

Integrating Digital Humanities into Senior High School Literary Criticism: Opportunities and Challenges

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Abstract: In the present day, digital methods aid in the investigation and reflection of language and literary studies. It continues to develop through the use of digital tools, providing fresh perspectives on text analysis, language comprehension, and cultural significance of literary works. The growing field of digital humanities has completely changed how academics study and comprehend language and literature. The goal of digital humanism is to investigate how technology and humanistic research might be combined in the field of language and literary studies. It demonstrates how technology improves our understanding of stories, genre classification, authorship characteristics, and language evolution. Furthermore, using these digital tools goes beyond simple analysis, embracing fresh approaches to interpretation and providing new perspectives on the production, distribution, and reception of literary works and linguistic materials. It provides opportunities for interdisciplinary study by fusing computational techniques with humanities studies to investigate language and literature in fresh and perceptive ways. In the literary field, the digital humanities offer cutting-edge techniques and resources that enhance study, instruction, and interpretation. In addition to advancing conventional approaches, the function of digital humanities is to promote innovative approaches to engage with and understand cultural artifacts in a technologically mediated world.

Keywords: Digital humanities; Literary criticism; Pedagogy; Technology; Technological advancement

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1. Introduction

Transformation in the field of education is prominent as technological advancement arises and leads the way to redefine the traditional approach. These changes introduced new tools and methodologies, especially digital humanities, allowing people to deal with different subjects, even history, arts, and literature. Focusing on literature, it enables a broader way to interpret and analyze a literary text. Furthermore, this provides more

opportunities in secondary education as there is the study of literature for the students provided by teachers. In the context of digital humanities—the process of incorporating the information in literature, language, history, and other aspects and combining it to provide a new framework and perspective—it enables students to easily compare and engage in different works that allow them to enhance their critical thinking and analytical skill, which is crucial not only in education but also in any field of work^[1].

Digital humanities and language learning being connected with technology enhances students' experience in terms of education. Learning a language through books and movies can be a captivating and successful method of language development. A person can get more skilled and proficient in literature studies by reading books, learning about genres, expanding their vocabulary, having discussions, and performing analysis. However, in the digital realm, language learning can be advanced through the use of language learning apps, TV series, movies, and audiobooks. English-language films, TV series, and music have a huge global audience in the media and entertainment industry, impacting languages and cultures all over the world. Language-neutral translation and localization services are now more widely available thanks to technology. Numerous platforms and apps make language learning easier by simplifying methods for users to learn several languages. Learning becomes more engaging, dynamic, and enjoyable when digital media is included in the process. Digital ethics in literature and language in today's dynamic world take into account the appropriate use of technology and online resources while producing, disseminating, and viewing material. As technology advances, ethical norms in literature and language provide accountability for the communication process and respect for other viewpoints. In our increasingly interconnected world, upholding integrity, justice, and respect in language and literature requires utilizing digital communication and technology while adhering to ethical ideals. Literature allows us to critically analyze the moral implications of technology on people, promoting introspection and directing moral judgment in the digital age. The relationship between digital ethics and morality in literature and language draws attention to how ethical issues are changing in a world that is becoming more and more technologically advanced.

However, despite the opportunities digital humanities brought in literary criticism, it also serves challenges. It raises concerns regarding digital ethics that deal with ethical considerations covering the appropriate ways to use the online resources gathered, the personal data of the owner, and even avoiding misinformation because of the credibility of the site. Relating this to the context of literature specifically with literary criticism, it deals with the production, sharing, and consummation of the context used in the criticism. Furthermore, it also concerns respect because of the different perspectives that each individual has wherein these must be addressed to provide a better outcome.

With this, the study aims to identify the opportunities and challenges related to the existence of digital humanities in literary criticism for senior high school students. In addition, we will explore how digital tools and resources can improve students' reading experience in approaching literature, providing them with new channels of analysis and appreciation of literary texts. It shall further delve into the challenges educators and institutions face in adopting these technologies, ranging from issues of access and pedagogical approaches to the need for comprehensive teacher training. Likewise, the research aims to provide practical recommendations for effectively incorporating digital humanities into high school curricula in a way that would encourage critical thinking, creativity, and digital literacy in students while preserving the essence of traditional literary analysis.

1.1. Research questions

This study aimed to determine the opportunities and challenges experienced by the teachers in the integration of

digital humanities into the literary criticism of senior high school students.

Specifically, this study sought to answer the following objective:

(1) What kind of ongoing support and resources are necessary for teachers to sustain the use of digital humanities in their classrooms?

(2) What are the challenges and barriers that teachers face when integrating digital humanities into their teaching practice?

(3) How can the effectiveness of digital humanities integration in senior high school literary criticism be measured and evaluated?

1.2. Study significance

This study would provide a great opportunity for educators, learners, parents, school administrators, and future researchers to be aware and be guided on the integration of digital humanities in writing literary criticism among senior high school students.

(1) Educators: This study guides them on how they are going to handle the digital humanities in writing literary criticism.

(2) Learners: As for the learners, this will benefit them in terms of knowledge and awareness of the existence of digital humanities and cope with the challenges to provide an appropriate output in writing literary criticism.

(3) Parents: This study may guide the parents to know what specific action and guide they may provide for their children in the existence of digital humanities to lessen the challenges it brings and maintain and support the opportunities it provides.

(4) School administrators: The findings may present ideas to help school administrators provide a conducive environment for the existence of digital humanities in writing literary criticism and provide specific strategies for maintaining its proper usage.

(5) Future researchers: The result of this study may provide information for future researchers who want to conduct similar studies or any related studies about digital humanities.

1.3. Scope and limitation

The research sought to identify the opportunities and challenges experienced by the teachers in integrating digital humanities into the literary criticism of senior high school students. The aspects looked into the kind of ongoing support and resources necessary for teachers to sustain the use of digital humanities in their classrooms, the challenges and barriers that teachers face when integrating digital humanities into their teaching practice, and ways to measure and evaluate the effectiveness of digital humanities integration in senior high school literary criticism.

Moreover, this study is limited only to the senior high school teachers who are having literary criticism for their students at STI College Balayan. This is because they are suitable to be the respondents from whom the needed information for the study is gathered. This means that other teachers who are not handling senior high students and from other schools were excluded from this study.

2. Literature review

2.1. Support and resources to sustain the use of digital humanities

In the period between 1990 and 2000, the concept of digital humanities appeared, initially under the name of

humanistic computer science (Humanities Computing) or computer-aided processing of humanistic data ^[2], despite the use of computers to analyze research data in humanities disciplines such as literature and history dates back to the 1940s. At that time, according to Gavin and Smith ^[3], the focus was on the potential of computers to facilitate the creation and sorting of large concordances and thesauri of historical texts.

According to Harrison ^[4], young children can access pictures and videos, navigate YouTube, and interact and participate in games and digital applications that are suited to their age. This access provides a wide range of digital content for young individuals. For instance, YouTube can allow a child to explore different multimedia content wherein it also provides learning experiences as it gives way for a child to do hands-on learning. Generations Y and Z evidently possess the greatest experience of ICT facilities, thereby making it easier for these groups to utilize even online learning. This kind of familiarity allows them to navigate things online in an easier way.

In addition, Fauziana ^[5], students can revisit their lessons by re-watching recordings made by the educator, and obtain information from books or using the internet to strengthen their knowledge. Educators and students can also conduct bilateral communication, as messages can be exchanged during a lecture using the meeting software's chat column, WhatsApp, Telegram, video calls, or phone calls. Students can also review their lessons using Education TV on DidikTV channels. This is particularly useful for students expecting to take the following examinations: the Form 5 Malaysia Certificate of Education (SPM), the Form 3 Assessment Test (PT3), and the Standard 6 Primary School Assessment Test (UPSR).

2.2. Challenges and barriers in the integration of digital humanities

Technological advancement undeniably paved the way to transform one thing to another even in education, specifically in the method of teaching practices. This technology provides new ways in analyzing and sharing information. However, the digital age has also brought new challenges to the humanities. One of the most relevant is the problem of saving data ^[6]. Nowadays, so much information is stored digitally that there is a risk of losing important data due to technological obsolescence or data corruption. Scientists must take steps to ensure the long-term preservation of digital data so that it remains accessible to future generations ^[7]. This includes having a digital archive and a robust backup system for everyone.

Another challenge is the need for scientists to develop new skills and adapt to new technologies to keep up with the rapidly evolving digital landscape. Specific professionals need to adapt to this situation and incorporate technology in research and teaching. This requires a willingness to use new methods and tools, as well as a commitment to continuous learning and professional development, otherwise, there might be lapses in the use of available digital resources.

Furthermore, Walt ^[8] mentioned that the integration of digital humanities also deals with challenges in terms of communication, opportunities, funding, and resources. As digital humanities reach a wide scope, it now tends to be more complex. This is also related to the absence of technical support and limited experience in digital humanities, which affects the output itself. These challenges have been continuously mentioned over time as it does not only affect a single aspect but each one affects one another.

2.3. Effectiveness of the integration of digital humanities in senior high school literary criticism

The effectiveness of digital humanities in senior high criticism is a factor to be determined as it will foster ways on how it will be improved as well as address the opportunities and challenges it brought. Senior high school

students can benefit from digital technologies to improve their understanding of every word, text, and meaning delivered via digital literacy tools. It implies that such digital tools help them develop their digital literacy skills while promoting self-regulated learners' autonomy^[9]. At the same time, digital literacy tools empower senior high school students in literacy as they grow with technology. Their skills develop through careful and detailed comprehension^[10]. Over the last few years, the influence of digital technology in daily life has evolved^[11].

This is primarily because digitally literate people have multiple literacies that allow them to use digital technology effectively and productively^[12]. On the other hand, senior high school students should have various skills to be digitally literate where they can use different 24 Humanities, Arts, and Education digital technology effectively and innovatively, which can help achieve quality education in times of distance learning.

Moreover, senior high school students with developed digital literacy skills are helpful for the future generation of technology. Along with these technological advancements, students use software applications like Canva, Microsoft Office, WPS, and others. These applications are used to showcase their digital literacy skills and enhance their language skills by producing critical content with images, videos, and other media output. Additionally, the digital environment that develops as an educational tool requires skills to embrace basic literacy for reading and writing in today's era, as well as the requirements of the students to have critical thinking skills such as analyzing the reliability of information and contextualizing, analyzing, and synthesizing what is found on the Internet^[13].

3. Research design

The study employed qualitative design wherein it deals with exploring and understanding a complex phenomenon through individuals' and or groups' interpretations. Plus, it captures rich human experiences, beliefs, behaviors, and attitudes by providing insight that is not within the statistical analysis^[14]. This method is used in different studies as it enables one to get first-hand information as well as it is suitable for this study to determine the opportunities and challenges brought by digital humanities in writing literary criticism.

3.1. Data collection

The opportunities and challenges brought by digital humanities in writing literary criticism in senior high school were determined using teachers' perspectives based on their own understanding and experience. With this, the data for this study was collected using interview questions. However, to ensure ethical consideration and secure information, a permit was obtained before conducting the study. Upon the approval, the process was explained and pushed through one by one wherein the answer will be written down and treated with utmost confidentiality. The collected data was read carefully and analyzed with the use of thematic analysis.

3.2. Data analysis

Thematic analysis was used in this study to further analyze the gathered information and uncover the meaning of a certain text through its pattern^[15]. This analysis was chosen as it is suitable for the study and it helps the researcher to easily categorize and analyze the data collected. The data was compiled and read thoroughly to identify the similarities and differences in the answers from each respondent. Furthermore, the analyzed data was used in the discussion to be further analyzed and interpreted.

4. Discussion

This section assessed the opportunities and challenges in the integration of digital humanities in senior high school literary criticism based on teachers' perspectives.

4.1. Ongoing support and resources necessary for teachers to sustain the use of digital humanities in their classrooms

All of the participants pointed out the importance of a supportive environment that pertains to people and resources to have a sustainable use of digital humanities in the classroom. Each participant highlighted different key aspects that aim to benefit the teachers in handling the digital humanities effectively. For participant 1, the need for specialized professional development tailored to their discipline was mentioned, which deals with having personal experiences on how to do things; it is related to the answer of participant 5 wherein it focuses on the need to have technical support wherever there are technical difficulties to be solved.

“Teachers should have access to specialized professional development tailored to their discipline. For example, humanities teachers may need training on text analysis software, while history teachers might benefit from resources on geographic information systems (GIS).”—Participant 1

“Teachers may face technical difficulties while using DH tools, so access to a responsive tech support team is essential.”—Participant 5

On the other hand, participants 2, 3, and 4 emphasized the crucial role of collaboration among teachers and reflection on each practice with the integration of digital humanities. Participant 2 entailed that in order to have a supportive environment, each teacher must collaborate with each other to have a broader knowledge of digital humanities and provide more solutions regarding the problem to be solved. This collaboration is related to the reflection to gain feedback to monitor themselves to have continuous improvement. Furthermore, participant 4 added that it will also benefit the teacher to be flexible and adapt easily as they will be able to refine their approaches over time.

“Encouraging teachers to work together, whether within their own institution or with other educators in digital humanities-focused communities, fosters knowledge sharing and problem-solving.”—Participant 2

“Teachers need ways to reflect on their teaching and get feedback from students, peers, or mentors. Regular surveys, focus groups, or peer reviews can help gauge the effectiveness of digital humanities integration.”—Participant 3

“The nature of digital humanities work often involves constant iteration and adaptation. Teachers need a supportive environment that encourages experimentation and allows for the adaptation of projects as new tools or challenges arise.”—Participant 4

4.2. Challenges and barriers teachers face when integrating digital humanities into their teaching practice

All of the participants shared a common concern about the interaction of digital humanities into teaching practice. Both participants 1 and 5 pointed out teachers having a hard time with digital humanities as they lack sufficient expertise and there are also existing issues about access. With this, the participants emphasized the importance of having technical expertise in the field and institutional support to cope with this challenge.

“Many teachers may not have the technical expertise required to effectively use digital humanities tools like text analysis software, GIS, or digital archives. Without proper training, educators might feel overwhelmed or ill-equipped to integrate these tools into their lessons.”—Participant 1

“Without a strong institutional framework for continuous professional development, collaboration, and

technical support, teachers may struggle to keep up with the evolving nature of digital humanities tools and methodologies.”—Participant 5

On the other hand, participants 2 and 3 highlighted the challenge in terms of educators intentionally and unintentionally not wanting to adopt the existence of digital humanities for different reasons such as their preference and capability in doing so.

“Some educators or institutions may be resistant to adopting digital humanities due to unfamiliarity with new technologies or a preference for traditional teaching methods.”—Participant 2

“Not all students may have equal access to the technology or digital resources needed to fully engage in digital humanities projects, especially in institutions with diverse socioeconomic backgrounds.”—Participant 3

Meanwhile, participant 4 mentioned that the problem lies in balancing the approach with the use of modern and traditional approaches as both of them have their pros and cons.

“Teachers may struggle to find a balance between incorporating new digital tools and maintaining traditional teaching methods that they are comfortable with and that have proven effective.”—Participant 4

4.3. Methods to measure and evaluate the effectiveness of digital humanities integration in senior high school literary criticism

Each participant showcased common significant factors to measure and evaluate the effectiveness of digital humanities in senior high school literary criticism, which is the work of the students. Three of the participants shared a related way: for participants 1 and 5, it is crucial to evaluate the application of students in using digital tools. In addition, participant 3 mentioned that feedback must be also given to know what to improve.

“I can say that the effectiveness of digital humanities integration can be evaluated by assessing the ability of the students in using digital humanities in interpreting a literary text.”—Participant 1

“I can evaluate my students by focusing on the technical proficiency of my students while using digital humanities tools. Here, I can monitor the ability of my students in using digital humanities tools.”—Participant 5

“We can do it by giving feedback and rating our students’ work giving more points for the content.”—Participant 3

Meanwhile, participant 2 emphasized that the evaluation must focus on the shared knowledge of the students through collaboration while participant 4 suggested that determining the difference between the initial and final work should be given focus to see how digital humanities tools work on the students.

“This can be done through observing the collaboration of the students in doing their work with the use of digital platforms. I’m interested in collaborative projects and discussion since students can exchange ideas also there is digital humanities.”—Participant 2

“We can check the initial and final output to see the differences and changes between the two outputs since progress is a must especially as there are tools for digital humanities.”—Participant 4

5. Conclusion

The digital humanities significantly changed the landscape of the study of language and literature by analyzing specific themes, which have illuminated the profound implications of digital humanities in reshaping scholarly discourse, fostering interdisciplinary collaborations, and democratizing access to literary and linguistic resources. Through its innovative technologies, it enables deeper analysis, interpretation, and preservation of literary works and languages. However, ongoing support and resources are crucial parts of making this possible. It highlights the use of computational tools and techniques to open avenues for interdisciplinary collaboration,

which in turn has encouraged new approaches to understanding cultural artifacts, linguistic nuances, and historical contexts. With this, the future of the field will revolutionize how we explore, analyze, and appreciate language and literature in our increasingly digital world. The fusion of humanities and technology has enriched both scholarly research and democratized access to literary resources while establishing a more inclusive and diverse understanding of the language and literature. Therefore, the advent of digital humanities in the sphere of language and literature presents a new shift of paradigms providing novel chances for exploring, understanding, and sharing literary pieces of work as well as other linguistic ingredients with the collaboration of teachers, reflection of practices, and providing great opportunities for personal experiences.

The challenges and barriers teachers face when integrating digital humanities into their teaching practice involve insufficient technical expertise and experiences, difficulties and assistance, access to technology, and the use of traditional methods. Despite these difficulties, the digital age brings exciting new opportunities for the humanities, and scientists are taking innovative approaches to capitalize on these opportunities. The humanities continue to be important contributors to understanding human experience in the digital age, and beyond that, by using new technologies and methods of analysis as well as by engaging audiences in new and creative ways.

The effectiveness of digital humanities in senior high school criticism can be measured and evaluated with the help of student engagement as it deals with their work using digital tools. It emphasizes evaluating the works of the students and the discussions, and monitoring students' progress by giving feedback to enhance the critical thinking and understanding of the students in using digital humanities.

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Disclosure statement

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References

- [1] Berry DM, 2019, What Are the Digital Humanities? viewed December 23, 2024, <https://www.thebritishacademy.ac.uk/blog/what-are-digital-humanities/>
- [2] Digitalna Humanistika, 2020, viewed December 23, 2024, https://sl.wikipedia.org/wiki/Digitalna_humanistika
- [3] Gavin M, Smith KM, 2012, An Interview with Brett Boley, in Gold MK (Ed.), *Debates in the Digital Humanities*, University of Minnesota Press, London, 61–66.
- [4] Harrison E., McTavish M, 2018, 'i'Babies: Infants' and Toddlers' Emergent Language and Literacy in a Digital Culture of iDevices. *Journal of Early Childhood Literacy*, 18: 163–188.
- [5] Shahgiraev IU, Dzhafarova ZK, Hadisov MRB, 2022, Economic Security of Enterprises Amidst Digital Transformation of Economy, Social and Cultural Transformations in the Context of Modern Globalism, Grozny, Chechen Republic, Russia, 545–552.
- [6] Pusvyta S, 2015, Memotivasi Belajar dengan Menggunakan E-Learning. *Jurnal Ummul Quro*, 6(2): 20.
- [7] Volchik VV, 2019, Institutional Traps in the Education and Science Sector under the Conditions of Optimisation. *Zhurnal Ekonomicheskoy Teorii*, 16(4): 783–795.

- [8] Walt A, Steyn J, Trusler A, et al., 2023, Challenges and Opportunities of Digital Humanities Training in South Africa, *Digital Humanities Workshops*, Routledge.
- [9] Turula A, 2017, Learner Autonomy as a Social Construct in the Context of Italki. *Teaching English with Technology*, 17(2): 3–28.
- [10] Mudra H, 2020, Digital Literacy Among Young Learners: How Do EFL Teachers and Learners View Its Benefits and Barriers? *Journal of Teaching English with Technology*, 20(3): 3–24.
- [11] Bekker T, Bakker S, Douma I, et al., 2015, Teaching Children Digital Literacy Through Design-Based Learning with Digital Toolkits in Schools. *International Journal of Child-Computer Interaction*, 5: 29–38. <https://doi.org/10.1016/j.ijcci.2015.12.001>
- [12] Mohammadyari S, Singh H, 2015, Understanding the Effect of E-Learning on Individual Performance: The Role of Digital Literacy. *Computers & Education*, 82: 11–25. <https://doi.org/10.1016/j.compedu.2014.10.025>
- [13] Fieldhouse M, Nicholas N, 2008, Digital Literacy as Information Savvy: The Road to Information Literacy, in Knobel M, Lankshear C, (Eds.), *Digital literacies concepts, policies and practices*, 43–72.
- [14] Jain NJ, 2023, What Is Qualitative Research Design? Definition, Types, Methods and Best Practices. IDEASCALE, viewed December 23, 2024, <https://ideascale.com/blog/what-is-qualitative-research/>
- [15] Crosley J, 2021, What (Exactly) Is Thematic Analysis? GRADCOACH, viewed December 23, 2024, <https://gradcoach.com/what-is-thematic-analysis/>

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