



RESEARCH ARTICLE

INTEGRATION OF INFORMATION AND COMMUNICATION TECHNOLOGY FOR SOCIAL STUDIES EDUCATION IN A DIGITAL ERA

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ABSTRACT

The integration of Information and Communication Technology (ICT) in education has generated significant discussions regarding its impact on students' academic performance. This study investigates the integration of ICT in Social Studies education within the context of the digital era, with particular focus on secondary school students. Over the years, ICT has increasingly been adopted in educational systems globally and has become a fundamental part of classroom instruction in both developed and developing countries, including Nigeria. Its integration into the Nigerian educational system has contributed to meaningful educational reforms, particularly at the secondary school level. As part of the Social Studies curriculum implementation, teachers are now expected to utilize ICT tools in their teaching processes. This study highlights that ICT tools – such as internet resources, computer-mediated instruction, Twitter, YouTube, Telegram, and other digital platforms – can significantly enhance both instructional delivery and students' learning outcomes. The adoption of ICT for teaching Social Studies in this digital era is, therefore, essential for ensuring an effective and engaging teaching and learning process for both teachers and students.

Keywords: Communication, digital era, information, integration, technology

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Received: 23/4/2025; **Revised:** 28/5/2025; **Accepted:** 2/7/2025; **Published:** 30/7/2025



1.0. INTRODUCTION

In recent years, the rapid development of Information and Communication Technology (ICT) has transformed virtually every aspect of human life, including education. The advent of the digital era has brought about significant changes in the way teaching and learning are conducted across different disciplines, including Social Studies. Social Studies, as a core subject in the Nigerian education curriculum, plays a vital role in shaping the social, moral, and civic attitudes of learners. Therefore, the integration of ICT into Social Studies education is essential to ensure that learners acquire not only content knowledge but also the digital skills required for effective participation in the modern world.

Despite the global emphasis on ICT integration in education, many schools in Nigeria still face significant challenges in fully adopting these technologies, especially in Social Studies classrooms. Limited access to technological resources, lack of teacher training, and inadequate infrastructure often hinder effective ICT utilization (Yemothy, 2015).

Modern ICT experts argue that technology facilitates access to information, fosters creativity, and enhances student engagement, critics caution that it may distract students, lead to over-dependence, and diminish face-to-face learning experiences. This research aims to examine the various ways in which technology influences academic performance, particularly in secondary schools, and to assess both its positive and negative effects on learning outcomes.

Social Studies as a discipline has been firmly entrenched in Nigeria's educational curriculum and is taught across all educational levels; basic, post-basic, and tertiary. However, recent national and global developments demand a critical reappraisal of Social Studies as a problem-solving discipline (Lawal, 2022). Across the world, access to Information and Communication Technologies (ICTs) and digital literacy, which are vital for knowledge acquisition, information generation, and utilization, is not equally distributed. Many developing countries, including Nigeria, continue to face challenges in terms of access to digital tools and infrastructure (Ifijeh, Iwu-James & Adebayo, 2016). Despite the global growth of technology in information generation, processing, and dissemination in the 21st century, widespread adoption and effective use of ICT are still developing in many parts of the world.



Integrating ICT into the Social Studies curriculum offers numerous benefits but also presents challenges for the educational system. For example, in Sub-Saharan Africa, Ferri, Grifoni, and Guzzo (2020) identified issues such as poor internet connectivity, lack of infrastructure, inadequate technical skills, and low teacher quality as some of the obstacles to effective ICT integration in teaching. These challenges emphasize the urgent need to improve the quality of Social Studies instruction by incorporating ICT tools such as internet resources, computer-mediated instruction, Twitter, YouTube, Telegram, and a host of other technologies.

While integrating ICT into education presents several benefits – including improved engagement, creativity, and digital literacy – it also brings challenges that must be addressed for successful implementation. Advances in digital technology have had a profound impact on education globally (Kurt, 2013). The ongoing digital transformation in education presents both significant opportunities and challenges that continue to shape teaching and learning processes across disciplines. The availability of various digital tools, including learning software, interactive applications, and online educational platforms, has led to substantial changes in traditional teaching methods (Snelson, 2011).

It is against this backdrop that this study explores the digitalization of Social Studies education through the integration of ICT, assessing its benefits, challenges, and implications for teaching and learning in secondary schools.

2.0. CONCEPTUALISATION

Concept of Information and Communication Technology

The integration of Information and Communication Technology (ICT) into the classroom has reshaped the nature of teaching and learning. Specifically, the Internet enables students to research and access primary historical sources, providing richer learning experiences beyond the limitations of textbooks and secondary materials. ICT also allows students to engage with resources and tools unavailable in their immediate school environment.

Throughout human history, technology has consistently influenced development by introducing new ways of life, from the agricultural and industrial revolutions to the present-day knowledge and information revolution. These widespread technological advancements



have significantly impacted every sector of society, with Information and Communication Technology (ICT) emerging as one of the most influential milestones.

Considerable attention has been given to the role of technology in education, with numerous studies investigating its impact on learning outcomes and evaluating the kind of enhanced learning environments that technology can foster. The positive influence of ICT on teaching and learning has been well-documented globally, with research emphasizing the benefits it provides for learners, educators, and educational institutions as a whole.

Many scholars have defined ICT in various ways. Woodbridge, as cited by Yemothy (2015), described technology as an instructional tool, while its purposeful integration into the classroom is seen as an instructional strategy for delivering content to learners. ICT integration can be as basic as using laptops for document creation or as advanced as developing multimedia projects or broadcasting educational content online.

While ICT integration in education is well-established in developed countries, its adoption in developing nations remains relatively new. Before the introduction of modern ICT tools, traditional educational technology consisted primarily of televisions, videos, and slide projectors. However, the introduction of ICT has led to significant transformations in the use of digital technologies for instructional purposes.

One major component of ICT in education is multimedia technology, which Kurt (2013) describes as having the capacity to stimulate students' interest in learning. Multimedia, which combines audio, video, animation, and other technological effects, creates an engaging and interactive environment for students. He further explained that multimedia enhances teaching effectiveness, improves class efficiency, and encourages a shift from teacher-centered approaches to more learner-centered environments. Moreover, Udim & Etim (2016) observed that multimedia technologies break the barriers of time and space, creating authentic and vivid learning environments that promote student initiative and collaboration.

Another emerging ICT tool relevant to Social Studies instruction is **social media**. Social media platforms have become essential tools for informal learning. Platforms such as YouTube, Twitter, Instagram, Facebook, and Google serve not only as social networking



tools but also as avenues for sharing educational resources. Daniels (2017), citing Coyle and Caughan, noted that students increasingly turn to these platforms both within and outside the classroom to connect, collaborate, and share information. Facebook, for instance, offers an informal yet effective educational space where teachers can create groups for academic discussions, assignments, and resource sharing (Snelson, 2011).

Additionally, educators are encouraged to incorporate platforms like YouTube, Twitter, Telegram, and educational mobile applications into their instructional strategies (Harrison & McTavish, 2018). As students are familiar with these technologies in their daily lives, using them for academic purposes can improve engagement and participation.

As technology evolves, teachers continue to adopt innovative strategies, utilizing tools such as recorders, cameras, projectors, storytelling media, iPads, smartphones, and computers across various disciplines (Hembre & Warth, 2020; Undheim & Jernes, 2020). Among these, YouTube has proven especially effective for educational purposes. DeWitt et al. (2013) emphasized that YouTube provides multimedia content that supports audio-visual learning. Snelson (2011) explained that students retain over 75% of information when they engage visually, auditorily, and through active participation, compared to significantly lower retention when only reading or listening. This makes platforms like YouTube valuable alternatives for enriching instruction in Social Studies and other disciplines.

In summary, ICT – including multimedia, social media platforms, and interactive technologies – plays a crucial role in enhancing instructional delivery and improving student learning outcomes. Its effective integration into Social Studies education holds significant promise for transforming teaching and learning processes in this digital era.

3.0. METHODOLOGY

The study employed mixed methods to explore the integration of internet technology in social studies education. It combined theoretical exploration with empirical research, analysis of challenges, and practical applications to provide a comprehensive understanding of how internet technology could be effectively integrated into social studies. Data were collected from both secondary and primary sources.



4.0. DISCOURSES

4.1. Adoption of Information and Communication Technology

The adoption of Information and Communication Technology (ICT) in the teaching of Social Studies has generated considerable debate. Covid-19 has highlighted the problems associated with globalization. indeed, the Covid-19 pandemic has distorted the world's operating assumptions, revealing the absolute lack of resilience of dominant economic models (of the west) to respond to unplanned shocks and crises (Abaneme, Ejieji-Ezeibe, Michael & Okwuadimma, 2022).

Advocating for imperative approach to avert post Covid-19 shocks and crises Kucirkova (2018) noted that *'educational reforms involving technology integration are often aimed at changing teachers' instructional methods or modifying how educational content is delivered to students.* Teachers are increasingly expected to integrate technology into their instructional practices by recommending appropriate digital tools, guiding students in acquiring new knowledge, and helping them filter and evaluate relevant information, whether sourced online or in print.

While technology has always played a role in education, the forms and sophistication of ICT tools have evolved significantly over time (Kucirkova, 2018). Integrating ICT into Social Studies can enrich the learning experience by encouraging exploration and creative thinking. As Arnott & Yelland (2020) observed, ICT integration enables students to engage with technology meaningfully, supporting their ability to draw conclusions about the importance of technology in their lives. In today's educational environment, this integration is particularly essential because students have grown up immersed in technology-driven societies (Ahmed & Nasser, 2015).

In recent years, the adoption of digital technologies in classrooms has increased markedly (Daniels, 2017). Educators continuously seek innovative ways to implement these technologies to foster interaction and enhance both learning outcomes and teaching quality. In developed countries, the integration of ICT such as digital devices, interactive screens, and touch-enabled technologies has become commonplace (Daniels, 2017). However, many



educators, particularly in developing nations, often lack adequate training in effectively utilizing these technologies for instructional purposes. This skills gap is further compounded by varying levels of parental expertise regarding technology management at home, which can influence students' learning experiences.

Marsh, Perez & Morales (2019) highlighted that both teachers and parents frequently lack clear guidance on how to support children's use of technology in educational contexts. They emphasized the importance of providing teachers, especially those in early education, with the necessary training to integrate ICT meaningfully within a playful, student-centered pedagogical framework.

Beyond its application in Social Studies, ICT can broadly be defined as the combination of physical equipment (hardware) and software applications that allow individuals to access, retrieve, store, organize, manipulate, and present information electronically (Ahmed & Nasser, 2015). They further described ICT as an electronic-based system for transmitting, receiving, processing, and retrieving information. Essentially, ICT involves a systematic process of gathering, processing, storing, retrieving, and disseminating information using computing, broadcasting, and telecommunication technologies.

The adoption of ICT in Social Studies education not only improves instructional delivery but also equips students with essential digital literacy skills, which are increasingly necessary in modern academic and professional settings.

4.2. Benefits of Adopting Information and Communication Technology

There are numerous benefits that both Social Studies teachers and students can derive from the effective application of Information and Communication Technology (ICT) in the teaching and learning process. Some of these benefits are highlighted below.

Many Social Studies concepts that were previously taught through rote memorization often resulting in students forgetting them easily can now be taught more effectively with the aid of ICT. By integrating and utilizing ICT tools in their instructional delivery, teachers can help students learn with greater ease, while also enhancing the retention of concepts over a longer period. Furthermore, ICT promotes active participation in classroom activities, encouraging



both students and teachers to engage more meaningfully in the teaching-learning process. The use of ICT also fosters hard work and academic discipline among students, while assisting teachers in delivering lessons more effectively.

An important advantage of ICT is the improved access to up-to-date reference materials and educational resources. Aina (2003) observed that ICT provides access to current references, standards, and scholarly materials, helping both teachers and students remain academically relevant. According to Omosewo (2009), ICT also affords teachers and students the opportunity to participate in conferences, seminars, and workshops related to Social Studies education globally, eliminating geographical restrictions.

ICT supports a dynamic exchange of ideas, continuous learning of new materials, and exposure to updated teaching strategies. Since knowledge in Social Studies, like many other subjects, evolves with time, integrating ICT ensures that teachers and students do not rely on outdated information. Thus, ICT promotes the continuous updating and sustainability of knowledge among both learners and educators.

More specifically, the benefits of ICT in Social Studies can be categorized in the following ways:

1. **Promotion of Citizenship Education:** ICT fosters global awareness and civic responsibility by providing students with access to global perspectives, multicultural experiences, and current socio-political developments.
2. **Creation of a Collaborative Learning Environment:** Through online forums, social media, and collaborative platforms, students and teachers can exchange ideas, work together on projects, and participate in meaningful discourse beyond the confines of the classroom.
3. **Development of Essential Skills:** ICT encourages the development of critical thinking, problem-solving, research, and analytical skills—all of which are essential for effective learning and practice in Social Studies.
4. **Increased Student Motivation and Engagement:** The use of multimedia resources such as videos, animations, and interactive applications helps sustain students' interest and improves their attitudes towards learning.



Technology, when appropriately utilized in education, serves as a powerful complement to teachers' instructional strategies. It can enhance students' engagement, encourage creativity, and provide varied avenues for exploration. For teachers, ICT tools simplify instructional planning and delivery, making lessons more effective, challenging, and motivating for both themselves and their students.

4.3. Implications of Adopting Information and Communication Technology

The adoption of Information and Communication Technology (ICT) in education carries several implications for instructional delivery, teaching practices, and Social Studies learning. These implications affect the school system, teachers, and students, who are the primary users of ICT resources in educational settings.

One of the major implications for the educational system is the lack of adequate technological facilities. Garba and Alademerin (2014) observed that insufficient access to basic technological equipment, low internet connectivity, limited availability of computers, and inadequate use of educational software remain some of the greatest challenges to the integration of ICT in the classroom. Without the necessary infrastructure, the successful adoption of ICT in teaching Social Studies remains difficult, especially in developing countries.

Another critical implication is the requirement for teachers to acquire new skills in ICT utilization. Teachers need to develop competencies in using various technological tools, platforms, and software applications to effectively deliver content. For students, their learning strategies must adapt to accommodate new modes of accessing information and engaging with digital resources. Volery and Lord (2000) highlighted that students who possess prior experience using ICT tools are generally more successful in technology-driven learning environments than those without such experience. This digital divide in skill sets among students further emphasizes the need for preparatory ICT training in schools.

Additionally, Shabha (2000) noted that students in the future will increasingly come from diverse backgrounds, with varying degrees of technological exposure and educational experiences. As technological advancements accelerate, this skills gap is likely to widen, necessitating more intensive training efforts to bridge disparities. Students with access to



personal computers and related digital tools may enjoy more flexible and enriched learning processes, but those without such access may be left at a significant disadvantage. This digital inequality can undermine the goal of equitable learning opportunities.

Moreover, infrastructural limitations such as malfunctioning hardware, incompatible software, slow internet connectivity, or unreliable servers pose significant barriers to effective ICT integration. Volery and Lord (as cited by Ja'ashan, 2020) observed that such technical problems can cause frustration among students and negatively impact both instructional delivery and learning outcomes. Unfortunately, these challenges are often unpredictable, making it crucial for schools to maintain their technological infrastructure properly and consistently.

Integration of ICT in the teaching of Social Studies also requires a **transformation of** traditional teaching models. McFadzean (2001) argued that conventional instructional methods must evolve to fully harness the benefits of technology-enhanced learning. Teachers, therefore, face the task of adopting new pedagogical strategies that are compatible with digital learning environments.

For Social Studies teachers, the implications are particularly significant and should not be overlooked by educational institutions seeking to implement ICT-enhanced teaching. Teachers must be given adequate time, support, and resources to develop and implement technology-integrated lesson plans that meet the learning needs of students. Equally important is the need to manage the transition from traditional to technology-based teaching methods, ensuring that teachers are supported throughout this adaptation process.

A major area of concern is the additional workload pressure that ICT integration may impose on teachers. For educators who lack sufficient ICT skills, the requirement for extensive training and retraining can be overwhelming. This challenge is further compounded by the continual evolution of technology, which necessitates ongoing professional development to remain current. Familiarity with ICT is closely linked to the success of technology-enhanced teaching and learning; hence, the importance of comprehensive training programs cannot be overstated.



In summary, while the integration of ICT into Social Studies education presents immense potential for improving teaching and learning, it is not without challenges. Addressing infrastructural gaps, providing sustained teacher training, ensuring equitable student access, and supporting teachers through transitional periods are critical steps to ensuring that the adoption of ICT fulfills its intended educational objectives.

4.4. Prospects for Adopting Information and Communication Technology

Over the past three decades, the educational sector has witnessed significant investments in technology, leading to major transformations in educational organization and instructional delivery methods. Despite this, a lingering question remains regarding the actual impact of ICT on students' learning and teaching effectiveness. Researchers have sought to address this question both theoretically and empirically, but two persistent challenges remain: first, student learning and academic performance are often difficult to measure, with no universally agreed definition; second, ICT is continually evolving, making it challenging to isolate its specific effects from other contextual influences.

Nonetheless, the importance and future prospects of ICT in Social Studies education are widely acknowledged. ICT is expected to enhance education, offering more efficient and effective learning experiences than traditional approaches alone. The potential benefits of ICT integration are numerous and promising.

For instance, Aduwa-Ogiegbaen and Iyamu (2005) found that teachers generally perceive ICT as a facilitator of easy access to course materials for both instructors and students. Through the use of course websites or learning management systems, teachers can upload lecture materials, assignments, and important announcements, giving students the flexibility to study at their convenience. This flexibility is especially beneficial for students who miss traditional classroom sessions, as it promotes independent learning and improves motivation.

One of the distinctive advantages of computer-based instruction is its capacity to provide instant feedback to students, helping to clarify correct answers and reinforce learning in real-time. Additionally, as Kumar (2007) noted, students tend to learn more efficiently and develop positive attitudes toward learning in technology-enhanced environments, especially through computer-based classes.



However, despite these prospects, challenges remain, particularly in developing countries. Trucano (2015) observed that access to technology is often inconsistent in these regions, with many projects facing sustainability issues once external funding ends. Problems such as outdated hardware, unaffordable internet connectivity, limited technical support, and lack of ongoing professional development often prevent long-term benefits and scalability of ICT initiatives.

Hammonds, Matherson, Wilson, and Wright (2013) further identified key barriers to effective ICT adoption in classrooms, including teachers' lack of confidence, insufficient technological competence, and anxiety about integrating technology into curriculum delivery. These challenges are often exacerbated by inadequate access to training and the absence of educational technology specialists in schools (Kurt, 2013).

Despite these challenges, ICT presents several promising opportunities for improving Social Studies instruction. Technology allows for greater participation and accessibility, particularly in distance education, where learning materials can be accessed by a wider audience beyond the traditional classroom. ICT tools such as word processors can also enhance students' writing skills, offering opportunities for drafting, editing, and improving writing quality.

The educational potential of modern ICT far surpasses that of earlier instructional technologies such as radio, television, films, and even traditional resources like chalkboards and textbooks. Modern technologies – such as computers, internet resources, and multimedia tools – hold immense promise for enhancing students' learning abilities and improving academic outcomes.

In summary, while several barriers hinder the effective integration of ICT in Social Studies teaching, its prospects remain substantial. With proper investment in infrastructure, comprehensive teacher training, and sustained support systems, ICT can significantly improve the teaching and learning of Social Studies, contributing to more engaging, effective, and student-centered education.



5.0. CONCLUSION AND RECOMMENDATION

This paper has examined the benefits, implications, and prospects of integrating Information and Communication Technology (ICT) into the teaching of Social Studies. Integrating ICT into education involves the application of modern technological tools to enhance instructional delivery in the classroom. The continual advancement of digital technologies, coupled with the increasing digitalization of daily human activities, highlights the necessity of embedding ICT into the teaching and learning process to fully harness its potential benefits.

The integration of ICT into Social Studies offers numerous advantages, including enhanced student engagement, improved access to information, and more effective instructional delivery. However, as highlighted, its adoption also comes with challenges, particularly in terms of infrastructure, teacher training, and equitable access for students. These challenges require thoughtful planning and sustained commitment by stakeholders in the education sector.

Overall, the future prospects of ICT in Social Studies education are promising. If properly harnessed with adequate resources and support, ICT can significantly improve the quality of teaching and learning, equipping students with the skills they need to thrive in a technology-driven world.

Competing Interest

The author declares that no conflicting interest exist in this study

REFERENCES

- Abaneme, A.O, Ejieji-Ezeibe, P.I. & Micheal, M.C. (2022). Covid-19 pandemic and African Autochthonous development challenges. *Socialscientia Journal of the Social Sciences and Humanities*. <https://journals.aphriapub.com/index.php/ss/>.
- Aduwa-Ogiegbaen, S. E. & Iyamu, E. O. S. (2005). Using information and communication school: Where is children's agency? In G. Oakley (Ed.) *Mobile Technologies in Children's Language and Literacy*. Emerald Publishing Limited. 133-153. Available atdoi.org/10.1108/978-1-78714-879-620181009.



- Ahmed, K. & Nasser, O. (2015). Incorporating iPad technology: Creating more effective language classroom. *TESOL Journal*, 6(4), 751-765.
- Aina, L. O. (2003). Information, knowledge and the gatekeepers. The One Hundred and Thirty Second Inaugural Lecture delivered at the University of Ilorin, Nigeria.
- Arnott, L. & Yelland, N.J. (2020). Multimodal Life worlds: pedagogies for play inquiries and explorations. *Journal of Early Childhood Education Research*, 9(1), 124-146.
- Daniels, K. (2017). Children's engagement with iPads in early years' classrooms: Exploring peer cultures and transforming practices. In C. Burnett, G. Merchant, A. Simpson, and M. Walsh (eds.). *The Case of the iPad* Singapore: Springer, 15-29.
- Ferri, F., Grifoni, P. & Guzzo, T. (2020). Online learning and emergency remote teaching: opportunities and challenges in emergency Situations Societies, 10(4), 86.
- Garba, S.A. & Alademerin, C.A. (2014). Exploring the readiness of Nigerian colleges of Germany: Springer. doi:10.1007/978981-287-537-2.
- Hammonds, L., Matherson, L. H., Wilson, E. K. & Wright, V. H. (2013). Gateway Tools: Five Tools to Allow Teachers to Overcome Barriers to Technology Integration. *The Delta Kappa Gamma Bulletin*.
- Harrison, E., & Mctavish, M. (2018). 'Infants' and toddlers' emergent language and literacy in a digital culture of devices. *Journal of Early Childhood Literacy*, 18(2), 163-188. Available at doi.org/10.1177/ 14687 98416653175
- Hembre, O.J. & Warth, L.L., (2020). Assembling ipads and mobility in two classroom settings. *Technology, Knowledge and Learning*. 25(1), 197-211. Available at doi.org/10.1007/s 10758-019-09405-w.
- Ifijeh, G., Iwu-James, J. & Adebayo, O. (2016). Digital inclusion and sustainable development in Nigeria: The role of Libraries. In 3rd International Conference on African Development Issues (52–57).
- Kucirkova, N., (2018). Personalized learning with digital technologies at home and school: where is children agency? In G. Oakley (Ed.) *Mobile Technologies in Children's Language and Literacy*. Emerald Publishing Limited, 133-153. Available at doi.org/10.1108/978-1-78714-879-620181009.
- Kumar, S. & Daniel, B. K. (2016). Integration of learning technologies into teaching within Fijian Polytechnic Institutions. *International Journal of Educational Technology in Higher Education*, 13(36), 1–17 (2016).
- Kurt, S. (2013). Creating technology-enriched classrooms: Implementation challenges in Turkish Education. *Learning Media and Technology*. 38(1), 1-17. Available from doi:10.1008/17439884.2013.776077.



- Lawal, M. B. (2022). Vision for New Social Studies: Using the Appropriate Lenses, 25 (2), 65-179.
- Marsh, D., Perez, W. D. & Morales, M. E. (2019). Enhancing Language Awareness and Language integration. *Journal of ELearning and Knowledge Society* (15)1.
- McFadzean, J. A. (2001). Computers in a Community of learners. In E. DeCorte & M. C. Linn & H. Mandl & L. Verschaffel (Eds.), *Computer-Based Learning Environments and Problem-Solving* (163-188). Berlin: Springer Verlag.
- Omosowo, E. O. (2009). Views of physics teachers on the need to train and retrain physics teachers in Nigeria. *An International Multi-Disciplinary Journal*3 (1), 314-325.
- Shabha, G. (2000). Virtual universities in the third millennium: An assessment of the implications of tele-working on university buildings and space planning. *Facilities*, 18(5), 235-244.
- Snelson, C. (2011). YouTube across the disciplines: a review of the literature. *merlot teaching anthropology*, 2. Retrieved from <http://www.teachinganthropology.org>.
- Trucano, M. (2015). Surveying ICT use in education in Africa. EduTech: A World Bank blog on ICT use in Education [Web log post]. Retrieved from <http://blogs.worldbank.org/edutech/surveying-ict-use-education-africa>.
- Udim, K. D. & Edim, E. A. (2016). Use of Multimedia in teaching and learning of political science in University of Uyo, Akwalbom State, Nigeria. *Research in Pedagogy*, 6(2), 154170. DOI: 10.17810/2015.42.
- Undheim, M. & Jernes, M., (2020). Teachers' pedagogical strategies when creating digital stories with young children. *European Early Childhood Education Research Journal*, 28(2), 256-271. Available at doi.org/10.1080/1350293X.2020.1735743
- Volery, T. & Lord, D. (2000). Critical success factors in online education. *The International Journal of Educational Management*. 14 (5), 216-223.
- Yemothy, N. E. (2015). *Improving educational technology integration in the classroom*. Walden Dissertations and Doctoral Studies Collection. Retrieved from <https://scholarworks.waldenu.edu/dissertations>.