

Digital Storytelling in African Higher Education

Higher education is considered a field in which students, teachers, and researchers develop a broader view of concepts in a detailed and profound manner. Education in Africa has been seen as a field of continuous progress due to the historical and cultural entity of the continent. Efforts to keep educational content innovative and modern have been documented by many researchers in the field of digital narratives in education. Digital narratives are a new method of reporting various content in education. This research aims to unveil the values and domains in which digital narratives are incorporated in African higher education. To achieve the said aim, a qualitative document analysis was performed on several selected studies performed in African contexts. The findings suggest that digital narratives aid in improving motivation, self-confidence, cultural exposure, expression, and analytical skills among students.

Keywords: digital narratives, higher education, African education, values, motivation, skills.

Introduction

Education is a fundamental human right and an essential contributing component to the development of nations (United Nations, 1948). The process of acquiring knowledge, skills, and developing values and attitudes guarantees the effective functionality of society members. The quality of education provided, and its effect influence national and economic development, personal and ethical growth, and global citizenship (Boccanfuso, Larouche & Trandafir, 2015; Samuelsson, Lindstorm, 2022). Education in Africa can be labeled as a complex issue, many challenges and disparities can be found across the continent. Despite the efforts of numerous organizations over recent years, access to quality education remains a significant problem for African nations (Teferra, 2014). According to UNSICO (2010) reports demonstrate the growth in enrollment in African regions such as the sub-Saharan region and how it remains the lowest in the world at 6%. These numbers are the outcomes of many influencing factors such as poverty, lack of infrastructure, and conflict.

In recent years of research, the efforts performed to enhance and develop the sector of education in Africa have been documented. In the scope of this study, we elaborate on the attempts at modernization and digitalization of the field through digital storytelling. In recent years, digital storytelling has become a useful tool for research in social and educational contexts. It involves using different digital media to create personal narratives and stories, like short films told from a personal perspective (Robin 2008). Digital storytelling allows us to explore individuals' experiences more deeply, and is part of the traditional individual narrative framework, but with a technological interference (Bolivar and Domingo 2019). Although it is currently receiving more attention, digital stories have been used for decades, dating back to the 1970s and 1980s in the United States as a

1 means of promoting social change through personal voices (Center for Digital
2 Storytelling 2005).

3 Digital storytelling is a versatile approach that can be used for research,
4 combining both digital and traditional media to produce accurate results. Exposure
5 to digital content is a part of learners' daily lives, therefore, its integration into
6 education can promote long-term learning outside the formal educational context.
7 It can also serve as a means of promoting creativity and narrative skills, while
8 simultaneously acting as a representation of personal and group identity with an
9 artistic touch. Learners can either present their experience or reflect on peer
10 presentation which promotes critical thinking and analytical skill development
11 Additionally, digital storytelling can create virtual learning environments that
12 utilize web applications, mobile technology, and social networks, making it
13 suitable for both formal and informal educational contexts as it modernizes
14 learning and can help teachers be involved regardless of distance.

15 Several research studies have demonstrated the effectiveness of utilizing
16 digital storytelling as an instructional tool. The use of digital storytelling eases the
17 transition from a traditionally low-tech setting to a high-tech world outside the
18 classroom. It has been proven to motivate students to engage in learning by
19 allowing them to create personal stories (Smeda, Dakich, & Sharda, 2014; Ware,
20 2006). Moreover, digital storytelling provides students with the opportunity to
21 train and nourish their problem-solving skills and enhance their technological
22 competencies through practice and experimentation based on theory (Kajder,
23 2004; Robin, 2008). Robin (2008) argues that digital storytelling allows students
24 to develop digital literacy by using technological tools during the content
25 production process. Therefore, integrating it into teaching methods can facilitate
26 student engagement and motivation, and foster the development of essential
27 technological and problem-solving competencies, ultimately leading to more
28 effective learning outcomes.

29 30 **Digital Storytelling**

31
32 The pedagogical practice of incorporating digital storytelling has been
33 extensively employed in various educational sectors worldwide (Mills, 2010;
34 Ohler, 2006; Robin, 2008; Sadik, 2008). This practice is defined as the art of
35 storytelling using digital tools such as text, graphics, sound, and video (Robin,
36 2006). Typically, a digital story is a short narrative accompanied by a video and
37 music that conveys ideas on a particular theme (Robin, 2008; Sadik, 2008). A
38 digital story usually includes seven essential elements: a point of view, a dramatic
39 question, emotional content, a voice, the power of the soundtrack, economy, and
40 pacing (Lambert, 2010, p. 7; Robin, 2008, p. 223).

41 According to Robin (2008), digital storytelling is a powerful tool that engages
42 and motivates students to create their stories. The process of creating a digital story
43 involves four phases:

44 1. Pre-production phase:

- 45 • Owning your insights
- 46 • Owning your emotions

- 1 • Finding the moment
- 2 2. Production phase:
- 3 • Seeing your story
- 4 • Hearing your story
- 5 3. post-production phase:
- 6 • Assembling your story
- 7 4. Distribution
- 8 • Sharing your story (Lambert, 2010, pp. 7-22)

9
10 As outlined by various scholars (Chung, 2007), by utilizing digital
11 storytelling in education, students can improve their digital and media literacy
12 skills, gain experience with technology, and enhance their creative abilities. This
13 innovative teaching method can provide students with a more interactive and
14 engaging learning experience and enable them to develop critical thinking and
15 problem-solving skills, allowing them to express themselves uniquely and
16 creatively.

17 Due to the growing interest in modernizing education through digital
18 storytelling, this article explores the efforts performed to introduce this
19 contemporary concept to the developing African higher education and teacher
20 training sectors.

21 22 **Research Questions**

- 23
- 24 • What values are promoted with digital storytelling in education in Africa?
- 25 • In what context is digital storytelling integrated into African higher
- 26 education?
- 27
- 28

29 **Method**

30
31 The present study is a qualitative document analysis, following the orientation
32 of the research questions, it aims to identify the main points and build a qualitative
33 synthesis in connection to digital storytelling in African higher education. To
34 achieve the aims of this study, an analysis is conducted on the selected literature.
35 The data presentation includes the objectives, context, and design of the study. The
36 thematic scheme that is derived from the research questions is developed based on
37 the elements and results of the chosen studies.

38 39 **Inclusion and Exclusion Criteria**

- 40
- 41 • The literature was researched on the Google Scholar search engine, the
- 42 database ERIC, JSTOR, ResearchGate, and other platforms depending on the
- 43 research equation selected.
- 44 • The literature selected is in the form of scientific articles and research studies.
- 45 • The studies are done in an African context.

- Literature must fall under the themes of education, higher education, social sciences, and digital storytelling.
- The time frame of the selected studies is 2000-present.
- Studies belonging to the research areas of social sciences and educational research.
- The literature corresponds to the research objectives and research questions.

Search Strategy, Data Selection and Analysis

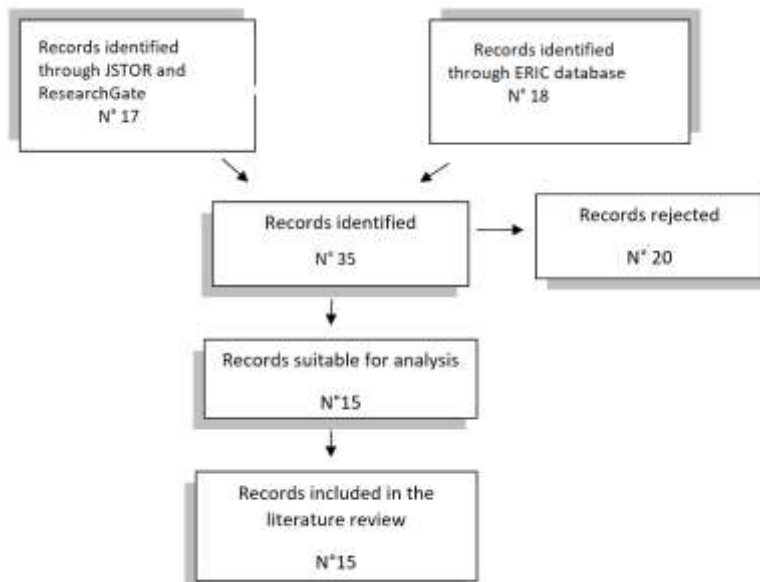
The research equation:

Table 1. Research equation

DATABASE	Search Platform	
EQUATION	African studies Education Digital storytelling	Digital education Higher education African education

The selected studies represent 15 scientific articles derived through the presented research equation. The initial number of studies (35) articles, the filtering process was conducted through a Prisma Protocol based checklist. Documents that do not fit the selected keywords and studies that seem duplicated have been omitted through the selection. The final number (15) reflects the studies that fit the specific context chosen, methodology, and keyword preferences. The following graph demonstrates the filtering process.

Figure 2. Selection chat based on Prisma Protocol



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- 1 Post the selection of documents, the records were read and categorized. To
- 2 explore the selected data, a table is presented, in which the location, aim, sample,
- 3 methodology, and results are summarized. This part gives an overview of the
- 4 topics and paves the way to provide a background for the analysis.

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Table 2. Selected studies' elements

Study Location	Aim of the study	Sample	Methodology	Results
South Africa	This article discusses a digital storytelling initiative in a higher education institution located in the Western Cape. The goal was to implement the idea of the "pedagogy of discomfort" in a pre-service teacher training program for final-year students.	19 self-selected students.	This research adopted an interpretative qualitative approach.	This study examined the complex emotional dynamics that exist in a classroom setting, including power relations between individuals and groups. Using digital storytelling, students were able to explore and express their identities, shedding shame and building a sense of pride. However, the study also found that students often focus mainly on race and construct identities which reflect stereotypes. Despite this, the sharing of personal stories provided an opportunity to introduce indirect knowledge that may have a transformative impact on social engagements. Overall, the study highlights the potential of digital storytelling to facilitate open dialogue and transform relationships among students.
South Africa	The article discusses how digital storytelling can improve students' interest and involvement in their academic pursuits.	29 final year pre-service student teachers University of Technology in South Africa.	The study collected data through focus group interviews with both students and facilitators of the project.	The study findings showed that digital storytelling is beneficial in increasing student engagement with their studies. The study identified several factors that contributed to said claim, such as students having more time to study, being motivated to interact with the subject matter, having control over their own learning and the process of creating digital stories, it promotes peer learning, increases interactions with the lecturer, and reflection.
South Africa	This study demonstrates how the utilization of multimedia aids pre-service teachers to create a community of practice through developing their personal digital stories for evaluation.	7 pre-service teachers. Education Institution in Cape Town.	The study used a qualitative research approach to collect and analyze data. The information was obtained by conducting focus group interviews as well as collecting written reflections.	The study findings demonstrate that utilizing multimedia tools to create digital stories in a diverse classroom setting fostered the development of a community among pre-service teachers. Through this process, participants gained a better understanding of each other's cultures, leading to increased respect and understanding. The pre-service teachers reported that participating in the project helped prepare them to teach in multicultural classrooms.
South-West Nigeria	The research aims at exploring the effectiveness of utilizing digital storytelling in enhancing students' performance in reading maps within the Ibadan urban area located in the southwestern region of Nigeria using 2 digital storytelling models; individual based and group based.	242 students in Southwest Nigeria.	A pretest-posttest quasi-experimental design, which included two modes of teaching: group-based and individual-based DST.	Findings show that the use of digital storytelling has been proven to be successful in enhancing geography students' performance in map reading. This finding highlights the effectiveness of DST in keeping learners engaged during the learning process, which ultimately leads to improved performance in map reading. moreover, the group learning approach has shown better results in comparison to individual learning mode.
	The primary objective of this	50 volunteers	In this research, a	The findings of this study indicate that pre-service teachers have a positive

South Africa	research is to explore the potential advantages of utilizing digital storytelling (DST) for teaching and learning purposes, identify and examine any factors that may hinder the implementation of DST, and contribute to the development of effective teaching strategies.	pre-service teachers.	qualitative approach was taken through conducting focus group interviews.	perception of the potential benefits of digital storytelling (DST) in the classroom. The participants acknowledged that DST has the capability to enhance and sustain students' motivation and engagement levels during learning activities. Furthermore, DST was deemed valuable in promoting self-expression and facilitating collaborative learning, which in turn can help students acquire a broad range of skills. However, despite the perceived benefits, pre-service teachers recognized that a shortage of resources, a lack of self-confidence, and time constraints due to rigid curricula may hinder their ability to incorporate DST into their teaching practices.
Egypt	The main objective of this research is to examine the impact of digital storytelling on the oral proficiency of learners. Also, to assess the level of satisfaction among learners regarding their experience with DST.	8 first-year college students at Zewail University of Science and Technology in Egypt.	The study employed a one-group pre-test posttest design.	The results indicate a statistically significant and positive improvement in learners' oral performance as they practiced grammar and pronunciation through multiple attempts to record their narratives. Additionally, the participants expressed high levels of satisfaction with the experience.
Tanzania	The aim of this study is to explore the notion of one-to-one narrative forming approach in developing education in rural areas. Also, to examine and help develop computer aided education and life planning.	17 students and teachers.	Exploratory study using teaching materials, provided technology.	The digitalized stories enabled the students to share their experience to the global community, enhanced creativity, imagination, self-image, motivation, and future expectation projection. It also shows the permanent factor of DST through presenting and sharing of oral traditions in a contemporary way. Moreover, the research proves the expended special and temporal dimensions the stories can overcome.
South Africa	The researcher aims to study the connection between digital storytelling, reflective practices, and higher-order thinking. Also, explore the use of digital stories as a tool for teaching and learning in higher education in Africa.	29 final-year pre-service student teachers at the Cape Peninsula University of Technology (CPUT), South Africa.	The methodology adopted was pure qualitative with the aid of focus group interviews.	According to the scholars, digital storytelling offers a promising instrument for reevaluating and reinventing evaluation methods in higher education, facilitating students in acquiring advanced reflective capabilities, and consequently fostering profound learning and the growth of higher-order thinking abilities. Nevertheless, the researchers advise that when incorporating digital storytelling into assessments, emphasis should be placed on the narrative content rather than on the technology itself.
Uganda	The study aims at Evaluating the alteration of DST techniques and recognizing the prospective utilization of DST in Uganda and various East African environments.	6 participants representing several interdisciplinary faculty branches;	Participatory Action Research.	Through the research, DST provided a culturally fitting frame for updating traditional oral narrative customs, it also displayed promise for extensive application within Uganda. Adapting DST might help tackle moral and practical values connected to collaborating with diversified and marginalized demographics within the nation. The notion of educating local facilitators was seen as beneficial in tackling the concerns of the community.

Nigeria	This study aims at analyzing the perspectives of geography teachers on the efficiency of digital storytelling in terms of map reading.	Nine teachers and 381 students from Nigerian secondary schools.	Qualitative study, with the aid of semi structured interviews and focus group discussions.	The results suggested that both geography instructors and students viewed digital storytelling as a suitable teaching instrument that could make map interpretation more practical and link it to the real-world. Obstacles such as inconsistent electricity availability, insufficient digital equipment, and a deficiency in technological proficiency were recognized by teachers and students as significant obstacles to the success of the approach.
South Africa	This study aims at exploring the efficiency of digital narratives in transmitting information by postgraduates to entry-level students.	7 post graduate students.	The researchers adopted a participatory ethnography research approach.	The outcomes of the study indicate that the utilization of DST proves to be exceptionally well-suited for the purpose of generating information, fostering collaborative participation, and monitoring the progressive path of postgraduate students who are engaged in intricate and mentally challenging research endeavors. This innovative approach not only does it facilitate the process of acquiring relevant data, but also encourages a dynamic and interactive engagement among individuals, allowing for a more comprehension of their developmental journey as they navigate through their research.
Nigeria	The primary focus of this research is to examine how pre-service educators perceive digital education and their levels of unease towards technology, and their state of preparedness in adopting digital storytelling in instructional output.	583 pre-service teachers; the Faculty of Education, University of Ibadan.	A mixed method research design was adopted with the aid of a questionnaire and focus group discussion.	The outcome revealed an impressive degree of preparedness among pre-service instructors to employ digital storytelling as a teaching tool within the classroom setting. Furthermore, the perceived significance of digital storytelling held by these pre-service teachers emerged as a noteworthy factor influencing their readiness to utilizing digital storytelling for instructional purposes.
South Africa	The study aims at identifying the social and moral benefits of digital storytelling in marginalized groups.	8 university students from Eastern Cape, South Africa;	The adopted approach was a participatory media production. Method.	The results demonstrate the possibilities carefully crafted digital storytelling initiatives have in raising awareness and giving a voice to the voiceless. Moreover, showcasing their capacity to serve as not only a means of psychological expression but also as a valuable instrument for educating communities and driving social activism among marginalized young individuals.
South Africa	The aim of this study is to conduct an in-depth examination into the creative methodologies employed by digital storytellers within the specific context of South Africa.	9 student facilitators at the university of technology in the Western Cape of South Africa.	Qualitative case study with the use of interviews and observation.	The results established a connection between digital storytelling and a productive classroom environment, which allows students to redefine their identities beyond established historical boundaries. Storytelling circles have demonstrated their effectiveness in involving students in a process that encourages both introspection and a discerning examination of their own writing methods. This demonstrates the harmonious relationship between expression and constructing narratives.
Kenya	The objective of this study is to investigate educational approaches that promotes cultural preservation through the governmental	91 teachers from Trans Nzoia County in Kenya.	A case study approach was adopted with the use of pre-and post-surveys,	Educators indicated the employment of technology for tasks such as lesson preparation and administrative record-keeping, as opposed to actively involving students in activities related to digital literacy. To address obstacles tied to technology, teachers mentioned implementing group work

motivation of progressive pedagogy and the universal acquisition of digital skills among students.		participant-generated artifacts, and interviews.	among students through using smartphones as tool due to lack of facility equipment.
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Findings and Implications

The above table represents the selected studies by adhering to the previously demonstrated research equation. All 15 studies fall under the same theme which is the use of digital narratives in higher education and teacher training in African contexts. The table demonstrates the aim, sample, methodology, and results of each study. It is evident, through observing the results, that most researchers seek to understand the benefits and preparedness of students and teachers to incorporate digital narratives in their educational practices. The studies selected vary in location and methodology to offer a diversified view of the notion. However, most studies adopt a qualitative research approach in which they try to understand views and opinions toward digital narratives referring to educational, personal, and cultural growth. According to Barrett 2005, a qualitative approach is the most appropriate when attempting to evaluate the use and effectiveness of DST in education due to the lack of data in research.

Results

Digital storytelling (DST) has emerged as a versatile and impactful tool across diverse educational landscapes, as evidenced by an array of scholarly works. In the exploration of complex emotional dynamics within a classroom setting, digital storytelling provided a platform for students to express their identities, mitigating shame and instilling a sense of pride. However, a nuanced understanding is essential, as students often center their narratives around race, inadvertently reinforcing stereotypes. Despite this, the sharing of personal stories through digital storytelling created an opportunity to introduce transformative indirect knowledge into social engagements, highlighting the potential of DST to facilitate open dialogue and reshape relationships among students. Significant findings emerge in the spectrum of student engagement. The incorporation of digital storytelling in educational settings resulted in increased student engagement with their studies (Barrett, 2005; Hayes, 2011). The study identified several contributing factors, such as students having more time for study, motivation to interact with the subject matter, and a sense of control over their learning process (Menezes, 2012). Moreover, the process of creating digital stories promoted peer learning, increased interactions with the lecturer, and facilitated reflective practices (Sanders, Murray, 2009) contributing to a more dynamic and participatory learning environment.

In the context of pre-service teachers, digital storytelling fostered the development of a sense of community within a diverse classroom setting (Condy, Chigona, Gachago & Ivala, 2013). Participants gained a better understanding of each other's cultures, leading to increased respect and understanding (Darcy, 2008). The project was reported to prepare pre-service teachers for teaching in multicultural classrooms, emphasizing the potential for digital storytelling to bridge cultural gaps in educational contexts. Geography education studies witnessed a positive transformation through digital storytelling, particularly in map

reading skills. Findings indicate that utilizing multimedia tools for creating digital stories in a diverse classroom setting fostered the development of a community among geography students (Kolapo,2020). Despite obstacles like insufficient digital equipment, both instructors and students viewed digital storytelling as a suitable teaching instrument that could make map interpretation more practical and relevant to the real world. In the realm of oral performance improvement, participants engaging in multiple attempts to record their narratives showed statistically significant improvement in their oral performance (Robin, 2008). High levels of satisfaction were expressed by the participants, indicating the effectiveness of the experience in enhancing language skills.

Scholars emphasize the potential of digital storytelling to reevaluate and reinvent evaluation methods in higher education, facilitating advanced reflective capabilities among students and fostering higher-order thinking abilities (Gregori-Signes, 2010). However, the emphasis should be on narrative content rather than technology itself when incorporating digital storytelling into assessments. In monitoring postgraduate research, digital storytelling proves to be exceptionally well-suited for generating information, fostering collaborative participation, and monitoring the progressive path of students engaged in intricate research endeavors (Rambe, Mlambo,2014). The innovative approach not only facilitates the acquisition of relevant data but also encourages dynamic and interactive engagement among individuals, allowing for a deeper comprehension of their developmental journey (Rambe, Mlambo, 2014).

The impact of digital storytelling extends to social activism, as it offers possibilities for raising awareness and giving a voice to the voiceless (Darcy, 2008). This demonstrates its capacity as a means of psychological expression and as a valuable instrument for educating communities and driving social activism among marginalized young individuals. However, challenges persist in effectively utilizing technology for educational purposes, as educators often prioritize administrative tasks over actively involving students in activities related to digital literacy. Addressing these obstacles requires innovative solutions, such as implementing group work among students through smartphones due to a lack of facility equipment (Ahadiat, 2005)

Discussion

The results of the diverse applications of digital storytelling (DST) in African higher education unveil a rich tapestry of values promoted and the contextual nuances of integration. Addressing the question of what values are promoted with DST in education in Africa, the findings echo a resounding narrative of empowerment, cultural enrichment, and transformative learning experiences. The multifaceted impact of DST extends far beyond traditional pedagogical approaches, offering a unique avenue for students to express their identities, overcome stereotypes, and engage in meaningful cultural exchanges. One of the predominant values promoted through DST is empowerment. The ability of students to explore and express their identities through digital storytelling was

found to be a powerful mechanism for shedding shame and fostering a sense of pride. This empowerment is not only individual but extends to the collective, as DST was identified as a tool that provides a voice to the voiceless, particularly among marginalized young individuals. The narratives created through DST become a vehicle for social change, fostering awareness and activism within the community. Cultural enrichment emerges as another significant value. In the context of Africa's diverse cultural landscapes, DST serves as a culturally fitting frame for updating traditional oral narrative customs.

Transformative learning experiences represent a core value promoted by DST in African higher education. The narratives shared through digital storytelling open avenues for indirect knowledge that may have a transformative impact on social engagements; moreover in connecting the past and the present (Trindade, Moreira, 2023). It facilitates a dynamic and interactive engagement among individuals, allowing for a deeper comprehension of their developmental journey as they navigate their research. DST becomes a catalyst for profound learning, fostering advanced reflective capabilities and the growth of higher-order thinking abilities (Robin, 2008; Sadik, 2008; Coutinho, 2010). The emphasis, as advised by researchers, should be placed on the narrative content rather than on the technology itself when incorporating DST into assessments. Understanding the context of how DST is integrated into African higher education is pivotal. The findings suggest a diverse array of applications, from pre-service teacher training to geography education, each highlighting the adaptability of DST in different academic settings. In geography education, for instance, DST not only enhances map-reading skills but also fosters a sense of community among students. Similarly, pre-service teachers view DST as a valuable tool for motivation, engagement, and collaborative learning, despite acknowledging challenges like resource shortages and time constraints (Gibson & Manuel, 2003).

The contextual integration of DST extends beyond the classroom, as seen in the application of digitalized stories enabling students to share their experiences globally. This global exposure not only enhances creativity, imagination, self-image, and motivation but also serves as a contemporary means of presenting and sharing oral traditions to a broader audience. Scholars emphasize the promising instrument DST offers for re-evaluating and reinventing evaluation methods in higher education, fostering profound learning and advanced reflective capabilities.

Conclusion

In conclusion, the findings across these diverse studies collectively underscore the multifaceted impact of digital storytelling across various educational domains. The benefits and challenges of incorporating DST are evident from identity exploration to oral performance improvement. The scholarly works cited contribute to a comprehensive understanding of DST's potential in fostering creativity, engagement, community building, and transformative learning experiences. While challenges exist, the positive outcomes presented in these studies provide a compelling case for the continued exploration and integration of

digital storytelling in diverse education. The values promoted by DST in African higher education, encompass empowerment, cultural enrichment, and transformative learning experiences. The contextual integration of DST is diverse, extending from geography education to pre-service teacher training, emphasizing its adaptability in various academic settings. The findings suggest that DST is not merely a technological tool but a transformative force that empowers students, enriches cultural understanding, and fosters profound learning experiences. As the educational landscape in Africa continues to evolve, these insights into the values and contexts of DST integration provide a foundation for future research and innovative educational practices.

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