Emerging Technology Mediation among Pre-service History Teachers at Makerere University

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Abstract. General pedagogy in higher education is constrained in terms of creativity and innovation. In the area of History Education, many teachers view history as a single accurate story about the past so they are slow in embracing dialogic and inclusive pedagogies that are mediated by emerging technologies (ETs) that can bring interpretation of the past in conversation with the present. This may become an impediment to improving the quality of learning since today’s students need to be taught using ETs that are aligned with the way they learn and think. Therefore, this study sought to support students’ participation in doing history mediated by ETs. Data was collected using interviews and observation from an educator and 20 pre-service teachers at Makerere University. The data were analysed through a Hermeneutic cycle-driven analysis. The findings revealed that historicity is constructed through active engagement in doing history by interpreting images, videos, pictures and texts as relics from the past afforded by ETs. Dialogical approaches to learning history through open conversations between the educator and students embedded by ETs helped the pre-service teachers to learn in a democratic way. If utilized this will be relevant to the pre-service teachers’ future students.

Keywords: Teacher training; Emerging technologies; Pedagogy.

1 Introduction

History pedagogy in secondary schools (Trskan, 2012) and at the university (Maloy & LaRoche, 2010) has been overtly based on the memorization of names, dates, places and facts (Bain & Mirel, 2006; Savich, 2009; Sebastian, Cosme, & Jorge,
2014), where teachers give oral accounts of the main events, note points on the chalkboard, and draw content primarily from text books geared at passing examinations (Keating & Sheldon, 2011; Trskan, 2012; Voet & De wever, 2016; Odendaal, 2017). The prevalent use of didactic approaches in the history classroom (Maloy & LaRoche, 2010) is characterized by student belief that the teacher is the only source of knowledge (Trskan, 2012) and viewing history as a single accurate story about the past (Cochran, 2010). It is, therefore, not surprising that today’s students feel detached from learning about the uncontextualized knowledge of past that does not relate to their everyday lives (Apostolidou, 2012; Stockdill & Moje, 2013; Harris & Girard, 2014; Voet & De wever, 2016).

In this paper, we propose a democratic participation (Barton, 2015) of the educator and students in doing history mediated by the affordances of ETs. In the context of this research, students will synonymously mean Pre-service teachers and participants.

1.1 Emerging Technologies

Embracing the use of ETs in History Education provides an opportunity to link the past to the present and can be a way of convincing students that they can participate interpreting the past as it is vital and relevant in their lives (Kuo, Song, Smith & Frankin, 2007; Haydn et al., 2015; Odendaal, 2017). In this paper, we conceptualized ETs as tools, ideas and advancements utilized in varied education settings to serve varied education-related purposes (Veletsiano 2010; Ng’ambi, 2013). Examples of such ETs are social technologies like Blogs, Wikis, Skype, Facebook, and WhatsApp that can potentially facilitate sharing of history content between educators and students. Although researchers (Lee, 2002: Haydn, 2011: Hillis & Munro, 2005: Haydn & Barton, 2006; Zin Yue & Jaafer, 2009; McCall, 2013; Warnich & Gordon, 2015; Haydn et al., 2015; Odendaal, 2017; Vander Merwe & Horn, 2018 & Sebbowa & Muyinda, 2018) have integrated ETs in the teaching and learning of history at different contexts. While, other researchers have engaged in doing history through creation of digital archives (Bolick, 2006); teaching historical contextualization (Havekes, Coppen & Luttenberg, 2012) and gathered and interpreted data from primary and secondary sources (Levstik & Barton, 2011). We argue for doing history through enabling both the educator and students to participate in attaching meaning to the past mediated by ETs. Thus, we sought to investigate how historicity is constructed on an ET platform among Pre-service teachers at Makerere University?

1.2 Historical Hermeneutical Theory

We engaged with the historical hermeneutics theory (Gadamer, 1975) key theoretical construct, historicity to give us the language to understand the process of interpreting and doing history mediated by ETs. Moreover, historicity is conceptualized as a true understanding of the past achieved through dialogical
interpretations and participation in doing history to make sense of the present with an anticipated future (Gadamer, 1985; Gjesdal, 2015). Historicity constantly reminds us about the importance of our traditions, cultures, imaginations and language in trying to make sense of the present, thereby remembering the injustices of our past and trying to fix them as we move into the future (Gadamer, 2004; Porter & Robinson, 2011). Every sense of the present is shaped by the past or tradition (Gadamer, 1975; Fairfied, 2015); if we did not have the past there would be nothing to determine the present and influence the future. This is suggested in Gadamer’s sentiments below;

“Long before we understand ourselves through the process of self-examination, we understand ourselves in a self-evident way in family, society and the state in which we live.” (Gadamer, 1975:276)

It can be inferred from Gadamer’s sentiment that, today’s students can participate in the meaning making process of the past events. For example, in this research, students were required to participate in doing history by sharing multiple sources such as texts (journal articles, newspaper extracts, audios, video clips, pictures and images about their families and cultures (see for example, Figure 1). Hence, by actively participating in collecting, retrieving their family/cultural history and sharing with others, students were able to interpret, appreciate, and identify with the past while aligning to its relevance in the present. The rationale for sharing their cultures was important in making them feel part of their own history, family and tradition. To this end, Seixas, (1996) argues that family history gives students a chance to learn about the past in a way that is meaningful to them as it connects to their lives. Comparably, Gadamer asserts that understanding of tradition is achieved through obtaining family history (Abadía, 2011). As earlier illuminated in this paper, the key construct of historicity influenced the understanding of framing the key question; how historicity is constructed on an ET platform among Pre-service teachers at Makerere University?

2 Methodology

A qualitative case study design was employed bounded by time and context at Makerere University, School of Education and more specifically among third year Pre-service teacher (Yin, 2003; Miles, Huberman, & Saldana, 2014). These cohorts of participants were pre-service teachers who took history as one of their teaching subjects. Subsequently, as educators teaching the History methods course, we requested the pre-service teachers interested in participating in the doing history on the ET platform to register their names. Out of the History Education class of over 100 students, only 20 participants voluntarily joined the ET platform comprising of; three Post Graduate Diploma students, eleven second-year students and six third-year students. Thus, voluntary participation was advantageous for the following reasons: firstly, those undertaking history could
engage at a higher thinking level, comprehend and debate various history concepts and issues aligned to the pedagogic context. Secondly, following the pragmatic and technical perspective, in that this research needed someone who had an interest in using Internet-enabled devices and mobile phones leading to their more likely use of social media tools such as Facebook, Twitter, Wikis, Blogs and Whatsapp (Sebbowa, Ng’ambi & Brown, 2014).

2.1 Face-to-Face Workshop

The volunteered participants were invited for a face-to-face workshop in the School of Education where they were requested to create accounts on the ET platform with the help of the laboratory technicians. To this end, Moule (2007) and Mokoena (2013) advise online facilitators and teachers that technical guidance is always needed during online learning. We observed student-student interactions during the workshop as peers kept on asking each other questions about the ET platform, and also consulted the educator. For further guidance, we requested the participants to refer to the ET user guide on the site and also play the video clip uploaded on the platform for further guidance. At the workshop, one participant from third year proposed a topic, Ethnicity in Uganda, suggesting that it would help participants identify with their own cultures while appreciating other people’s cultures. This topic was also deemed important because it is covered under the Ordinary level history syllabus in Uganda. The participants would get a chance to share the history of their own families/cultures.

2.2 Data Collection

Qualitative data was collected from semi-structured interviews and participant observations on the ET platform where participants (A1-A20) were required to share names, year of study and as well as post images, video clips, newspaper extracts, journal articles and pictures their culture/family history (see Figure 1). The rationality for sharing visual historical artefacts was to facilitate the analysis of all the data from the historical sources, post interpretations, receive comments, questions and responses from their peers with supplements from the educator mediated by ET as contemporary tools visible in the present. To this end, doing history through dialogic constructions of historicity would be afforded by the potentials of ET. Consequently, interview guide consisted of 17 question items focused on the key research question and was conducted within 30-45 minutes. The place and setting for conducting the face-to-face interview was with-in the office space as participants suggested it had less interference and minimum noise. The interview process was audio-recorded (with the consent of the interviewees) to maintain a level of accuracy and richness of the data. For triangulation of data, interviews and observations were later transcribed and analysed in alignment with the research question highlighted in the preceding section.
2.3 Data Analysis

The theory-driven analytical approach particularly the concept of hermeneutics cycle driven analysis was adopted for two reasons. Firstly, hermeneutic cycle driven analysis provided a systematic language and process for gaining understanding and interpretation of the texts constructed in this research (Fleming, Gaidys, & Robb, 2003, Turner, 2003). Secondly, this form of analysis was relevant in trying to get the actual communication of the author as a part without misunderstanding the text viewed as the whole (Porter & Robinson, 2011). Therefore, hermeneutic cycle driven analysis majorly focused on the cyclic interpretation of the whole and the parts, also referred to as the part-whole method (Gadamer, 1985). Subsequently, the hermeneutic cycle focuses on dialogical understanding of the text as a whole and the interpretation of the parts in which descriptions are guided by anticipated explanations (Gadamer, 1975: 117). Hence, to ensure a systematic analytical framework, I focused on the themes arising out of the data, provided an example of such data in form of an extract viewed as the part and then explained the whole phenomenon in relation to historicity as a theoretical construct and the research questions (following theme-extract-explanation).

3 Findings and Discussion

The students shared their online identities by choosing how they wanted to be known online (Figure 1).

![Figure 1. Online Introductions](image)

In Figure 1, students’ names are blanked (colour blue) out to ensure their anonymity. Twenty participants shared highlights about their family history by mentioning tribe, origin and something significant about their culture, while only seven uploaded images about their cultural history. The small number of image
uploads could be because some participants felt shy to upload family history images, some cultural relics (representations of the past) are not available in electronic format while others might have been challenged in uploading images and videos due to internet fluctuations. Therefore, observational findings suggested that students shared online identities and family histories for ease of interaction and understanding each other on the ET platform. These findings are evident in Gadamer’s qualitative sentiment (highlighted preceding section) of understanding self through the family and state (Gadamer, 1975).

Moreover, the findings suggested that students’ needs aligned to sharing their family history provided a significant aspect of following (their thinking) what they know in the present while moving back to the past. Thus, by sharing family history students felt part of the history academic disciple through participating in the meaning-making process and thus eliciting the relevancy of studying the past in the present situation. Thus, integrating the study of family/culture history in the academic version of the Uganda history curriculum would absolutely provide a partial solution to the underlying study problem of today’s students finding history boring and irrelevant because they feel detached from it, although the shared views about cultural and family history were obtained from a case of 20 students, who might not ably represent all students taking history as a teaching subject at Makerere University. These qualitative findings provided useful insights that might be applicable to similar contexts and were relevant in improving pedagogical processes.

In corroboration with the above findings, Interview findings with qualitative sentiments represented from three interviewees, who were aligned to the current situation while also focusing culture to a global perspective as follows:

‘I appreciate my culture as it proves my historical heritage; I believe our original cultures should be preserved through aligning the traditional with modern cultures ushered in today by technology and modernization to avoid cultural erosion.’ (A2).

While another reiterated that:

‘As a historian, I felt enriched to read about other people’s family history that enriched my knowledge scope. Also, there is a linkage to the present situation; for everything, there must be a root; it may have undergone changes but there is a big linkage with the past.’ (A7)

Another participant disagreed with some cultural practices:

‘While I love the idea of cultural heritage, I disagree with some cultures like the Sabiny culture of Female Genital Mutilation; some cultures in Northern Uganda where people [a man and a woman] fight before they get married. Such cultural practices do not show respect for human rights.’ (A11)

The interview sentiments above revealed an appreciation and respect of different cultural heritages. The statements suggested close alignment between cultural
practices and contemporary phenomenon. Therefore this was indicative of cultural history as an important aspect that ought to be preserved through different generations. For example, student (A2) used the phrase, ‘original cultures should be preserved’; aligning traditional with modern cultures ushered in today by technology.’ The perception of the student was such, while some people may not understand the relevancy of certain cultures today. She believed no form of cultural belief should be diluted but instead they should be aligned to modernity by using technologies that are available and accessible at different contexts. In agreement with the student’s view, we argue that original cultures can be preserved and communicated from one generation to another without being diluted or exaggerated - for example, the case of using ETs where students, educators and the community can share original pictures, images and texts from newspapers about the past, attach meaning to them in the present and also invite other stakeholders to contribute their views. This could be a great move towards preserving culture while ushering in technology and modernization, as reflected in the students’ sentiment above.

That said, student (A11) acknowledged that while she loved the idea of cultural heritage, she disagreed with some inhuman practices that did not ‘respect human rights.’ We strongly believe that cultures should be preserved and human rights respected. Our argument is that human beings should be at liberty and should not be subjected to any cultural practices that deprive them of their freedom. In agreement with this, the historical hermeneutics philosophy guiding this research attested to embracing culture, tradition and history by changing and altering them to make them relevant to one’s context and desires (Gadamer, 2004: Regan, 2012).

Thus, this paper apprehends the need for teachers/educators to connect to where students are in the present, potentially afforded by ETs and social media that today’s students are passionate about. This approach is viewed as critical in today’s study of history (Sebbowa et al., 2014) because it affords a process of enabling active participation in doing history through exploiting Wiki technologies that connect to today’s students (Maloy et al., 2010).
Figure 2. Doing History through Making Shared Interpretations of History Meanings
Figure 2 presents the educator’s task assigned to students on Ethnicity in Uganda, teaching methodologies and relevance of teaching the topic under study as reflected on the ET platform. In response to this, students consulted multiple sources of evidence; print and electronic textbooks, information from websites, visits to historical sites, museums, reading fellow peers’ posts on the ET platform, reading newspapers and interviewed elders. Moreover, they made collaborative interpretations of the underlined topic through commenting, questioning and responding to peer’s posts with supplements from the educator. Thus, observational findings from Figure 2 were categorized and coded in to themes arising out of the students’ responses as follows: out of the 12 participants who were observed on the ET platform, seven conceptualized ethnicity, six revealed that they would use interactive methods to teach Ethnicity in Uganda, seven revealed that ethnicity helps learners to know their origins and cultures, while eight uploaded images and videos on ethnicity, particularly from Buganda kingdom and Sabiny. However, it was observed that one student domineered and posted detailed contributions in response to the educator’s task in Figure 2. On close interrogation and asking him why he did that, the student expressed a lot of interest in using ICTs to facilitate understanding in the classroom room. Correspondingly, Husbands (2003) encourages educators to engage with representations of the past littered through students’ daily lives such as films, videos, audios and television as a way connecting to the present. Consequently, an analysis of two excerpts as these particularly contained words and phrases that would be relevant to answering the research questions.

**Analysis Example 1**

**Theme:** Ethnicity helps learners to know their origins and cultures.

**Extract:** ‘In this context, Ethnicity gives each individual of 21st century chance to know each belief, practices, norms and customs of different tribes through learning/ teaching.’

**Explanation:** In the context of this research, students were able to construct various understandings and interpretation of the concept, Ethnicity in Uganda, as earlier highlighted. While pictures, videos and images (in reflection of the past) shared among participants proved useful resources in clarifying students’ understanding, these should be applicable to the students’ life and needs. This student argued that the studying, ‘Ethnicity helps students of the 21st century to know each belief and practices’. This is particularly significant in helping students establish identities and appreciation of each other’s cultures. In other words, in terms of responses to the research question, historicity should be constructed in relation to the needs of the contemporary situation. Given that analysis example 1 captured the content knowledge to be taught; Ethnicity in Uganda - the following example illuminates how such content should be taught to enhance learning.
Analysis Example 2

**Theme:** Use interactive methods to teach Ethnicity at the secondary school level

**Extract:** ‘I would use interactive methods like group work, field study, case study; project and role play to teach Ethnicity in Uganda. This is because they are learner centred.’

**Explanation:** The above sentiment postulated that student generated approaches could potentially facilitate in-depth learning about the past. Using multiple approaches in attaching meaning to the past could enhance democratization of learning about the past and also suit students’ stages of development (Roberts, 2010). For example, the student gave examples of ‘field study, case study and role play to enhance learning’. This was relevant for two reasons: firstly, for providing insights and understanding on how students (pre-service teachers) can actively participate in a shared constructing of meaning about the past and thus their likeliness to use the same methods with their future students. Secondly, such approaches capture imagination, wonder and excitement as the students are practically exposed to the community (field and case studies) in which they live, thus enhancing relevancy in learning history. The historical hermeneutics philosophy attested to an engagement with dialogical approaches that involved open-ended questioning and answering between educators and students focused on linking the past to the present (Porter & Robinson, 2011). Following the presentation of results, it was evident that students successfully and actively engaged in the collaborative construction and doing history mediated by the ET platform.

In alignment with the above findings, interview sentiments were identified in relation to students’ contrasting views (deviant cases) about cultural practices, as one student asserts that:

‘African cultural practices like FGM should go on. Africans have had their cultures and Europeans have since called them, barbaric; Erosion of African culture is indirect colonialism. If a community practices male and female circumcision then it should go on with it.’ (A14)

While another retorted that,

‘I interviewed 4 Sabiny students and also attended the Seska Sebei (Sabiny) cultural meetings at the freedom square Makerere University; I wanted to aligned what is documented in books and what the Sabinys have to say.’ (A11)

Contrary to the students’ earlier views of banning the practice of FGM as it is seen as barbaric and thus disrespects human rights, A14’s statement above suggested that such cultural practices should be preserved especially if they were accepted by the community. He used the words, ‘Africans have had their cultures and Europeans have called them barbaric; indirect colonialism.’ The statement was indicative of the importance of enhancing liberty as communities make their own cultural decisions and Africanisation (African cultural traits). However, it’s worth mentioning that, on 10 December 2009, the Ugandan Parliament passed a law banning the practice
of FGM and the practice has since been recognized as a violation of human rights. Thus, the position adopted in this paper is a need for continuous sensitization of the communities about the ills and effects of such cultural practices. The analysis suggested that students were able to learn to participate in reconstruction and ‘doing history’ through reading, interpreting and analysing multiple sources of evidence. Belanger (2011) argues that a critical aspect of doing history is to understand that history is a matter of weighing different sources evidence and making informed interpretations.

It was explicitly revealed that participants viewed family history as a means of cherishing cultural values, appreciating each other’s cultures and heritages, sources of identity, preservation of culture, while also exhibiting an awareness of diversity among cultures. To this end, Seixas (1993) argues that family experiences and cultural values are more important in shaping the students' understanding of the past other than any other source of historical information. Thus, this research has demonstrated that students’ interest can be aroused through linking the study of the past to their daily lives in the present. Also evident in this research was the desire for students to share and preserve their culture (avoid cultural erosion) through blending tradition with modernity. Such views are important as they are geared to attending to students’ interests and thinking about the past. In support of this view, Seixas (1993) argues that attending to students’ pre-understanding of historical knowledge, based on their families and cultural inclinations could afford understanding of the relationships and differences between their families and communities and thus bridge a sense of unity and brotherhood other than diversity. However, the contradiction in including students’ views about sharing their family history in the curriculum is that they are, in most cases, subjective and biased. To this end, Seixas (1993) suggests that if family history and cultures are to be appropriately integrated in the study of history in schools or at higher education institutions, there is need to provide a strict rules and procedure, and multiple understandings stipulated in the curriculum. Seixas further asserted that, there will be no means of assessing the many of myths and distortions that students might present.

4 Conclusion

Historicity was constructed through active engagement in doing history through making sense to images, videos, pictures and texts obtained from the past. For the purposes of this paper, doing history was described as actively and collaboratively sharing images, videos, and texts from the past and making sense of them through dialogical conversations on the ET (as lenses from the present). Doing history in this sense therefore attracted students to participating in the co-construction of the past by making use of ETs. However, it worth mentioning that some limitations were recorded during the research such as utilization of primary sources like visits to sites proved to be expensive, ET login challenges, Internet
fluctuations were a great impediment to construction of history meanings, and some students were slow and could not ably cope with the dialogical conversations on the ET platform. Therefore, there is need for continuous trainings and refresher courses for students and educators; technical and infrastructural support should be provided if ETs are to be successfully integrated in pedagogical practices.

Consequently, in order to make learning about the past relevant to learners, one must link history to students’ interests and what they know in the present to move back to the past, i.e. reviving their heritage and cultures. Appreciation of each other’s, families, cultures could bridge a sense of unity and brotherhood other than diversity. This might possibly reduce on the problem of cultural conflicts in the present situation and, with a projection of that understanding on what the future might be like. Historicity was also constructed through dialogical learning approaches such as group discussions, field visits, and questioning and answering as conversations between students and teachers with a focus on the past and the present, thus aligning students to historical thinking. Therefore, we argue for inclusive and democratic participation (Barton, 2015) between educators and students in the process of constructing history meanings mediated by ETs as the way in which today’s students’ learn. Such shared interpretations of historicity between the educator and the students provide meaningful and creative insights to innovate history pedagogy relevant to the 21st century.

References


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