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A Literary Exploration for Digital Media in Shaping the Humanities in Higher School Students: Review Paper

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Abstract

Over the past few years, there has been a noticeable shift in methods of instruction and learning in higher education; primarily due to the influence of the digital revolution. One primary advantage of digital media in education is its ability to enhance student involvement. Moreover, it facilitates pupils in comprehending challenging subjects by providing them with a variety of resources. Digital training facilitates the presentation of complex subjects that are frequently challenging to comprehend. The study investigates the impact of digital media in shaping the humanities in higher school student. The methods will include an extensive literature review that synthesizes the existing research on the role of digital media in educational contexts, complementing case studies of innovative projects. Digital media has been found to increase the level of access to humanities content and support collaborative learning, providing an environment in which students can become critical thinkers and creative individuals. This paper thus provides a basic resource for the educator and the policymaker who seek to integrate digital media into humanities education in an effective way.

Keywords: Digital media, Digital Humanities, Higher Education, Humanities

1. Introduction

Digital technologies are essential components of Higher Education instruction, encompassing a selection of equipment that are deliberately incorporated into official educational settings and utilized by students to enhance their learning experience. The utilization of technology in students' learning procedures and results has been found to have a beneficial overall influence. These technologies are employed with the aim of fostering active involvement and contribution of students in the educational procedure, both within and outside the confines of the educational setting (1). Digital technologies play a crucial role in the discussion around the instruction and acquisition of knowledge in higher studies (2) (3).

Technological advancements, for example laptops handheld gadgets, and the worldwide web, have had a significant impact on organizations and individual lives. These advancements have affected the way individuals interact with knowledge, acquire information, and approach work (4).

Higher Education Institutions provide technologically driven software infrastructures that facilitate the electronic organization and administration of instructional and educational activities at an organizational level. Furthermore, technological advances have been extensively utilized at an educational and operational level, leading to high expectations of a transformative impact on education. This



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transformation encompasses not only the physical environment of schools but also the methods of interaction and delivery of instructional information (5).

Predictions have been partially fulfilled. Learning techniques along with access to classes and other instructional materials have undergone significant improvements (6). There has been a shift towards customized learning (7), as well as a change in the duties of educators and students. Additionally, there has been a focus on ensuring equal admission to higher education (8) (9).

1.1 The Current State of Humanities in Higher Education

• The enrollment trend for humanities courses

The enrollment trend for humanities courses has shown a consistent downward trajectory over the last decade, indicative of a broader shift in the academic preferences of American students. A particularly steep decline is observed in traditional humanities disciplines such as English and history; the former saw an 8.4% reduction in positions in 2013-14 compared to the previous year, while the latter experienced a substantial 40% drop since 2007-8 (10). This decline in interest is further evidenced by the notable decrease in the percentage of humanities degrees awarded; from 17.2% of all enrollments in 1967 to a mere 6.5% in 2013 (11). Despite the democratization of access to higher education, which theoretically could have bolstered the number of degrees conferred, the number of humanities degrees has failed to grow. Still, it has declined, with a roughly 14 percent drop from 2012 to 2018(12) The implications of this trend extend beyond mere numbers; they reflect a shifting academic landscape where the humanities appear to be losing their stature, potentially compromising the diversity and richness of scholarly discourse within American higher education (12).

• The common perceptions of humanities in Academia

As academic institutions grapple with budget cuts and reduced funding for the humanities, the perceptions within academia about the value and relevance of humanities disciplines are mixed and often contentious. The traditional focus of the humanities on preserving and interpreting humanity's cultural achievements clashes with the shrinking faculties and the political backlash that accuses the humanities of embracing faddish approaches (13). This has led to a diminished presence in undergraduate education, with humanities majors representing a smaller fraction of the student population than in the past (14). Faculty members who see the humanities as a broad, singular umbrella term (14) often find themselves justifying the existence of their departments. They rely on student enrollment and interest to secure departmental resources, a dynamic that underscores the precarious position of the humanities within academia (14) Despite this, there remains a commitment within these disciplines to developing moral and political thought and a belief that the humanities can provide students with invaluable skills such as critical thinking, research, and writing, (12) However, these perceptions are at odds with the dominant narrative that warns students away from humanities studies, mainly due to the return-on-investment argument which undervalues a humanities degree and perpetuates the comparison of humanities majors to ostensibly more 'practical' fields like engineering (11), (12) This dissonance within academia reflects the broader misconception of the humanities' role and value in higher education and society, necessitating reevaluating how these disciplines articulate their contributions to students and the public (12).

1.2 Challenges Faced by Humanities Departments

• The primary factors contributing to the decline in humanities relevance

The decline in humanities relevance can be attributed to various interconnected factors extending beyond the often-cited economic arguments. While the financial perspective is significant, with the



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median earnings of humanities graduates being lower than many of their STEM counterparts, this income disparity has been a long-standing reality (15). The problem is more nuanced than mere financial outcomes post-graduation; it is also a matter of perception and cultural shifts. The cultural cachet once associated with humanities disciplines has notably faded, as evidenced by the decreasing literature readership and academic criticism, signaling a decline in the social value placed on these fields (13). This is not merely a reflection of market forces but also of a broader societal trend wherein the humanities are often regarded as lacking a transparent core explanatory system or epistemology, which exacerbates their perceived irrelevance (15). Moreover, the reconfiguration of humanities courses over the past decades—where traditional courses now represent a smaller percentage of the expanded field— may have diluted the essence of what once drew students to these disciplines (16). This multifaceted erosion of humanities' appeal has contributed significantly to the decline in students majoring in these fields and the overall perception of their value within the educational landscape and beyond.

• Technological Advancement Iimpact the value Placed On Humanities

The decline in academic positions within the humanities, as evidenced by the notable drops in English and foreign language postings, is mirrored by broader institutional challenges that further undermine the value placed on these disciplines. Financial pressures are a significant factor driving this devaluation as universities grapple with tight budgets and prioritize programs that yield immediate economic benefits (17). This fiscal focus has led to a troubling trend across the nation, where arts and humanities programs are among the first to be sacrificed in efforts to balance public university budgets, a strategy that not only fails to recognize the intrinsic value of these fields but also overlooks their long-term contributions to society (19). Additionally, the perception of the humanities as less "useful" has become more pronounced, with political pressures pushing these fields to demonstrate practicality and immediate relevance in a technology-driven world (18). Consequently, students are increasingly shifting their interests toward the sciences, often influenced by societal and industry norms that undervalue the humanities, as reflected in the mocking attitudes towards these fields and the belief that they do not align with industry values (20) (21). This shift represents not only a change in student preferences but also a concerning disregard for the diverse intellectual and cultural benefits that humanities studies provide.

• The Effects of Globalization on the Study of Humanities?

As the Humanities Research Center strives to combat the declining support for humanities programs in academia, globalization has notably influenced how humanities subjects are conceptualized and taught. The traditional nation-based focus in history and literature is increasingly considered too limited, as scholars criticize this approach for being insular and provincial (13) The surge in interest for broader frameworks is evident in the rise of Atlantic studies, diasporic studies, and an expansive view of world history, which collectively challenge the previously unchallenged centrality of nation-state history (13). This paradigm shift is also reflected in the study of literature, where global and comparative literature studies are gaining prominence over the traditional canon of national literature (13). Such developments underscore a movement away from established unitary conceptions of nation-states and master narratives, which are now seen as inadequate in capturing the complex, interconnected nature of historical and cultural phenomena (13). Additionally, this shift is not isolated to literature and history departments but has also influenced a broader range of humanities disciplines, as evidenced by a growing number of prominent historians embracing cultural critique, border studies, and critical identity studies (13) This interdisciplinary engagement suggests recognizing the need for humanities scholarship to evolve in response to the complexities introduced by globalization, which echoes the impact that



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critical theory and cultural critique have had across various fields beyond traditional literature departments (13).

1.3 The Future of Humanities in Academia

• The Potential Consequences of undervaluing Humanities in Higher Education

The consequences of undervaluing humanities in higher education extend beyond mere enrollment figures; they have significant implications for the workforce and societal understanding. As humanities disciplines face a decline in student interest, with elite research universities witnessing enrolments plummet to about 70 percent of their pre-crisis numbers (11), the impact is not just academic but also practical. Humanities education is essential for cultivating critical thinking, communication, and analytical skills, yet its decline suggests that the broader market may need more competencies in the future (22). Moreover, the perception of a bad job market for humanities graduates is compounded by producing more PhDs than available jobs within the field (23). creating a cycle of disenfranchisement from the humanities. This undervaluation and consequent drop in humanities graduates not only risk diminishing the presence of valuable skill sets in the workforce but also threaten to relegate the field to a secondary position, undermining the intrinsic value of humanities education in favor of other fields deemed more practical or profitable (22). This potential relegation may lead to the humanities becoming mere "ornaments" in a curriculum dominated by STEM and other fields, thereby jeopardizing the independent significance of humanistic studies (22).

• Humanities Education be reformed to regain its Importance

The decline in positions and enrollment within the humanities indicates a broader trend that necessitates reimagining their role in higher education. To counteract this downward trajectory, humanities education must adapt and reformulate its value proposition. Scholars such as J. Hillis Miller, N. Katherine Hayles, and Mark B. N. Hansen have demonstrated literary studies' enduring relevance and adaptability to intersect with technology, philosophy, and science, thereby showcasing that humanities disciplines can evolve to meet the demands of contemporary society (24). This reform is about preserving the existing structure and expanding the scope of humanities education to engage with modern challenges. For instance, Bruno Latour and Michel Serres have illustrated the pertinent contributions of anthropology, history, and philosophy to current global issues (24).

Furthermore, the humanities must make a strong case for their relevance in work and employment by highlighting the critical and creative thinking skills imparted through their curricula (24) Such an approach will help regain the importance of humanities education and ensure that it is recognized as vital for fostering a well-rounded, inclusive, and critically engaged citizenry (24). By emphasizing these multifaceted contributions of the humanities to intellectual life and practical skills, educators and policymakers can begin to reverse the decline in enrollment and reestablish the humanities as an indispensable field of study in the twenty-first century.

2. Review of literature

Kadmos, et. al, (2024) highlighted the growing influence of uncertainty on teaching and learning, and the resulted implications for the humanities. The study examined the manifestation of uncertainty in higher education and explored the potential techniques that students and teachers can developed while handled unpredictable educational environments. A qualitative design will be harnessed to tease out the ways in which precarity continues to strike a note in learning and teaching in the humanities. The findings discussed several instances of educational developments in the field of humanities that



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enhanced comprehension abilities. It also recognized the evolving conditions of students and suggested possibilities for continuous contemplation, introspection, and advancement in the humanities.

Shah, et. al, (2024) aimed was to support high school students in explored different roles as well as identities in STEM. STEM education is a pedagogical approach that combineD "the disciplines of science, technology, engineering, and mathematics". Study utilized "Projective Reflection" as a framework for theory and methodology to promote education through the exploration of identity. Student data collected during gameplay and in-class activities were analyzed using Quantitative Ethnography (QE) to understand the unique paths of student identity exploration. The study finding provided cases that revealed significant changes in students' understanding by fascination, self-organizing, discipline, and their opinions.

Lacka, et. al, (2021) examined the phrase "digital natives" referred to the modern higher education graduates whose lives were heavily influenced by digital technologies. In order to meet the requirements, the higher education institutions were progressively embraced digital technologies such as virtual educational settings plus social networking sites. Study Used exploratory sequential mixed research methodologies. The findings indicated that outcomes were considerably improved when students utilized virtual learning environments. When social media were employed in higher education, learning-oriented results were considered less essential compared to outcomes linked to understanding transfer. Students tend to prioritize the latter

Sciumbata, F. (2020) assessed the digital ability of Italian students who belong to the most recent wave of technological natives as well as pursued in humanities programs at university. The students may be at risk of neglecting their IT as well as technological abilities due to lack of enthusiasm and limited course offered in the field. Study completed a survey initial inquiries, a second part for self-evaluation, and a section with multiple-choice questions. The study focused on the theoretical as well as practical elements of IT and digital abilities, following the European Framework of Digital Competences. The findings indicated that individuals have a tendency to understate their proficiency in digital abilities, while simultaneously demonstrated a lack of understanding in fundamental subject areas.

Poremski, M. D. (2020) In order to effectively serve their customers, academic librarians must have a comprehensive understanding of the ever-evolving field of digital humanities librarianship. The objective of the study was to present a comprehensive outline of the abilities required for a digital humanities librarian and to investigate the required education and equipment in this domain. Instead of attempting to establish a specific definition for digital humanities as an academic area, the study aims to present an up-to-date description of digital humanities librarians. The finding stated that it will enabled librarians to better connect with both professionals in the rapidly developing humanitarian field.

Brügger, N. (2016) argued that the humanities were undergone a significant transformation in the 21st century due to the transition from equivalent digitization of origin material. The study employed qualitative method to conduct survey .The shift have various impacts on the humanities. To understand the manner in which various sorts of digital material impacts, it was helpful to distinguish among computerized, born-digital, as well as reborn-digital sources. The study provided a comparison of digitized collections as well as online platforms records to illustrate the difference.

Rieger, O. Y. (2010) stated that domain of digital humanities was analyzed via three perspectives: digital media as a catalyst for academic engagement; digital media as a medium for innovative thinking; and digital media as a framework for critical examination of digital culture. The study employed a qualitative case study methodology to analyze the notion. It was by gathered the varied opinions of a



group of humanities professors, which revealed numerous obvious trends. The study found that although technologies were being presented as catalysts for academic advancement, it was crucial to comprehend the societal, cultural and political impacts of digital media along with the way humanities students view and utilized them.

Table 1.1 Synthesis of reviews							
S.	Name of	Title of Study	Objective of Study	Key Findings			
No.	the Author						
	and Year						
1.	Kadmos, et.	'How precarity is	The study highlighted the	The study found that several			
	al, (2024)	shaping learning	growing influence of	instances of educational			
		and teaching in the	uncertainty on teaching and	developments in the field of			
		humanities: Arts	learning, and the	humanities that			
		and Humanities in	resulted implications for	enhanced comprehension			
		Higher Education'	the humanities.	abilities.			
2.	Shah, et. al,	'Facilitating and	The objective of study was	The study			
	(2024)	interpreting high	to support high school	finding provided cases that			
		school students'	students in	revealed significant changes in			
		identity	explored different roles as	students' understanding			
		exploration	well as identities in STEM.	by fascination, self-organizing,			
		trajectories in		discipline, and their opinions.			
		STEM'					
3.	Lacka, et.	'Examining the	The study aimed to	The findings			
	al, (2021)	impact of digital	understand the role and	indicated that outcomes			
		technologies on	influence of digital	were considerably improved			
		students' higher	technologies on outcome	when students utilized virtual			
		education	learning and understanding	learning environments			
		outcomes: the case	transfer among				
		of the virtual	contemporary graduates,				
		learning	often referred to as "digital				
		environment and	natives."				
		social meda'					
4.	Poremski,	'Evaluating the	The study in order to	The finding stated that digital			
	M. D.	landscape of	effectively served their	humanitarian library			
	(2020)	digital humanities	customers, academic	enabled librarians to better			
		librarianship'.	librarians must have a	connect with both professionals			
			comprehensive	in the rapidly developing			
			understanding of the ever-	humanitarian field.			
			evolving field of digital				
			humanities librarianship.				
5.	Sciumbata,	'Students of	The study aimed to				
	F. (2020)	humanities and	assess the digital ability of	The findings indicated that			
		digital skills: a	Italian students who belong	individuals have a tendency to			

Table 1.1 Synthesis of reviews



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		survey on Italian	to the most recent wave of	understate their proficiency in
		university	technological natives as	digital abilities, while
		students'	well as pursued in	simultaneously demonstrated a
			humanities programs at	lack of understanding in
			university.	fundamental subject areas.
6.	Brügger, N.	'Digital	The study argued that the	The study provided a
	(2016)	Humanities in the	humanities	comparison of digitized
		21st Century:	were undergone a	collections as well as online
		Digital Material as	significant transformation	platforms records to illustrate
		a Driving Force'.	in the 21st century due to	the difference.
		-	the transition from	
			equivalent digitization of	
			origin material.	
7.	Rieger, O.	'Framing digital	Stated that domain of	The findings stated that it
	Y. (2010)	humanities: The	digital humanities	was crucial to comprehend the
		role of new media	was analyzed as a catalyst	societal, cultural and political
		in humanities	for academic engagement;	impacts of digital media along
		scholarship.'	as a medium for innovative	
		1	thinking; and as a	students view and
			framework for critical	utilized them.
			examination of digital	
			culture.	

3. Research Questions

- 1. How does a digital medium enhance the understanding of humanities subjects and their appreciation in higher school students?
- 2. What are some of the challenges and advantages of incorporating digital media into teaching humanities subjects at higher school levels?
- 3. How best should digital media be integrated into the humanities curriculum for improved learning outcomes of the students?

4. Discussion

It came to find out that the shifting educational landscape, with a focus on the humanities; digital media and technology have taken central place which was stated by Kadmos et al. in 2024 Similarly, Shah et al. (2024) focus on high school students negotiating identities in STEM education and take the guiding principles from the Projective Reflection framework to explore the research question of how gameplay and classroom activities have made personal growth possible. Rieger (2010) in his study introduces nuance into the discussion of digital humanities as an engagement catalyst, a medium for new thinking, and a framework for critical examination of the digital culture. Brügger, in 2016, extends the discussion by showing how the digitally made transformations in the humanities are done. In an analysis of the level of digital competence among students at Italian humanities programs, Sciumbata (2020) does establish that even though students may be native ICT users, they usually underestimate themselves in IT skills with a lacuna in foundational knowledge.. Poremski (2020) discusses how an academic librarian fits in



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when it comes to working in the digital humanities, while advocating for a broad conception of the skills needed in the field and their eventual requirements by way of education.Finally, Lacka et al. (2021) explore the concept of "digital natives" in higher education settings by noticing how HEIs are increasingly adopting digital technologies to improve learning experiences. Their exploratory research has shown that although virtual learning environments do improve outcomes, the focus often shifts away from goals that are oriented toward learning and toward the transfer of understanding, indicating a need for striking a balance between technology and pedagogy. The implications of all of these studies regarding the deep effects of digital media on the humanities are, through their findings, a call to integrate technology in meaningful ways to create relevant educational experiences for students in an increasingly digital world.

5. Conclusion

The current paper reviews the role of digital media in transforming the humanities for higher school students and explores the potential of achieving high understanding and engagement with more complex subject matter. The findings drawn from a wide range of literatures show that integration of digital media infuses skills of critical thinking, collaboration, and rich engagement with content in humanities, alongside reporting challenges and opportunities instigated by the curriculum change. The research thus underscores the requirement that educators and policymakers approach the integration of digital technologies in humanities education with consideration to how students are then equipped to operate within an increasingly digital world. At bottom, this exploration thus calls for a revalorization of the place of the humanities in academia, for their place in developing relevance and value in the well-rounded, critically engaged citizen.

References

- 1. Pinto, M., & Leite, C. (2020). Digital technologies in support of students learning in Higher Education: literature review. Digital education review, (37), 343-360.
- Becker, S. A., Cummins, M., Davis, A., Freeman, A., Glesinger Hall, C., & Ananthanarayanan, V. (2017). NMC Horizon Report: 2017 Higher Education Edition. Retrieved from Austin, Texas.
- 3. Bullen, M., & Morgan, T. (2015). Digital learners in higher education: Implications for teaching, learning & technology. Teaching and learning in digital worlds: Strategies and issues in higher education, 11-19.
- 4. Selwyn, N., Henderson, M., Finger, G., Larkin, K., Smart, V., and Chao, S. (2016). What works and Why? Understanding successful technology enabled learning within institutional contexts Part B Appendices. Canberra, ACT: Australian Government Office for Learning and Teaching.
- 5. Pedro, L., Barbosa, C., & Santos, C. (2018). A critical review of mobile learning integration in formal educational contexts. International Journal of Educational Technology in Higher Education, 15(1), 10.
- Han, I., & Shin, W. S. (2016). The use of a mobile learning management system and academic achievement of online students. Computers and Education, 102, 79-89. doi:10.1016/j.compedu.2016.07.003
- 7. Vázquez-Cano, E., Meneses, E. L., & Sánchez-Serrano, J. L. S. (2015). Analysis of social worker and educator's areas of intervention through multimedia concept maps and online discussion forums in higher education. Electronic Journal of e-Learning, 13(5), 333-346



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- 8. Conole, G., & Alevizou, P. (2010). A literature review of the use of Web 2.0 tools in Higher Education. Walton Hall, Milton Keynes, UK: The Open University, retrieved February, 17, 2011.
- Henderson, M., Selwyn, N., & Aston, R. (2017). What works and why? Student perceptions of 'useful' digital technology in university teaching and learning. Studies in Higher Education, 42(8), 1567-1579. doi:10.1080/03075079.2015.1007946
- 10. Then Again. (n.d.) retrieved March 29, 2024, from leetrepanier.substack.com
- 11. The Humanities Are in Crisis. (n.d.) retrieved March 29, 2024, from www.theatlantic.com
- 12. Debunking Perceptions About Value of Humanities Degrees. (n.d.) retrieved March 29, 2024, from www.insidehighered.com
- 13. Rethinking the Future of the Humanities. (n.d.) retrieved March 29, 2024, from www.insidehighered.com
- 14. The State of the Humanities circa 2022 | Daedalus | MIT Press. (n.d.) retrieved March 29, 2024, from direct.mit.edu
- 15. Reframing the Public Humanities: The Tensions.... (n.d.) retrieved March 29, 2024, from direct.mit.edu
- 16. The crisis in arts and humanities: Rhetoric or reality? (n.d.) retrieved March 29, 2024, from www.universityworldnews.com/post.php?story=20230331111300644
- 17. The Challenges to the Humanities. (n.d.) retrieved March 29, 2024, from www.amacad.org/news/challenges-humanities
- 18. The Humanities Have Sown the Seeds of Their Own (n.d.) retrieved March 29, 2024, from www.theatlantic.com
- 19. Public Higher Ed and the Real Value of Arts and Humanities. (n.d.) retrieved March 29, 2024, from www.governing.com
- 20. Humanities and The "Battle of the University" | Magazine. (n.d.) retrieved March 29, 2024, from www.thecrimson.com/article/2022/3/3/humanities-scrut/
- 21. Why Are the Humanities Dying? (n.d.) retrieved March 29, 2024, from joshuafoust.com/posts/why-are-humanities-dying/
- 22. The Public Futures of the Humanities | Daedalus. (n.d.) retrieved March 29, 2024, from direct.mit.edu
- 23. The Future of the Humanities Is Not an Adjunct-Fueled (n.d.) retrieved March 29, 2024, from www.jamesgmartin.center
- 24. The Humanities: What Future? (n.d.) retrieved March 29, 2024, from www.mdpi.com/2076-0787/12/4/85
- 25. Poremski, M. D. (2020). Evaluating the landscape of digital humanities librarianship. In The Digital Humanities (pp. 7-20). Routledge.
- 26. Brügger, N. (2016). Digital Humanities in the 21st Century: Digital Material as a Driving Force. DHQ: Digital Humanities Quarterly, 10(3).
- 27. Lacka, E., & Wong, T. C. (2021). Examining the impact of digital technologies on students' higher education outcomes: the case of the virtual learning environment and social media. Studies in higher education, 46(8), 1621-1634
- 28. Kadmos, H., & Taylor, J. (2024). No time to read? How precarity is shaping learning and teaching in the humanities. Arts and Humanities in Higher Education, 23(1), 87-105.
- 29. Pennsylvania public universities seek innovative ways to teach humanities as interest wanes. (n.d.)



retrieved March 29, 2024, from penncapital-star.com

- 30. Rieger, O. Y. (2010). Framing digital humanities: The role of new media in humanities scholarship. First monday.
- 31. Sciumbata, F. (2020). Students of humanities and digital skills: a survey on Italian university students. Umanistica Digitale, (8/2020), 7-27.
- 32. Shah, M., Foster, A., Talafian, H., Barany, A., & Petrovich, M. E. (2024). Facilitating and interpreting high school students' identity exploration trajectories in STEM. In Virtual Learning Environments (pp. 105-124). Routledge