview “MAS”, 2025). From the students previous opinions, it can be understood that the local historical memory pedagogy based on the LHM catastrophic eruption of Mount Merapi in 2010: (1) the process of constructing historical knowledge and local memory through LHM encourages students critical thinking skills. (2) The LHM space allows students to interpret and experience history as something alive and relevant to current conditions. (3) The LHM space is a forum for expressing paradigms, values, identities, and personal interpretations of important historical events.

The LHM exploration activities of the catastrophic eruption of Mount Merapi in 2010 by the three previous classes reflect experiential pedagogy that integrates project-based, problem-based, and field learning. These exploration activities always emphasize the integration of real learning experiences into a work context related to the material being studied (Chisholm et al., 2009; Harden et al., 2012). These exploration activities also professionalism and experience as elements that distinguish them from traditional pedagogy (Fowler, 2008). Referring to the research by Jennifer A. Fredricks (2004), the participation students of history education program in exploring the LHM catastrophic eruption of Mount Merapi in 2010 can be divided into three dimensions: (1) cognitive (mental efforts to understand the material presented based on each individual's intelligence potential); (2) emotional (enthusiasm and consciousness that the pedagogy practiced is not limited to the transfer of knowledge, but also the transfer of values, distinctive paradigms, and cultural constructs); and (3) behavioral (attendance, activity, and completion of tasks based on their respective fields). This condition represents the integration of ‘pragmatic concept’ from John Dewey’s (2020) and ‘flow concept’ from Mihaly Csikszentmihalyi’s (1990). Students of history education program conducting local historical memory pedagogy based on the LHM catastrophic eruption of Mount Merapi in 2010 will reach an optimal level when the challenges and material provided relevant with the diversity of their abilities and intelligence.

In the third stage, the student groups reported their exploration results through presentations in class or zoom meetings. For the first stage presentations, the research (interviews, volcanic museum observations, and archive observations), cameramen, talent, and content writers divisions to report the results of the LHM exploration to the lecturer in the form of interview reports, observation reports, and draft storyboards for the framework for making videos and infographics on the LHM catastrophic eruption of Mount Merapi in 2010 (Interview Mr “TA”, 2025; Interview Mrs “DT”, 2025). The presentation of the LHM exploration results was conducted 3-4 times flexibly. At each presentation, the supervising lecturer provided guidance, input, and assessment of students performance in each division. In addition, for the storyboard, the lecturer also offered special insights to improve the quality of the concept and content of eduvlog video and infographics on the LHM catastrophic eruption of Mount Merapi in 2010.

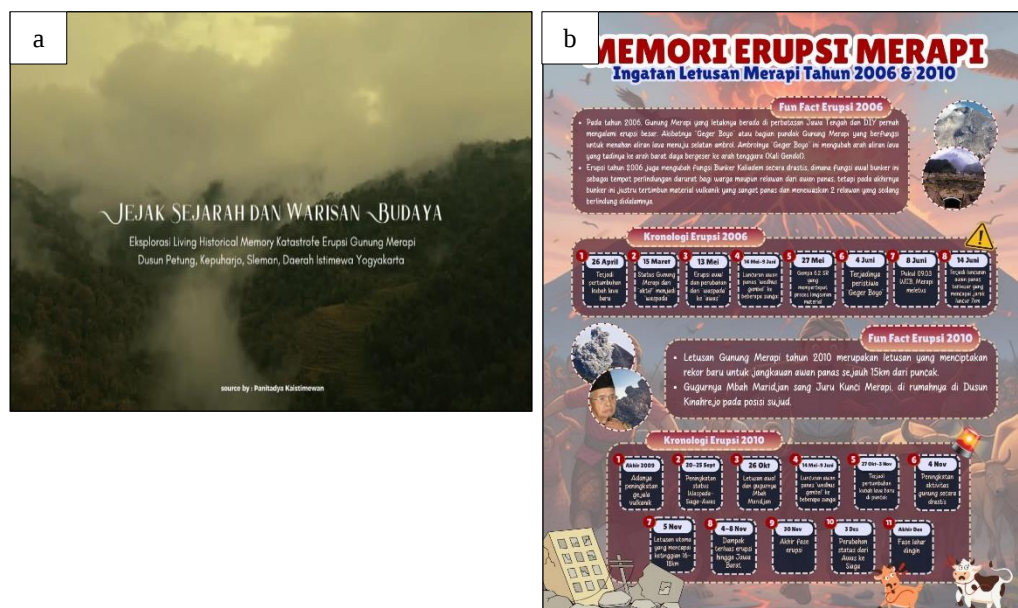


Figure 5. (a) Eduvlog Video of LHM Catastrophic Eruption of Mount Merapi in 2010 From History Education Class (C); and (b) Infographic of LHM Catastrophic Eruption of Mount Merapi in 2010 From History Education Class (B)

In the fourth stage, the student group in the research division (field research report writing section), can begin working on assignments including writing field research reports and editing eduvlog videos and infographics on the LHM catastrophic eruption of Mount Merapi in 2010. The field research report must follow the template provided by the lecturer, with no page limit, and references must include several articles indexed by SINTA and Scopus. The eduvlog video and infographics must follow the storyboard prepared by the content writer team, with a maximum duration of 30-35 minutes. For infographics, there must be at least three content slides covering: (1) the first slide explains the chronology of the 2010 Mount Merapi eruption, accompanied by the most memorable things about the eruption. (2) The second slide explains how the local community commemorated the 2010 Mount Merapi eruption through communicative memory (symbolization and euphemisms related to Mount Merapi) and cultural memory (the implementation of volcanic traditions and the establishment of a volcanic museum). (3) The third slide explains how the community interprets and responds positively to the dynamics of Mount Merapi (both in terms of catastrophe and normal conditions) (Interview Mr “TA”, 2025; Interview Mrs “DT”, 2025). Meanwhile, the second stage presentations, the research, editing, and dubbing divisions to report their work progress to the supervising lecturer through eduvlog videos, infographics, and field research reports that are still half-finished. The presentation of the LHM assignment work process is still carried out 3-4 times flexibly. At each presentation, the supervising lecturer provides guidance, input, and assessment of student performance in each division.

For students, the pedagogical process that facilitates the presentation of LHM data exploration results in the field and the progress of LHM product development (eduvlog videos and infographics) to the supervising lecturer encourages them collectively to present critical scientific arguments and convey those scientific arguments comprehensively (Student Interview “RAS”, 2025; Student Interview “JA”, 2025; Student Interview “PA”, 2025; Student Interview “ZAGL”, 2025; Student Interview “DRN”, 2025; Student Interview “PP”, 2025; Student Interview “AR”, 2025; Student Interview “MAS”, 2025). This process is important as a means for students and lecturers to exchange ideas and refine their understanding of the LHM catastrophic eruption of Mount Merapi in 2010. This is also a practice of ‘scaffolding concept’ from Lev Vygotsky’s (2013) in the pedagogical process of local historical memory to support

students cognitive skills. The production of eduvlog videos and infographics requires a high level of creativity in integrating audio-visual-graphic editing concepts with information content on the LHM catastrophic eruption of Mount Merapi in 2010. This is also a practice of 'creativity concept' from Paul Torrance's (1965) in creating and elaborating products from the pedagogical process that are widely beneficial.

Creativity, critical thinking, and collaboration are important skills that complement one another to support the pedagogical assignment on local historical memory based on the LHM catastrophic eruption of Mount Merapi in 2010. The creative project, accompanied by feedback, is reflected through the LHM exploration process in several affected hamlets. In addition, digital technology is used as a medium to promote the historical and local wisdom within the LHM catastrophic eruption of Mount Merapi in 2010 to the wider community. Both processes are effective ways to strengthen creativity, critical thinking, and collaboration among students of history education program. Therefore, this pedagogical process reflects three aspects: (1) a university culture that upholds critical thinking. (2) Flexibility in the curriculum and local historical pedagogy that optimizes students potential through total engagement in the exploration process and social interaction with the community as the custodians of historical heritage and local memory. (3) As a space for lecturers to explore further the richness of local history in Yogyakarta, involving the role of marginalized communities, and to realize a more transformative, adaptive, and contextual local historical pedagogy.

CONCLUSION

Local historical memory pedagogy based on the LHM catastrophic eruption of Mount Merapi in 2010 is a representation of transformative pedagogy, thus transcending conventional historical pedagogy that is overly oriented towards the dominance of the lecturer's role, is very textual-centrist, and whose historical pedagogy process is unable to optimize the diversity of students potential competencies and intelligence. Such as the concept of transformative pedagogy, this local historical memory pedagogy facilitates students: (1) as active learners who reflect their critical thinking skills through field research activities and reflect their creativity through collaborative project-based assignments; and (2) to understand new meanings in a local historical pedagogy process that is more adaptive, progressive, and contextual. The process of local historical memory pedagogy based on the LHM catastrophic eruption of Mount Merapi in 2010 consists of four stages, including: (1) lecturers delivering material about Mount Merapi with its historical and volcanic cultural potential constructed through LHM. (2) Students explore LHM in the hamlet and the archive center under the guidance and direction of lecturers. (3) Students present the results of their LHM exploration through presentations. (4) Students work on final projects in the form of eduvlog videos, infographics, and mini field research reports.

These four stages of the pedagogical process are a means to optimize the diversity of students competencies and intelligence, including: linguistic intelligence (communication and writing), visual-spatial intelligence (creativity), and naturalistic intelligence (critical analysis). In this case, instead of encouraging students to deepen their understanding of local history through presentations or reinterpreting existing local historical narratives to relate them to contemporary issues, this pedagogical process introduces students to the concept of LHM as a new method for understanding local historical events and encourages them to critically construct their knowledge of local history through direct socio-historical-cultural exploration in the field. This research is still limited to a deep analysis of the local historical memory pedagogy based on the LHM catastrophic eruption of Mount Merapi in 2010, so further studies are needed to test its effectiveness and precision. In addition, this research can serve as a reference for developing a transformative local history learning concept at the university level.

REFERENCES

- A. (2025). *Interview on the LHM Catastrophic Eruption of Mount Merapi in 2010*.
- AR. (2025). *Interview on Local Historical Memory Pedagogy Based on the LHM Catastrophic Eruption of Mount Merapi in 2010*.
- AS. (2025). *Interview on Local Historical Memory Pedagogy Based on the LHM Catastrophic Eruption of Mount Merapi in 2010*.
- Assmann, J. (1995). Collective Memory and Cultural Identity. *New German Critique*, 65, 125–133. <https://doi.org/10.2307/488538>
- Assmann, J. (2010). Communicative and Cultural Memory. In A. Erll & A. Nünning (Eds.), *Companion to Cultural Memory Studies* (pp. 109–119). De Gruyter.
- Assmann, J. (2011). *Cultural Memory and Early Civilization Writing, Remembrance, and Political Imagination*. Cambridge University Press. <https://doi.org/10.1017/CBO9780511996306>
- Assmann, J., & Ebeling, F. (2020). The Mnemohistory of Egypt Approaches Towards the Understanding of Egypt in Intellectual History. In M. J. Versluys (Ed.), *Beyond Egyptomania Objects, Style, and Agency* (pp. 23–38). De Gruyter. <https://doi.org/10.1515/9783110565843-004>
- BNPB & BAPPENAS. (2011). *Rencana Aksi, Rehabilitasi, dan Rekonstruksi Wilayah Pascabencana Erupsi Gunung Merapi di Provinsi DIY dan Provinsi Jateng Tahun 2011-2013*. BNPB.
- Cavas, B., & Cavas, P. (2020). Multiple Intelligences Theory-Howard Gardner. In B. Akpan & T. J. Kennedy (Eds.), *Science Education in Theory and Practice An Introductory Guide to Learning Theory* (pp. 405–418). Springer. https://doi.org/10.1007/978-3-030-43620-9_27
- Chisholm, C. U., Harris, M. S. G., Northwood, D. O., & Johrendt, J. L. (2009). The Characterisation of Work-Based Learning by Consideration of the Theories of Experiential Learning. *European Journal of Educational Research*, 44(3), 319–337. <https://doi.org/10.1111/j.1465-3435.2009.01394.x>
- Cho, S. E., Won, S., & Kim, S. (2016). Living in Harmony with Disaster: Exploring Volcanic Hazard Vulnerability in Indonesia. *Sustainability*, 8(9), 1–13. <https://doi.org/10.3390/su8090848>
- Choi, S. Y., Liu, J. H., Mari, S., & Garber, I. E. (2023). Content Analysis of Living Historical Memory Around the World: Terrorization of the Anglosphere, and National Foundations of Hope in Developing Societies. *Memory Studies*, 16(2), 333–351. <https://doi.org/10.1177/1750698021995974>
- Chuang, S. (2021). The Applications of Constructivist Learning Theory and Social Learning Theory on Adult Continuous Development. *Performance Improvement*, 60(3), 6–14. <https://doi.org/10.1002/pfi.21963>
- Csikszentmihalyi, M. (1990). *Flow: The Psychology of Optimal Experience*. HarperCollins.
- Donovan, K., Suryanto, A., & Utami, P. (2012). Mapping Cultural Vulnerability in Volcanic Regions: The Practical Application of Social Volcanology at Mt Merapi, Indonesia. *Environmental Hazards*, 11(4), 303–323. <https://doi.org/10.1080/17477891.2012.689252>
- DRN. (2025). *Interview on Local Historical Memory Pedagogy Based on the LHM Catastrophic Eruption of Mount Merapi in 2010*.

DT. (2025). *Interview on Local Historical Memory Pedagogy Based on the LHM Catastrophic Eruption of Mount Merapi in 2010*.

Duarte, D. N. (2024). History Teaching Based on the Theory of Multiple Intelligences: The Story of An Action Research Case Study. *Ricerche Di Pedagogia E Didattica*, 19(2), 115–131. <https://doi.org/10.6092/issn.1970-2221/20013>

DW. (2025). *Interview on Local Historical Memory Pedagogy Based on the LHM Catastrophic Eruption of Mount Merapi in 2010*.

EAF. (2025). *Interview on Local Historical Memory Pedagogy Based on the LHM Catastrophic Eruption of Mount Merapi in 2010*.

Fowler, J. (2008). Experiential Learning and Its Facilitation. *Nurse Education Today*, 28(4), 427–433. <https://doi.org/10.1016/j.nedt.2007.07.007>.

Fredricks, J. A., Blumenfeld, P. C., & Paris, A. H. (2004). School Engagement: Potential of the Concept, State of the Evidence. *Review of Educational Research*, 74(1), 59–109. <https://doi.org/10.3102/00346543074001059>

Gillies, R. M. (2014). Cooperative Learning: Developments in Research. *International Journal of Educational Psychology*, 3(2), 125–140. <https://doi.org/10.4471/ijep.2014.08>

Hakoköngäs, E., Pirttilä-Backman, A.-M., & Halme, M. (2021). Something Old, Something New: Finnish Living Historical Memory in the 2010s. *Journal of Pacific Rim Psychology*, 15, 1–8. <https://doi.org/10.1177/18344909211007024>

Halbwachs, M. (1992). *On Collective Memory* (L. A. Coser (ed.)). University of Chicago Press.

Harden, S. M., Allen, K. C., Chau, C. N., Parks, S. L., & Zanko, A. L. (2012). Experiential Learning in Graduate Education: Development, Delivery, and Analysis of An Evidence-Based Intervention. *Creative Education*, 3, 649–657. <https://doi.org/10.4236/ce.2012.35095>

Harris, R., & Reynolds, R. (2014). The History Curriculum and Its Personal Connection to Students from Minority Ethnic Backgrounds. *Journal of Curriculum Studies*, 46(4), 464–486. <https://doi.org/10.1080/00220272.2014.881925>

Hidayat, R. (2013). *Pedagogi Kritis: Sejarah Perkembangan, dan Pemikiran*. Raja Grafindo Persada.

Hirst, W., Phelps, E. A., Meksin, R., Vaidya, C. J., Johnson, M. K., Mitchell, K. J., Buckner, R. L., Budson, A. E., Gabrieli, J. D. E., Lustig, C., Mather, M., Ochsner, K. N., Schacter, D. L., Simons, J. S., Lyle, K., Cuc, A., & Olsson, A. (2015). A Ten-Year Follow-up of a Study of Memory for the Attack of September 11, 2001: Flashbulb Memories and Memories for Flashbulb Events. *Journal of Experimental Psychology: General*, 144(3), 604–623. <https://doi.org/10.1037/xge0000055>

Hirst, W., Yamashiro, J. K., & Coman, A. (2018). Collective Memory from a Psychological Perspective. *Trends in Cognitive Sciences*, 22(5), 438–451.

Hoggan, C., & Finnegan, F. (2023). Transformative Learning Theory: Where We Are After 45 Years. *New Directions for Adult and Continuing Education*, 177, 5–11. <https://doi.org/10.1002/ace.20474>

Hudayana, B. (2012). *Laporan Penelitian Komunitas Lereng Merapi serta Respon Terhadap Erupsi Merapi 2010*. Laboratorium Antropologi Untuk Riset dan Aksi Jurusan Antropologi, Fakultas Ilmu Budaya, Universitas Gadjah Mada.

JA. (2025). *Interview on Local Historical Memory Pedagogy Based on the LHM Catastrophic Eruption of Mount Merapi in 2010*.

K. (2025). *Interview on the LHM Catastrophic Eruption of Mount Merapi in 2010*.

KK. (2025). *Interview on Local Historical Memory Pedagogy Based on the LHM Catastrophic Eruption of Mount Merapi in 2010*.

Lévesque, S. (2018). Historical Thinking Definitions and Educational Applications. In S. A. Metzger & L. M. Harris (Eds.), *The Wiley International Handbook of History Teaching and Learning* (pp. 119–148). John Wiley & Sons, Inc. <https://doi.org/10.1002/9781119100812.ch5>

Liu, J. H., Zeineddine, F. B., Choi, S. Y., Zhang, R. J., Vilar, R., & Páez, D. (2021). Living Historical Memory: Associations with National Identity, Social Dominance Orientation, and System Justification in 40 Countries. *Journal of Applied Research in Memory and Cognition*, 10(1), 104–116. <https://doi.org/10.1016/j.jarmac.2020.09.007>

M. (2025). *Interview on the LHM Catastrophic Eruption of Mount Merapi in 2010*.

MAS. (2025). *Interview on Local Historical Memory Pedagogy Based on the LHM Catastrophic Eruption of Mount Merapi in 2010*.

Maulana, W. I. (2025). Meneropong Masa Depan Ilmu serta Pembelajaran Sejarah. In F. Al Arif (Ed.), *Ilmu Sejarah dan Pembelajaran Sejarah: Konsep, Metode, dan Aplikasi di Abad 21* (I, pp. 141–152). Duta Sains Indonesia.

Miguel-Revilla, D. (2021). What is History Education Good for? A Comparative Analysis of Students Conceptions About the Relevance of History. *Journal of Curriculum Studies*, 54(1), 70–84. <https://doi.org/10.1080/00220272.2021.1896784>

Miles, M. B., Huberman, A. M., & Saldana, J. (2014). *Qualitative Data Analysis* (Third Edit). SAGE Publications, Inc.

MJ. (2025). *Interview on the LHM Catastrophic Eruption of Mount Merapi in 2010*.

MRS. (2025). *Interview on the LHM Catastrophic Eruption of Mount Merapi in 2010*.

Narayan, R., Rodriguez, C., Araujo, J., & Shaqlaih, A. (2013). Constructivism/Constructivist Learning Theory. In B. J. Irby, G. Brown, R. Lara-Alecio, & S. Jackson (Eds.), *The Handbook of Educational Theories* (1st ed., pp. 169–184). Information Age.

Nokes-Malach, T. J., Richey, J. E., & Gadgil, S. (2015). When is it Better to Learn Together? Insights From Research on Collaborative Learning. *Educational Psychology Review*, 27(4), 645–656. <https://doi.org/10.1007/s10648-015-9312-8>

Ofianto, Erniwati, & Fitrisia, A. (2023). Can Primary Source Evidence Skills be Improved by Using Virtual Field Trip Learning Resources? *Al-Ishlah: Jurnal Pendidikan*, 15(4), 5972–5978. <https://doi.org/10.35445/alishlah.v15i4.2620>

P. (2025). *Interview on the LHM Catastrophic Eruption of Mount Merapi in 2010*.

PA. (2025). *Interview on Local Historical Memory Pedagogy Based on the LHM Catastrophic Eruption of Mount Merapi in 2010*.

Páez, D., Basabe, N., Ubillos, S., & González-Castro, J. L. (2007). Social Sharing, Participation in Demonstrations, Emotional Climate, and Coping with Collective Violence After the March 11th

Madrid Bombings. *Journal of Social Issues*, 63(2), 323–337. <https://doi.org/10.1111/j.1540-4560.2007.00511.x>

Pattiasina, J., Touwe, S., & Ansiska, P. (2025). Transforming Ethnopedagogic-Based Learning of Maluku History to Improve Student Understanding and Engagement. *Al-Ishlah: Jurnal Pendidikan*, 17(3), 4765–4779. <https://doi.org/10.35445/alishlah.v17i3.7427>

PP. (2025). *Interview on Local Historical Memory Pedagogy Based on the LHM Catastrophic Eruption of Mount Merapi in 2010*.

Priyambodo, R. (2010, November 4). PVMBG: Erupsi Merapi 2010 Terburuk Sejak 1870. *Antara News*. <https://www.antaranews.com/berita/231884/pvmbg-erupsi-merapi-2010-terburuk-sejak-1870>

PY. (2025). *Interview on the LHM Catastrophic Eruption of Mount Merapi in 2010*.

R. (2025). *Interview on the LHM Catastrophic Eruption of Mount Merapi in 2010*.

RAS. (2025). *Interview on Local Historical Memory Pedagogy Based on the LHM Catastrophic Eruption of Mount Merapi in 2010*.

Riga, F. (2020). Pragmatism John Dewey. In *Science Education in Theory and Practice: An Introductory Guide to Learning Theory* (pp. 227–239). Springer International Publishing. https://doi.org/10.1007/978-3-030-43620-9_16

Rimé, B., Bouchat, P., Klein, O., & Licata, L. (2015). When Collective Memories of Victimhood Fade: Generational Evolution of Intergroup Attitudes and Political Aspirations in Belgium. *European Journal of Social Psychology*, 45(4), 515–532. <https://doi.org/10.1002/ejsp.2104>

S. (2025). *Interview on the LHM Catastrophic Eruption of Mount Merapi in 2010*.

Seixas, P. (2017). A Model of Historical Thinking. *Education Philosophy and Theory*, 49(6), 593–605. <https://doi.org/10.1080/00131857.2015.1101363>

SR. (2025). *Interview on the LHM Catastrophic Eruption of Mount Merapi in 2010*.

Straaten, D. Van, Wilschut, A., & Oostdam, R. (2015). Making History Relevant to Students by Connecting Past, Present, and Future: A Framework for Research. *Journal of Curriculum Studies*, 48(4), 479–502. <https://doi.org/10.1080/00220272.2015.1089938>

TA. (2025). *Interview on Local Historical Memory Pedagogy Based on the LHM Catastrophic Eruption of Mount Merapi in 2010*.

Tamm, M. (2008). History As Cultural Memory: Mnemohistory and the Construction of the Estonian Nation. *Journal of Baltic Studies*, 39(4), 499–516.

Tamm, M. (2024). Mnemohistory. In L. M. Bietti & M. Pogacar (Eds.), *The Palgrave Encyclopedia of Memory Studies* (pp. 1–6). Palgrave Macmillan. https://doi.org/10.1007/978-3-030-93789-8_37-1

Thorp, R., & Persson, A. (2020). On Historical Thinking and the History Educational Challenge. *Educational Philosophy and Theory*, 52(8), 891–901. <https://doi.org/10.1080/00131857.2020.1712550>

Tirado-Olivares, S., Cózar-Gutiérrez, R., García-Olivares, R., & González-Calero, J. A. (2021). Active Learning in History Teaching in Higher Education: The Effect of Inquiry-Based Learning

and a Student Response System-Based Formative Assessment in Teacher Training. *Australasian Journal of Educational Technology*, 37(5), 61–76. <https://doi.org/10.14742/ajet.7087>

Torrance, P. (1965). Scientific Views of Creativity and Factors Affecting its Growth. *Daedalus*, 94(3), 663–681.

Torres, M. P. M. (2024). Ancient History Education through Project-Based Learning. *Journal of Classics Teaching*, 26(51), 1–6. <https://doi.org/10.1017/S2058631024000783>

Truc, G. (2012). Memory of Places and Places of Memory: For a Halbwachsian Socio-Ethnography of Collective Memory. *International Social Science Journal*, 62(203–204), 147–159. <https://doi.org/10.1111/j.1468-2451.2011.01800.x>

Widja, I. G. (2018). Pembelajaran Sejarah yang Mencerdaskan Suatu Alternatif Menghadapi Tantangan dan Tuntutan Jaman yang Berubah. *Jurnal Pendidikan Sejarah Indonesia*, 1(2), 117–134. <https://doi.org/10.17977/um033v1i22018p117>

Yasa, I. W. P., Syahrin, A. A., Arta, K. S., & Pageh, I. M. (2025). Revitalizing Local Culture-Based History Learning: Opportunities and Challenges Toward Transformative Deep Learning Practices. *International Conference on Law, Social Sciences, and Education 2025 (ICLSSE 2025)*, 1–9.

ZAGL. (2025). *Interview on Local Historical Memory Pedagogy Based on the LHM Catastrophic Eruption of Mount Merapi in 2010*.

Zeineddine, F. B., & Qumseya, T. (2021). The Contents, Organization, and Functions of Living Historical Memory in Egypt and Morocco. *Asian Journal of Social Psychology*, 24(3), 378–391. <https://doi.org/10.1111/ajsp.12434>