



# Digital Humanities: Gen Z And Gen Alpha Learners To Enhance Sustainable Development

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## ARTICLE INFO

## ABSTRACT

Digital humanities is an area of scholarly activity at the intersection of computing or digital technologies and the disciplines of the humanities, and it has become more relevant to Gen Z and Gen Alpha learners. This generation has grown up surrounded by technology and is more comfortable using digital devices and various platforms for learning. Digital Humanities combines technology online resources and extensions to enhance the learning experience thus making it more engaging and interactive, especially for Gen Z and Gen Alpha, thereby enhancing sustainable development, Digital Humanities can be implemented in several ways. The article explores the characteristics of Gen Z and Gen Alpha learners, the rise of digital technology, collaboration of digital tools and extensions in traditional classrooms of Gen Z and Gen Alpha learners, thereby enhancing Sustainable Development.

**Keywords:** Digital Humanities, Gen Z, Gen Alpha, Social justice, Sustainable development

## Introduction:

Digital Humanities blends traditional ways of education with digital tools. It covers multiple fields incorporating diverse areas of literature, history, philosophy, linguistics, and so on. It gathers popularity primarily by increasing data availability, and the necessity of finding innovative ideas to enhance the scope of education. Researchers find it convenient to process an ample amount of data with the use of technology effectively. Whereas traditional methods erode time and power in identifying the data.

Digital transformation targets to enhance an entity by provoking prominent modifications to its features through amalgams of information, computing, communication, and connectivity technologies (Vial 2019). Researchers are motivated to deep dive into research with the help of Digital Humanities tools by conducting discussion forums online and sharing data. Shelly-Godwin Archive which digitally makes the availability of Mary Shelley, William Godwin, and Mary Wollstonecraft manuscripts (Fraistat). This kind of archive helps scholars access the materials with a lot of engagement towards the work.

Researchers from multiple fields can improve their comprehension and interpretation with the capability of Digital Humanities tools and methodologies. Researchers can spot links and resources linked with their research seamlessly by associating tools online - Hathi Trust Digital Library which allows scholars to analyse language patterns and evolution over time. The Scholars can raise questions about language and literature that seem ghosts in traditional methods.

Digital Humanities devices and extensions equip researchers to protect and ensure social inheritance that is being misplaced or damaged. Digital Conservation procedures ensure the social inheritance that gets passed on to the next generation and will be made accessible to future generations to consider and appreciate. Digital conservation can take multiple shapes, counting digitization of physical artifacts, making computerized chronicles, and creating Virtual Reality concurrencies that allow clients to investigate social legacy destinations. Frischer (2008) talks about the Rome Reborn project which is a digital reconstruction of ancient Rome that allows researchers to explore the 320 AD city. This project of reconstruction makes the public explore the city and its cultural heritage in absentia.

Digital Humanities withholds perks that can advance traditional humanities. The field opens up plenty of opportunities for collaboration, better efficiency, interpretation and visualization, better accessibility, new

research questions, and preservations of cultural ancestry. As technology advances and data proliferates, the Digital Humanities are likely to become an increasingly important part of humanities research. Researchers using digital humanities methods, extensions and tools can contribute and gain new knowledge to their field. The article tries to explore the prowess of blending Digital Humanities in a traditional classroom with Gen Z and Gen Alpha learners.

### **Gen Z and Gen Alpha Learners:**

The field of education significantly made changes over the years with the advancement of technology and societal concerns. With the emergence of new generations, such as Gen Z and Gen Alpha, there is a growing need to adapt education to meet the needs of these learners. These generations are often referred to as digital natives, as the development takes up technology as an integral part. Generation Z, known to be the post-millennial generation or iGeneration, refers to individuals born between 1997 and 2012 (A. Eldridge 2024). They are often described as tech-savvy, having grown up with smartphones, social media, and instant access to information. They are used to having the world at their fingertips and expect immediate responses and gratification. These learners are known for their desire for social justice and inclusivity.

Miranda (2020) in the article "Generation Z: Re-thinking Teaching and Learning Strategies" quoted Seemiller and Grace's statement that Generation Z considers themselves loyal, thoughtful, compassionate, open-minded, and responsible. Generation Z pursues to make changes in our society. Gen Z learners prefer to learn through interactive and visual methods, such as videos, animations, and games. They are attracted to content that is engaging and entertaining and prefer learning at their own pace. In addition, they often rely on peer-to-peer learning, preferring to collaborate with their peers and exchange ideas. They also value authenticity and transparency and are more likely to trust information from individuals or sources that are considered authentic.

Generation Alpha, born between 2010 and 2025, is the first generation to be born entirely in the 21st century. Australian researcher, Mark McCrindle introduced the term Generation Alpha in a report published in 2008 (S. Eldridge). They are sometimes referred as screenagers or digital natives, as they do not know a world without smartphones, tablets, and other digital devices. They are growing up in an increasingly complex and interconnected world and are expected to be the most tech-savvy and adaptable generation yet. Generation Alpha learners prefer visual and interactive learning. They are accustomed to using touchscreens, voice assistants, and virtual reality and are likely to be attracted to learning experiences that incorporate these technologies. They also tend to be highly creative and curious and prefer to learn through exploration and experimentation.

### **Rise of Digital Technology:**

The emergence of digital technology has revolutionised the field of education, providing new opportunities for learners and educators alike. Digital technology has made it easier to access information, communicate with others, and collaborate on projects. It has also enabled the creation of new learning resources and platforms that cater to the preferences of Gen Z and Gen Alpha learners. One of the key advantages of digital technology in education is its ability to provide personalized learning experiences. Adaptive learning technologies use data and analytics to tailor learning experiences to the needs and preferences of individual learners. This can help to ensure that learners are challenged appropriately and can progress at their own pace (El-Sabagh 2021). Digital technology also enables the creation of immersive and engaging learning experiences. Virtual reality imparts learners with realistic and interactive simulations of real-world situations. This can be particularly useful in fields such as medicine and engineering, where learners need to gain hands-on experience in a safe and controlled environment (Moore 2023).

Another boon of digital technology is its ability to enable collaboration and peer-to-peer learning. Social learning platforms, such as Edmodo and Schoology, provide learners with the ability to connect with their peers and exchange ideas and resources. This can foster a sense of community and promote active learning. While there are numerous advantages to using digital technology in education, some challenges and risks also need to be considered. One of the main concerns is the potential for distraction and addiction. Digital devices and social media platforms can be highly addictive, and learners may find it difficult to stay focused on their studies when so many other distractions are available.

Another risk of digital technology is the potential for cyberbullying and other negative online behaviours. Social media platforms and online forums can be breeding grounds for hate speech, harassment, and other forms of cyberbullying. Learners may feel intimidated or excluded if they become targets of these negative behaviours, which can have a significant impact on their mental health and well-being (Patchin 2018). Digital technology can also have negative impacts on physical health. Learners who spend a long period consummate at screens may experience eye strain, headaches, and other physical symptoms. In addition, sedentary lifestyles can lead to obesity, diabetes, and other health problems.

In order to mitigate these risks, educators need to be mindful of the potential adverse impacts of digital technology and take steps to ensure that learners are using technology in a safe and responsible way. This may include setting clear guidelines for device usage, monitoring online behaviour, and promoting physical activity and healthy lifestyles. The variety of digital learning tools and platforms available to educators and learners,

range from uncomplicated tools such as online quizzes and interactive whiteboards to more involved platforms such as learning management systems (LMSs) and virtual learning environments (VLEs).

LMSs are software platforms that provide educators with the ability to manage and organize learning resources and activities. They typically include features such as course calendars, assignment submission and grading tools, and discussion forums. Some popular LMSs include Blackboard, Canvas, and Moodle. VLEs, on the other hand, are immersive digital environments that provide learners with a range of learning resources and experiences. They typically incorporate elements such as virtual reality, gamification, and social learning. Some examples of VLEs include Minecraft Education Edition, Classcraft, and 3D GameLab.

In addition to these platforms, there are also numerous digital tools and resources available to educators and learners. These include video lectures, interactive animations and simulations, online textbooks and journals, and digital libraries. Many of these resources are free or low-cost, making them accessible to learners from all backgrounds (Manca 2016). The emergence of digital technology has also had a significant impact on teaching practices. In order to engage effectively with Gen Z and Gen Alpha learners, educators need to adapt their teaching strategies to incorporate digital technology and multimedia resources.

One approach that has been shown to be effective is the use of flipped classrooms. In a flipped classroom, learners watch video lectures or engage with other multimedia resources before coming to class. This allows for more active and collaborative learning experiences during class time, as learners can engage in discussions, group work, and other activities. Another effective approach is the use of game-based learning. Games can be highly engaging and immersive, providing learners with a fun and interactive way to explore complex concepts and skills. Games can also be used to promote teamwork and collaboration, as learners work together to solve problems and achieve goals.

In order to effectively incorporate digital technology into their teaching practices, educators, also need to have the necessary skills and knowledge. This includes understanding how to use digital tools and platforms, as well as how to design effective digital learning experiences. Many educators may need to undergo training or professional development in order to acquire these skills (Manca 2016). There is a growing group of research that suggests that digital learning can have a positive impact on learning outcomes. The study undertaken by Means et al. (2010) found that online and blended learning environments can be just as effective as traditional face-to-face instruction, and in some cases maybe even more effective. Other studies have found that digital learning can improve Learner engagement and motivation, as well as promote higher-order thinking skills and creativity (Kirschner 2017). Digital technology also has the potential to personalize learning experiences, allowing learners to work at their own pace and in their own preferred learning style. However, the effectiveness of digital learning depends on a range of factors, including the quality of the digital resources, the design of the learning experiences, and the support provided to learners. Educators need to be mindful of these factors in order to ensure that digital learning is effective and engaging for all learners. The emergence of digital technology has transformed the landscape of education, offering new opportunities for learning and engagement. Gen Z and Gen Alpha learners have grown up in a world where digital technology is ubiquitous, and as such, educators need to adapt their teaching strategies to meet their needs. Digital learning offers numerous advantages, including flexibility, personalized learning experiences, and the ability to engage learners through multimedia resources. However, there are also risks and challenges associated with digital learning, including the potential for distraction and addiction, cyberbullying, and negative impacts on physical health.

Educators need to be mindful of these risks and challenges and take steps to ensure that learners are using digital technology safely and responsibly. This includes setting clear guidelines for device usage, monitoring online behaviour, and promoting physical activity and healthy lifestyles. The impact of digital learning on teaching and learning outcomes is largely positive, but the effectiveness of digital learning depends on a range of factors, including the quality of the digital resources, the design of the learning experiences, and the support provided to learners. By embracing digital technology and adapting their teaching strategies, educators can create engaging and effective learning experiences for Gen Z and Gen Alpha learners.

### **Digital Humanities in Sustainable Development:**

The concept of Sustainable development flourishes the present and future generations by promoting the social, and environmental background. The learners of the 21st century face challenges in revolutionising sustainable development through the integration of Digital Humanities. It transforms the way of teaching-learning process which makes education a profound ingredient of sustainable development. It makes the learners involved and engaged in the learning activity and also stands as the prime element of Digital Humanities. Tools such as interactive maps, timelines, and databases engage learners in visualising intricate concepts and comprehending the relationships between different events and phenomena. Educators can use the tool 'Omeka' to construct an online exhibition that reviews the history of environmental activism. Educators assess the level of learning of learners by providing personalised feedback with the tool 'Hypothes.is.' It also allows annotation of digital texts, and comments, and permits the learners to respond to the questions raised by the educators. It encourages learners to engage with the material more critically and cogitatively. According to Johnson and Friedrich, Digital Humanities in education can help create more interactive and engaging learning experiences.

### **Environmental Conservation:**

Environmental conservation marks a significant impact on the area of Digital Humanities. Its primary competence is to collect and analyze large amounts of data. 'Geographic Information Systems (GIS)' tool assists the researchers to view map and inspect environmental data namely deforestation rates, biodiversity, and water quality. It also helps to intimate policy decisions and conservation endeavors. 'StoryMap' tool creates interactive narratives that explore environmental issues like climate change. It comprehends multimedia resources such as videos, images, and audio recordings. It further assists the learners to understand the perplexity of these issues and the need for the action taken. Digital Humanities in environmental sustainability can help collect and analyze large amounts of data, which can be used to inform policy decisions and conservation efforts. They also argue that tools such as 'StoryMap' can be used to raise awareness about environmental issues and encourage public engagement.

### **Social Justice:**

Other prime area that marks a considerable effect in Digital Humanities is Social justice. The digital tools assist the researchers to inspect the issues of race, gender, and identity in the advanced manner. 'Text Mining' is one such tool that help the researchers to analyze large amounts of textual data, identify prototypes and topics connected to the issues of social justice. It informs policy decisions, advocacy efforts and also enhance the awareness among the public. 'Twitter' utilised to track and analyze social media conversations related to social justice issues. This can also be used to identify key influencers and to improve targeted outreach tactics.

### **Challenges and Solutions:**

The approach towards sustainable development potentially revolutionises and challenges the incorporating areas of Digital Humanities. The central challenge that the people of the world face is data privacy. It is crucial to ensure that the data collected by the tools is ethical and safe. It should not harm the general public and individuals by anonymously using the data. Technological Literacy is one such another challenge in sustainable development. The knowledge and skill set are not used by general public without proper training. To address this issue one need to undertake workshops, online tutorials, and other forms of training. The collaborative initiative is required for Digital Humanities between researchers from different disciplines such as computer science, social sciences, and humanities. In parallel to Digital Humanities, sustainable development need to collaborate between environmental scientists, policymakers, and community members. Collaborating this two groups together can also be a great challenge, because each group probaby have distinct set patterns, goals, values, and working ways. This can be subdued by nurturing the communication and articulating the goals for sustainable future between two groups. Another area useful area of Digital Humanities in sustainable development is to monitor and evaluate the progress concerning sustainability goals. 'Data Visualization' tool assist the policymakers and community members track progress towards goals cognate reducing carbon emissions or increasing access to clean water. Ultimately, it is essential to identify that Digital Humanities in sustainable development is not a universal remedy. The tools of Digital Humanities is one such part of a major effort to create a more sustainable future. They can contribute to various other approaches, such as policy changes, community engagement, and technological innovation. When blending these approaches, one can create a more holistic and effective approach to sustainable development. The amalgamation of Digital Humanities in sustainable developmentenormously transform the way of approach towards the challenges of the 21st century. As long as Digital Humanities continues to progress, it should remains comprehensive and accessible to all. Not only addressing the above mentioned challenges but also the challenges related to representation and power. To avoid high risk factor, one should As with any field, there is a risk that Digital Humanities in sustainable development could maintain power imbalances and expel marginalized communities. Furthermore, it is notable to assure that Digital Humanities projects are developed in collaboration with the communities which are intended to serve and prioritise diversity.

### **Conclusion:**

Digital Humanities has enormous potential to transform sustainable development and create a more sustainable, just, and equitable world. By leveraging the power of technology and interdisciplinary collaboration, one need to collect, analyze, and visualise data related to sustainability in intuitive manner. The challenges associated with blending Digital Humanities into sustainable development, one need to overcome it through training, support, and collaboration. In the long run, the positive result of Digital Humanities in sustainable development relies on the ability in utilizing technology according to modalities that are ethical, inclusive, and socially valid.

### **Works Cited:**

1. Eldridge, Alison. "Generation Z." Encyclopedia Britannica, 2024, <https://www.britannica.com/topic/Generation-Z>.
2. Eldridge, Stephen. "Generation Alpha." Encyclopedia Britannica, 2024, <https://www.britannica.com/topic/Generation-Alpha>.

3. El-Sabagh, Hassan A. "Adaptive E-Learning Environment Based on Learning Styles and Its Impact on Development Students' Engagement." *International Journal of Educational Technology in Higher Education*, vol. 18, no. 1, Oct. 2021, Springer, [educationaltechnologyjournal.springeropen.com/articles/10.1186/s41239-021-00289-4](https://educationaltechnologyjournal.springeropen.com/articles/10.1186/s41239-021-00289-4).
4. Fraistat, Neil, et al., editors. "About the Archive." *The Shelley-Godwin Archive*, [shelleygodwinarchive.org/](https://shelleygodwinarchive.org/).
5. Frisher, B. "The Rome Reborn Project: How Technology is Helping us to Study History," Rome Reborn Project, 2008. [https://sofaarome.wordpress.com/wp-content/uploads/2008/11/frischer\\_oped\\_final2.pdf](https://sofaarome.wordpress.com/wp-content/uploads/2008/11/frischer_oped_final2.pdf).
6. "From Around the Library." HathiTrust Digital Library, 2024, <https://www.hathitrust.org/>.
7. Kirschner, P. A., and De Bruyckere, P. "The myths of the digital native and the multitasker." *Teaching and Teacher Education*, vol. 67, 2017, pp. 135-142. <https://doi.org/10.1016/j.tate.2017.06.001>.
8. Manca, S., and Ranieri, M. "Is Facebook still a suitable technology-enhanced learning environment? An updated critical review of the literature from 2012 to 2015." *Journal of Computer Assisted Learning*, vol. 32, no. 6, 2016, pp. 503-528. <https://www.learntechlib.org/p/174108/>.
9. Means, B, et al. *Evaluation of Evidence-Based Practices in Online Learning: A Meta-analysis and Review of Online Learning Studies*. US Department of Education. 2010. <https://www2.ed.gov/rschstat/eval/tech/evidence-based-practices/finalreport.pdf>
10. Miranda, Carmen. "Generation Z: Re-Thinking Teaching and Learning Strategies." *Faculty Focus*, 24 Apr. 2020, [www.facultyfocus.com/articles/teaching-and-learning/generation-z-re-thinking-teaching-and-learning-strategies/](http://www.facultyfocus.com/articles/teaching-and-learning/generation-z-re-thinking-teaching-and-learning-strategies/).
11. Moore, Earl. "Virtual Reality and Augmented Reality in ELearning: Providing Deeper Engagement." *ELearning Industry*, 3 Aug. 2023, [elearningindustry.com/virtual-reality-and-augmented-reality-in-elearning-providing-deeper-engagement](https://elearningindustry.com/virtual-reality-and-augmented-reality-in-elearning-providing-deeper-engagement).
12. Patchin, J. W., and Hinduja, S. "Deterring Teen Bullying: Assessing the Impact of Perceived Punishment From Police, Schools, and Parents." *Youth Violence and Juvenile Justice*, vol. 16, no. 2, 2018, pp. 190-207. <https://doi.org/10.1177/1541204016681057>.
13. Vial, Gregory. "Understanding digital transformation: A review and a research agenda." *The Journal of Strategic Information Systems*, vol. 28, no. 2, 2019, pp. 118-144. ScienceDirect, <https://www.sciencedirect.com/science/article/abs/pii/S0963868717302196>.