

INTRODUCTION

Digital humanities is an interdisciplinary study that cuts across technology and traditional humanities studies.^[1] It also involves the use of computer tools, databases, and electronic media to examine, visualize, and analyze literary and cultural texts in order to make them better learned and comprehended.^[19] Using the power of digital technologies, researchers are able to learn about literary traditions more accurately and reveal some hidden trends and relationships within an extensive collection of works.^[18] Such integration creates novel possibilities for researching the field of humanities as it is more dynamic and accessible^[2]

Digital humanities play an important role in re-discovering the lost English literary traditions. Historically, a significant number of such literary voices, those of marginalized people in particular, have been simply ignored or blocked out of the mainstream academic curriculum.^[23] These neglected texts can be preserved and shared with the help of digital tools that can make sure the voices of minorities and representatives of marginal groups are not buried in history.^[3] The ability to digitize and open these works to access allows scholars and educators to expand the literature study by adding a wider range of approaches to the canon. With the help of this process, inclusivity is encouraged, and the voices of the marginalized are heard and honored .^[15, 16]

The inclusion of the marginalized literary traditions in secondary education is important in the diversification of knowledge of English literature among students.^[22] This is achieved through the use of digital humanities workflows that help to make these texts more available and easier to analyze. It facilitates cultural understanding and critical literacy, where the students are encouraged to read the literature with a more inclusive approach.^[4] The importance of such work is in the fact that it could rebrand education, giving students a deeper and broader perspective of the world and literature. Sealing this gap will help educators create a more inclusive curriculum that will capture different cultural and historical experiences.

Key Contribution

1. The article presents the idea of integrating digital humanities processes to rediscover and study

the marginalized English literary traditions in secondary education and make it easier to access and engage with the previously unacknowledged texts.

2. It shows how technology, like text mining and sentiment analysis, can enhance the knowledge students have of marginalized voices to think critically and understand their cultures better.
3. The study offers a rubric that can be implemented by teachers to embrace new and evidence-based practices, develop a more representative and diverse English literature curriculum that can incorporate more voices.

The paper is divided into six main parts: Introduction, which includes the explanation of the importance of digital humanities in the restoration of marginalized literature practices; Literature Review, which discusses what has already been researched about the issue of marginalized texts and the traditional constraints of teaching; Methodology, which covers how digital humanities will be introduced in terms of text selection, digitalization, and digital analysis tools; Case Studies, which will showcase successful practices of applying digital humanities to women and post-colonial literature; Results, which will present the outcomes of the application of digital humanities on the student engagement and There is an element of inclusivity and richness of the English literature education in each section that can be shown.

LITERATURE REVIEW

The focus on the marginalized English literary traditions has been continuously increasing, and now many scholars are shifting their interest towards writers who belong to minority groups, women, and post-colonial origins.^[5, 6, 21] These artists tend to upset the mainstream cultural discourses and provide a variety of voices that represent the issues of race, gender, and social identity.^[14] This literature shows how such works have been either forgotten or sidelined by mainstream literature conventions. By working with marginalized writers, researchers are able to see the worth of such voices in a more accommodating literary environment. In addition, they provoke the existing norms and stimulate the more profound

interpretation of cultural and historical conditions that are frequently misrepresented in the traditional academic environments.^[20, 24]

In secondary school education, traditional pedagogies tend to emphasize the canonical literature that tends to concentrate on well-established male writers, mostly of Western or Eurocentric origin.^[13] Such methods do not include works of underrepresented groups, which restricts the exposure of students to a wider range of literary traditions.^[7] Consequently, students cannot have a chance to critically approach the variety of literary forms and comprehend the peculiarities of race, gender, and identity. Besides, the traditional use of print-based resources may limit access to non-canonical works, and the students will hardly have an opportunity to consider these works thoroughly.^[11] This disproportion in the curriculum does not lead to critical thinking regarding the contributions of the marginalized communities to the development of literature and culture.^[12, 17]

The solution to these constraints is found in digital humanities workflows. These workflows enable the provision of hitherto unreachable literary works to both the instructors and the students through the digitization of literary works.^[8] The establishment of digital archives offers numerous resources that are readily available, analyzed, and disseminated. There are also digital tools available that promote active participation among the students, like text-mining software, online databases, and visualization platforms that enable them to interact with the

literature in new and innovative ways.^[10] This change encourages more engagement with the material and allows for a more in-depth understanding of the works, which makes the curriculum in secondary education more inclusive.^[9]

Digital humanities processes are an effective means of breaking down barriers of conventional educational practices. These workflows encourage inclusivity, cultural sensitivity, and critical engagement with a wider set of views by supporting the salvaging and analysis of marginalized literary traditions.

METHODOLOGY

This research method will involve the selection, digitization, and analysis of marginalized English literary traditions with the aid of digital humanities tools in secondary education. It starts with the identification of the underrepresented literary works, and then the process of digitizing the texts and creating digital archives that are easily accessible. The digital tools of analysis, including text mining and data visualization, are used to facilitate the identification of themes and patterns in the texts. The method encourages student-teacher interaction, collaborative learning, and critical thinking. Lastly, these digital workflows are tested based on student and teacher feedback to determine their contribution to student engagement, comprehension, and achievement.

Figure 1 outlines the key phases of digital humanities projects that would be involved in

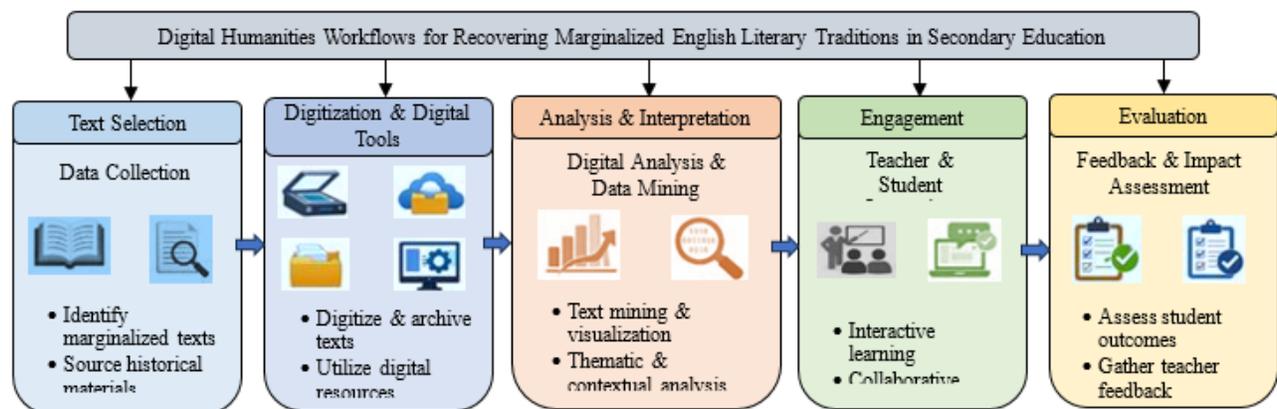


Fig. 1: Digital Humanities Workflows for Recovering Marginalized English Literary Traditions in Secondary Education

restoring marginalized traditions of English literature in secondary schools. The first step would be “Text Selection,” which requires data collection and marginalized texts recognition. The following step is called Digitization and Digital Tools, and it revolves around the use of digital material in archiving and preserving texts. Analysis and interpretation are dedicated to text mining using digital tools, visualization of data, and thematic analysis of literature. The Engagement part is a good illustration of the participatory and interactive learning atmosphere between the teacher and the students. Lastly, the workflow analysis and evaluation evaluate how effective the workflows have been by using the feedback and impact evaluation of students and teachers. This holistic model advances inclusiveness and value addition to the general curriculum of the secondary level of education.

Process of Selecting and Analysing the Text (Marginalized Literature)

In this research, the texts of English literature that belong to the margin will be selected with the help of a mixed use of data-based and criteria-based approaches to ensure that the materials are applicable and academic at the same time. The main source of data to extract and curate texts, which meet the requirements of the study, will be a good data set in the Kaggle repository, including the Project Gutenberg Fiction Books corpus of varied English literature with metadata that is convenient to use in text analysis. The texts will be selected based on the underrepresentation in mainstream schooling, historical significance, cultural relevance, and texts authored by writers of non-majority groups like women writers, post-colonial writers, and marginalized cultures that disrupt superior literary discourses. This kind of data allows the extraction, sorting, and sifting of texts systematically to further analyze them to have a firm empirical foundation for digital humanities procedures.

After the selection of the literary texts, they will be exposed to a thorough digital analysis with the assistance of the advanced computational tools. The textual analysis software, such as Voyant Tools, will be applied in picking up the central themes,

stylistic clues, or typical lexical arrangement and historical background that are hidden in the texts. These tools facilitate several analysis tasks such as word frequency counting, sentiment analysis, and a thematic extractor that assists in enhancing the journalism and comprehension of the literary analysis way beyond the traditional manual reading. The integration of the structured information of the dataset provided by Kaggle, combined with digital analytical methods, will enable the exploration of the textual content through the use of data that will reveal patterns and other factors that determine the cultural and pedagogical significance of these marginalized texts in high school education.

Description of digital tools and technologies used in the research

Digital humanities workflows are highly dependent on a number of digital tools and technologies to ensure the digitization, analysis, and dissemination of marginalized texts. A key part of this methodology is the availability of digital archives such as Google Books and Project Gutenberg, which allow access to a wide range of digitized texts, including many texts that are difficult to find or have been ignored in traditional education. These archives will serve as a repository for the selected literary works of the marginalized.

Additionally, text-mining software, such as Voyant Tools, will be used in order to analyze the content of the texts in greater depth. This software can allow a researcher to apply modern methods to identify relationships among various authors, texts, and themes, including topic modeling, text clustering, and network analysis. The systematic capacity to extract valuable themes and patterns from huge amounts of texts can provide valuable information on the marginalized literary traditions.

In addition, the findings of the research will be shared with the rest of the academic community through online collaborative tools like GitHub, which will give an opportunity to analyze the research and publish it in an academic form. These also facilitate the development of open-access repositories, which in turn can release the recovered texts and analyses to educators and students across the globe.

Criteria to Assess the Efficiency of Digital Workflow

The criteria that should be used to evaluate this form of digital humanities are to gauge the effectiveness of the online stream processes in improving the learning process. Both teachers and students of secondary schools will be interviewed and surveyed on their feedback to the research. The surveys will entail the extent to which the digital tools have been helpful in enhancing the awareness of the student about the marginalized texts, the capacity to assess the material critically, and the general academic development. Besides the qualitative feedback, the engagement measures will be collected, including the frequency of the student engagement with the digital texts, the duration of time it spends analyzing the texts, and the levels of its involvement in the activities performed using the collaboration tools, like group discussion or online forums.

These engagement metrics will give quantitative data on how effective the tools are in creating deeper engagement and improving critical thinking skills. The evaluation will consider the role of digital workflows in crafting a more inclusive and interesting curriculum that ensures that English literary traditions at the margins are incorporated into the secondary education and appreciated by students. The feedback collected will also be used to identify areas for improvement in the workflow, providing valuable insights into how these tools can be improved for future use.

Figure 2 shows the process of evaluation in order to determine the effectiveness of digital humanities workflows in secondary education. The flow starts with Feedback Collection from students and teachers, which involves surveys and interviews. It goes on to Engagement Metrics, which track student interaction frequency, time spent on digital texts, and participation levels. Both Qualitative Feedback and Quantitative Data are then analyzed, which is followed by the analysis and evaluation phase, which focuses on assessing the learning outcomes. The last steps are Assess Effectiveness, which measures the impact on engagement and understanding, and Identify improvements, which identify areas for improving the workflow. The general aim here is to enhance an inclusive and engaging curriculum- to make sure that the digital humanities workflows can contribute to a more inclusive and engaging learning experience.

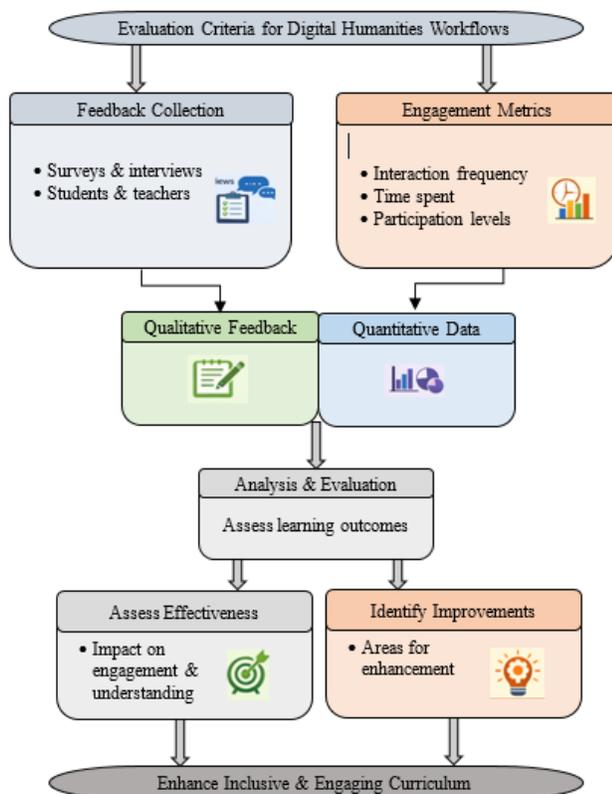


Fig. 2: Evaluation Criteria for Digital Humanities Workflows

RESULTS

Marginalized Literature Case Studies of Digital Humanities Workflows

Digital humanities workflows have played a significant role in the recovery and dissemination of marginalized English literary traditions, and have made it possible to engage with texts that have often been overlooked in mainstream education. Two powerful case studies demonstrate the use of these workflows: the Digital Archiving of Women's Literature and the Preservation and Analysis of Post-Colonial Texts.

1. Digitalization of Women's Literature.

Women Writers Project (WWP) is considered to be among the finest examples of a digital archive that aims

at the retrieval of the voice of women in literature. The project provides access to a tremendous amount of text that creates an image of different historical periods, geographical locations, and cultural settings. The texts in this archive are usually sidelined in the conventional curricula and contain writings by female authors with a wide spectrum of backgrounds, such as feminist writers, Black writers, and early modern female writers. This archive would offer a digital space where these works may be stored, studied, and disseminated, thereby becoming available to teachers, scholars, and students. The project allows introducing secondary educational environments to their students with these often-overlooked works so that they can expand their set of knowledge about the place of women in shaping the literary traditions.

2. Post-Colonial Texts: Digital Age.

There has been a significant impact of the digital age on the study and preservation of post-colonial literature. The digital humanities tools have facilitated the creation of digital archives in the preservation of valuable works of post-colonial authors, most of whom have difficulty championing a significant role in mainstream academia. Digital Archives of Post-Colonial Literature provide access to works of authors in Africa, the Caribbean, South Asia, and other locations that were colonized by the British. These archives not only safeguard the literature but also offer the materials to the examination of the identity themes, resistance, and the long history of colonialism. In the text, post-colonialism texts may be examined using digital technologies, including text mining, sentiment analysis, and visualizing the data, which can enable the students to comprehend the relevant and difficult themes more systematically and interactively.

Digital Workflow: Digital Workflow Effects on Student Engagement and Understanding

Application of the digital humanities processes has shown to have a significant role in student interaction and familiarity with the marginalized literary traditions of the English language. With the help of online archives, students have access to texts

that they could not previously reach and, therefore, can learn the opinions and historical contexts they were not exposed to before. Accessing these digital sources, students will be able to actively study literature, where text mining and sentiment analysis can be used to find patterns and themes that cannot be immediately seen when reading the piece of literature in traditional ways.

The digital processes also enable students to dig deeper into the literature, as they can engage in group activities, such as group discussions, online forums, and interactive work. Such activities will foster critical thinking and analytical skills among the students since they will be required to analyze the texts differently and to reflect on their cultural, historical, and social context. Moreover, online tools will help students track their progress and have a more interdependent and holistic perspective on how different texts are interconnected.

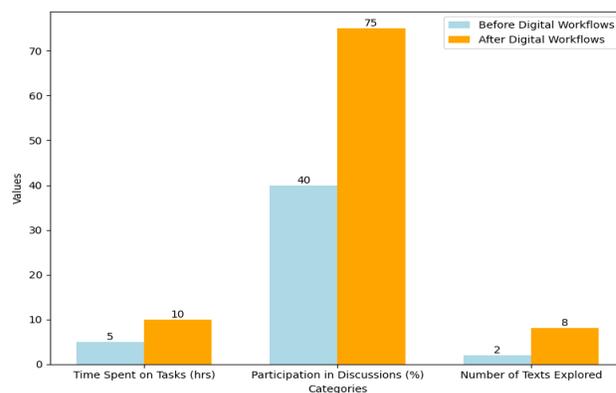


Fig. 3: Impact of Digital Humanities Workflows on Student Engagement and Understanding

This is Figure 3, which compares student engagement prior to and following the implementation of the digital humanities workflows. It also focuses on three areas: time spent on tasks (hrs), participation in discussions (percentages), and the number of texts explored. The chart demonstrates a significant rise in engagement after the application of digital tools, and students spend more time on tasks, engage more in discussions, and read more texts. The orange and light blue bars of post-workflow and pre-workflow data, respectively, represent the difference in engagement. The image shows how the processes of digital humanities positively influence the engage-

ment of students in the field of marginalized literary traditions.

Comparison of the Results with the Traditional Teaching Methods

Digital humanities workflows are better in engagement, understanding, and critical analysis when compared to the traditional methods of teaching. Conventional approaches tend to give attention to a few canonical writings, and the marginalized writers and their works are not taken into consideration, resulting in passive learning. By contrast, digital humanities workflows are more interactive and hands-on, with the students being actively involved with literature by using digital tools such as text mining, sentiment analysis, and thematic exploration. These instruments allow students to find out patterns, define language characteristics, and discuss historical and social backgrounds more systematically. Also, online libraries can expand access to a variety of texts that would otherwise have been ignored in conventional curricula. Discussions, exchange of wisdom, and cogitation, which are the hallmarks of digital humanities work, foster more effective thinking processes, analytical and critical thinking, and are more likely to be developed. Such a strategy would contribute to a more open and

dynamic learning process and raise awareness among the students of the marginalized literature traditions.

Table 1 is a comparison of the most significant points of both the traditional teaching approach and the digital humanities processes in secondary education and their influence on exploring the English literary traditions of the marginalized. It has emphasized the differences in the text selection, student engagement, critical analysis, access to texts, collaboration, exploration of historical context, approach to learning, and final results. Although the conventional approaches are usually based on the use of canonical materials and passive learning, digital humanities processes are more inclusive, interactive, and data-driven, promoting more in-depth work with a variety of texts and developing better critical thinking and analysis skills.

DISCUSSION

Proposals for Incorporating Digital Humanities into Education

The problem of implementing digital humanities workflows in the secondary education program implies the introduction of digital tools and resources into the secondary education curriculum and promotes the study of marginalized literary traditions. Teachers must start with the choice of various texts

Table 1: Comparison of Traditional Teaching Methods and Digital Humanities Workflows

Aspect	Traditional Teaching Methods	Digital Humanities Workflows
Text Selection	Focus on a limited set of canonical texts	Broader access to diverse texts, including marginalized works
Student Engagement	Passive reading and analysis	Active participation through interactive tools and analysis
Critical Analysis	Limited to text interpretation and surface-level analysis	Data-driven analysis using text mining, sentiment analysis, and thematic exploration
Access to Texts	Limited access to texts often excludes marginalized authors	Access to digital archives with a wide range of texts
Collaboration	Minimal collaboration; individual work	Collaborative activities like discussions and sharing findings
Historical & Social Context	Focus on canonical context, limited exploration of diverse backgrounds	In-depth exploration of historical and social contexts with digital tools
Learning Approach	Teacher-centered, with limited student interaction	Student-centered, with dynamic, hands-on learning experiences
Outcomes	Limited understanding of marginalized literary traditions	Deeper understanding of diverse literary traditions and enhanced critical thinking skills

in digital collections, including Project Gutenberg and the Women Writers Project, and must include the voices of historically marginalized people. These texts should be analyzed with the help of text mining, sentiment analysis, and thematic exploration in order to assist the students in revealing patterns and interacting with literature at the level of deeper engagement. Furthermore, group discussions and group research should be developed through collaborative tools such as GitHub by the teacher. To ensure a successful implementation, it would be important to train teachers on using these digital tools and make available to them resources such as professional development. Last but not least is the technological infrastructure that should be invested in schools, where learners are able to access these facilities and be in a position to interact well with the texts.

Discussion of Potential Challenges and Strategies for Overcoming Them

Introducing digital humanities processes in the secondary level has a number of challenges, such as a lack of access to technology, a lack of knowledge of digital tools by the teachers, and opposition to new practices. The schools in low-funded districts might not have the technological facilities to access the digital archives and analytical tools for students. To get over this, schools must attempt to obtain funding for digital resources and partner with online sources that provide free access to educational content. Professional development programs can overcome the other challenge, which is the necessity of teachers to develop digital literacy, which is possible with the help of special professional development programs. The position of traditionalist educators can be lessened through proving the usefulness of digital tools, which include greater student involvement and greater interpretation of marginal texts. Constant encouragement and fellowship among the teachers may also assist them in getting more familiar with these new workflows.

Future Study Recommendations in this Field

Further studies in the field of digital humanities processes in secondary school learning should be aimed

at determining the long-term effect of these processes on the performance of students in terms of academic success, critical thinking, and cultural sensitivity. Scholars might develop longitudinal research to study the impact of exposure to marginalized literary traditions with the help of digital tools on students who develop their attitude to literature and diversity. Moreover, the research ought to be extended to understand how these workflows can be scaled to other educational institutions (particularly the low-resource schools). Research on the usefulness of some digital tools (e.g., text mining software) in improving selected elements of literary analysis (i.e., theme identification, sentiment analysis) would be of great benefit to teachers. Lastly, understanding how digital humanities practices can be incorporated into other courses, including history and social studies, may have a broader range of interdisciplinary advantages of such approaches, making it a more well-rounded learning experience.

CONCLUSION

The study shows that the processes of digital humanities can play a significant role in recovering and spreading the not well-represented English literary traditions. The most important results of the research are that students demonstrate a significant engagement level after using such digital tools as text mining, sentiment analysis, and data visualization. These tools enabled the students to establish the hidden patterns and themes of marginalized writings that could not be detected under the traditional reading techniques. Moreover, online archives helped to offer wider access to the voices of women, post-colonial writers, and other oppressed groups, which can be seen as more effective in critical thinking, and it allowed students to consider the historical and cultural context of the works.

In the case of secondary education, the study highlights the fact that digital humanities processes have great potential to develop a more inclusive and diverse curriculum. A combination of these tools enables educators to provide previously underrepresented voices that provide students with a more in-depth perspective of English literature. The interactive and collaborative learning settings

allow students to go deep into the text, making them approach the literature critically and reflectively. The paper underlines how these digital processes are essential in fostering cultural consciousness, diversity, and more holistic perspectives of literature. Teachers are invited to adopt these new methodologies in order to develop a curriculum that brings the marginalized voices to the center and prepares students to critically take part in a diverse literature so that educational experiences are more accommodating.

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