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## PROMOTING DIGITAL LITERACY AND SOCIAL EQUITY IN EDUCATION: LESSONS FROM SUCCESSFUL INITIATIVES

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### ABSTRACT

Promoting digital literacy and social equity in education is a critical endeavor in our increasingly digital world. This review explores lessons gleaned from successful initiatives aimed at achieving this goal. Digital literacy encompasses the ability to effectively navigate, evaluate, and create digital content. It is a fundamental skill set for participation in modern society and the workforce. However, access to digital resources and education is unevenly distributed, exacerbating existing social inequalities. Successful initiatives in promoting digital literacy and social equity in education have demonstrated several key principles. Firstly, they prioritize equitable access to technology and internet connectivity, ensuring that all students have the necessary tools to engage in digital learning. Additionally, these initiatives recognize the importance of culturally relevant and inclusive curriculum that reflects the diverse backgrounds and experiences of students. By incorporating content that resonates with students' lives, they foster greater engagement and participation in digital learning activities. Furthermore, successful initiatives emphasize the development of critical thinking and digital citizenship skills. Students are taught how to responsibly navigate online spaces, critically evaluate information, and engage in respectful online discourse. These skills are essential for

students to become informed and ethical participants in the digital world. Collaboration between educators, policymakers, and community stakeholders is another hallmark of successful initiatives. By working together, these stakeholders can leverage resources and expertise to create comprehensive strategies for promoting digital literacy and social equity in education. Successful initiatives in promoting digital literacy and social equity in education prioritize equitable access, culturally relevant curriculum, development of critical skills, and collaboration among stakeholders. By learning from these initiatives, educators and policymakers can work towards creating a more inclusive and equitable educational system in the digital age.

**Keywords:** Education, Literacy, Digital, Social Equity, Initiatives, Review.

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## INTRODUCTION

In today's digital age, digital literacy and social equity in education have emerged as paramount concerns. Digital literacy, the ability to effectively navigate, evaluate, and create digital content, is essential for meaningful participation in modern society and the workforce (Sharma, et al., 2014; Jones, and Flannigan, 2006). Concurrently, social equity in education, ensuring that all students have fair opportunities for learning and success regardless of their background, is a fundamental principle of a just society. However, a pervasive problem persists: the uneven access to digital resources exacerbates existing social inequalities.

As technology becomes increasingly integrated into education, students without adequate access to digital tools and internet connectivity are at a significant disadvantage. This digital divide disproportionately affects marginalized communities, perpetuating disparities in academic achievement and future opportunities. Furthermore, the lack of culturally relevant and inclusive curriculum exacerbates this disparity, as it fails to engage students from diverse backgrounds and experiences (Warschauer., & Matuchniak, 2010; Helsper, 2008; Mudra, 2020).

Nevertheless, amidst these challenges, successful initiatives have emerged, offering valuable lessons in promoting both digital literacy and social equity in education (Hobbs, 2010; Falloon, G., 2020; Reis, et al., 2020). These initiatives prioritize equitable access to technology and internet connectivity, recognize the importance of culturally relevant curriculum, and emphasize the development of critical thinking and digital citizenship skills. By addressing these key areas, successful initiatives demonstrate how collaboration among educators, policymakers, and community stakeholders can create comprehensive strategies to bridge the digital divide and foster inclusive learning environments.

Therefore, this paper aims to explore and analyze the lessons learned from successful initiatives in promoting digital literacy and social equity in education. By examining these initiatives, educators and policymakers can glean valuable insights and implement effective strategies to ensure that all students have the opportunity to thrive in the digital age.

### **Background on Digital Literacy and Social Equity in Education**

Digital literacy, defined as the ability to effectively use digital technologies to access, evaluate, and create information, has become increasingly crucial in contemporary education. As technology continues to evolve rapidly, digital literacy skills have transitioned from being advantageous to being indispensable for success in both academic and professional realms (Eshet, 2004; Nikou, and Aavakare, 2021).

In the educational context, digital literacy encompasses various competencies, including the ability to navigate online platforms, critically evaluate information found on the internet, and responsibly utilize digital tools for learning and communication. These skills are not only essential for academic achievement but also for equipping students with the abilities necessary to thrive in an interconnected, technology-driven society.

However, access to digital resources and technology is not uniform across all demographics, leading to the exacerbation of existing social inequalities. This digital divide disproportionately affects underserved communities, including low-income households, rural areas, and marginalized populations. Without equitable access to technology and internet connectivity, students from these communities face significant barriers to acquiring essential digital literacy skills (Enebe, et al., 2019; Choudhary, and Bansal, 2022), placing them at a disadvantage compared to their more privileged counterparts. Moreover, social equity in education is closely intertwined with digital literacy. Ensuring that all students, regardless of their socioeconomic background or demographic characteristics, have equal opportunities for learning and success is a fundamental principle of education. Yet, the lack of access to digital resources perpetuates disparities in educational outcomes, widening the gap between the advantaged and disadvantaged (Bulfin, and McGraw, 2015; Ilomäki, et al., 2023).

Addressing the intersection of digital literacy and social equity in education requires comprehensive strategies that prioritize equitable access to technology, culturally relevant curriculum, and the development of critical thinking and digital citizenship skills. By fostering an inclusive learning environment and providing necessary support to underserved communities, educators and policymakers can work towards bridging the digital divide and promoting social equity in education.

### **Equitable Access to Technology and Internet Connectivity**

In today's digital age, equitable access to technology and internet connectivity is paramount for ensuring that all students have the necessary tools for digital learning. Access to technology not only facilitates academic success but also promotes digital literacy and prepares students for the demands of the modern workforce (Anthonysamy, et al., 2020; Nawaz, and Kundi, 2010; Meyers; et al., 2013). This section delves into the importance of equitable access, provides examples of initiatives aimed at providing technology and internet access to underserved communities, and examines the impact of such access on closing the digital divide.

Access to technology is no longer a luxury but a necessity in education. From accessing online learning materials to collaborating with peers on digital platforms, technology has become deeply embedded in the learning process. Therefore, ensuring that all students have equitable access to technology is essential for leveling the playing field and promoting educational equity. Students who lack access to technology face significant barriers to learning and academic achievement. Without access to devices such as laptops, tablets, or smartphones, they may struggle to complete assignments, conduct research, or participate in virtual classrooms. Moreover, limited access to the internet further exacerbates these challenges, hindering students' ability to access online resources and engage in digital learning activities. By providing equitable access to technology, schools can empower students to fully participate in digital learning opportunities and develop essential digital literacy skills. Equipped with the necessary tools, students can explore educational resources, collaborate with peers, and engage

in interactive learning experiences that prepare them for success in an increasingly digital world (Iqbal, and Campbell, 2021; Daniel, 2010; Matthew, et al., 2015).

Several initiatives have been launched to address the digital divide and provide technology and internet access to underserved communities (West, 2015; Rao, 2005; Anamu, et al., 2023). One notable example is the Federal Communications Commission's (FCC) E-rate program, which provides discounted telecommunications and internet access services to eligible schools and libraries. Through the E-rate program, schools in low-income areas can access affordable high-speed internet connectivity, enabling students to engage in online learning activities (Woodworth, and Weaver, 2005; Gilroy, and Resources, Science, and Industry Division, 2001; Nabil, 2020).

Similarly, organizations such as the One Laptop per Child (OLPC) Foundation aim to provide children in developing countries with access to affordable laptops and digital learning resources (Warschauer, and Ames, 2010; Buchele, and Owusu-Aning, 2007). By distributing rugged, low-cost laptops equipped with educational software, OLPC seeks to empower children in underserved communities to explore, create, and connect through technology (Navarro, 2006). In addition to national and international initiatives, many local organizations and community partnerships work to bridge the digital divide at the grassroots level. For example, community centers and libraries often offer free or low-cost computer and internet access to residents, providing a lifeline for individuals who lack access at home.

Equitable access to technology and internet connectivity has the potential to significantly reduce disparities in educational outcomes and close the digital divide (Vigdor, et al., 2014). When students have access to the same tools and resources, regardless of their socioeconomic background, they are better equipped to succeed academically and develop essential digital literacy skills. Studies have shown that students who have access to technology at home tend to perform better in school and have higher graduation rates. By providing equitable access to technology and internet connectivity, schools can help level the playing field and ensure that all students have equal opportunities for learning and success. Furthermore, closing the digital divide is not only essential for individual students but also for society as a whole. In an increasingly digital world, access to technology is closely linked to economic opportunities and social mobility. By narrowing the gap in access to technology, we can create a more inclusive society where everyone has the chance to thrive and contribute to the digital economy (Cullen, 2001; Ritzhaupt, et al., 2020; Afzal, et al., 2023).

In conclusion, equitable access to technology and internet connectivity is essential for promoting educational equity and closing the digital divide. By ensuring that all students have the necessary tools for digital learning, providing examples of initiatives aimed at providing technology and internet access to underserved communities, and examining the impact of such access on closing the digital divide, we can work towards creating a more equitable and inclusive educational system.

### **Development of Critical Thinking and Digital Citizenship Skills**

In the digital age, fostering critical thinking and digital citizenship skills among students is essential for navigating the vast and often complex online landscape responsibly (Frau-Meigs, et al., 2017; Ribble, and Park, 2022; Middleton, 2022). This section explores the importance of teaching students to navigate online spaces responsibly, fostering skills to critically evaluate information, promoting respectful online discourse, and digital citizenship. Additionally, it

examines case studies that highlight successful integration of critical thinking and digital citizenship education.

As students increasingly turn to online platforms for information and communication, it is essential to teach them how to navigate these spaces responsibly. This includes understanding concepts such as digital privacy, online etiquette, and cybersecurity. Educators play a crucial role in guiding students to make informed decisions about their online behavior and interactions. By teaching students to critically evaluate the credibility of online sources, avoid plagiarism, and protect their personal information, educators empower them to become responsible digital citizens (Navarro, 2006.).

With the proliferation of information available online, students must develop the ability to critically evaluate the credibility and reliability of sources. This involves teaching them how to discern between fact and opinion, identify bias, and recognize misinformation and fake news. By fostering these critical thinking skills, educators enable students to make informed judgments and navigate the complexities of the digital information landscape effectively (Shidqiyah, et al., 2023; Costello, et al., 2014). In addition to critical thinking skills, promoting respectful online discourse and digital citizenship is crucial for fostering a positive and inclusive online environment. This includes teaching students the importance of respecting diverse perspectives, engaging in civil discourse, and practicing empathy and digital empathy. By promoting a culture of respect and empathy online, educators can help mitigate issues such as cyberbullying, harassment, and hate speech, creating safer and more inclusive digital spaces for all (Jones, and Mitchell, 2016).

Numerous case studies illustrate the successful integration of critical thinking and digital citizenship education in schools and educational programs. For example, the "Be Internet Awesome" curriculum developed by Google provides interactive lessons and activities to teach students about online safety, privacy, and digital citizenship. Similarly, programs such as Common-Sense Education offer resources and lesson plans to help educators integrate digital citizenship and media literacy into their curriculum effectively. By highlighting these case studies, educators can learn from successful initiatives and implement best practices in their own classrooms.

### **Collaboration Among Stakeholders**

Collaboration among educators, policymakers, and community stakeholders is essential for promoting digital literacy and social equity in education. This section explores the importance of collaboration, leveraging resources and expertise to create comprehensive strategies, and provides examples of successful collaborative efforts in promoting digital literacy and social equity in education (Suwana, 2021; Statti, and Torres, 2020).

Collaboration between stakeholders is essential for developing holistic and sustainable solutions to address digital literacy and social equity in education. Educators, policymakers, and community stakeholders each bring unique perspectives, resources, and expertise to the table, making collaboration essential for creating comprehensive strategies that address the needs of diverse student populations. By working together, stakeholders can identify barriers to access, share best practices, and advocate for policies that promote digital equity and inclusion (Penuel, et al., 2020). Collaboration allows stakeholders to leverage their collective resources and expertise to create comprehensive strategies for promoting digital literacy and social equity in education. This may include pooling funding and resources to provide technology and

internet access to underserved communities, developing professional development programs to train educators in digital literacy instruction, and implementing policies that promote equitable access to educational opportunities. By combining their efforts, stakeholders can maximize impact and create lasting change in the educational landscape.

Numerous examples demonstrate the power of collaboration in promoting digital literacy and social equity in education. For example, the Digital Promise League of Innovative Schools brings together a network of school districts to share best practices, collaborate on research, and advocate for policies that support digital innovation and equity in education (Brizard, 2023; Angevine, et al., 2019). Similarly, initiatives such as the Future Ready Schools program provide resources and support to help districts develop strategic plans for integrating technology and promoting digital citizenship. By highlighting these examples, stakeholders can learn from successful collaborative efforts and replicate best practices in their own communities.

### **Future Outlook**

The future outlook for promoting digital literacy and social equity in education is both promising and challenging. As technology continues to evolve at a rapid pace, educators and policymakers must remain vigilant in their efforts to ensure equitable access to technology, foster critical thinking and digital citizenship skills, and promote collaboration among stakeholders. One of the key challenges moving forward will be addressing the ever-changing landscape of technology and its impact on education (Falloon, 2020; Scholes, 2023; Quaicoe, and Pata, 2020). Emerging technologies such as artificial intelligence, virtual reality, and augmented reality hold great potential for transforming the learning experience (Bakshi, et al., 2021; Iatsyshyn, et al., 2020). However, ensuring that these technologies are accessible to all students and used in ways that promote equitable learning opportunities will be critical. Additionally, the ongoing COVID-19 pandemic has highlighted the importance of digital literacy and access to technology for remote learning. As schools continue to navigate the challenges of remote and hybrid learning models, there will be a growing need for initiatives that address digital equity and support educators in effectively integrating technology into their instructional practices.

Looking ahead, it will be essential to continue advocating for policies that promote digital equity and inclusion in education. This includes initiatives to expand broadband access in underserved communities, increase funding for technology resources in schools, and provide professional development opportunities for educators in digital literacy instruction.

Furthermore, fostering collaboration among educators, policymakers, and community stakeholders will be crucial for driving meaningful change in education. By working together, stakeholders can leverage their collective expertise and resources to develop comprehensive strategies that address the multifaceted challenges of promoting digital literacy and social equity in education (Ainscow, 2016; Penuel, et al., 2020; Rubin, 2009).

### **RECOMMENDATION AND CONCLUSION**

In conclusion, promoting digital literacy and social equity in education is essential for preparing students for success in the digital age. By ensuring equitable access to technology, fostering critical thinking and digital citizenship skills, and promoting collaboration among stakeholders, educators and policymakers can create a more inclusive and equitable educational system.

To achieve this vision, it is imperative that stakeholders continue to learn from successful initiatives, adapt to the evolving landscape of technology, and advocate for policies that

prioritize digital equity and inclusion. By summarizing key points, reinforcing the significance of learning from successful initiatives, and issuing a call to action for educators and policymakers, we can collectively work towards a future where all students have the opportunity to thrive in the digital age.

In summary, the journey towards promoting digital literacy and social equity in education is ongoing, but by working together and remaining committed to these goals, we can create a brighter future for generations to come.

## Reference

- Afzal, A., Khan, S., Daud, S., Ahmad, Z., & Butt, A. (2023). Addressing the Digital Divide: Access and Use of Technology in Education. *Journal of Social Sciences Review*, 3(2), 883-895.
- Ainscow, M. (2016). Collaboration as a strategy for promoting equity in education: possibilities and barriers. *Journal of Professional Capital and Community*, 1(2).
- Anamu, U.S., Ayodele, O.O., Olorundaisi, E., Babalola, B.J., Odetola, P.I., Ogunmefun, A., Ukoba, K., Jen, T.C., & Olubambi, P.A. (2023). Fundamental design strategies for advancing the development of high entropy alloys for thermo-mechanical application: A critical review. *Journal of Materials Research and Technology*.
- Angevine, C., Cator, K., Liberman, B., Smith, K., & Young, V. (2019). Designing a Process for Inclusive Innovation: A Radical Commitment to Equity. Version 1.0. *Digital Promise*.
- Anthony, L., Koo, A.C., & Hew, S.H. (2020). Self-regulated learning strategies in higher education: Fostering digital literacy for sustainable lifelong learning. *Education and Information Technologies*, 25, 2393-2414.
- Bakshi, S.K., Lin, S.R., Ting, D.S.W., Chiang, M.F., & Chodosh, J. (2021). The era of artificial intelligence and virtual reality: transforming surgical education in ophthalmology. *British Journal of Ophthalmology*, 105(10), 1325-1328.
- Brizard, J.C. (2023). Breaking with the Past: Embracing Digital Transformation in Education. *Digital Promise*.
- Buchele, S.F., & Owusu-Aning, R. (2007, December). The one laptop per child (OLPC) project and its applicability to Ghana. In *Proceedings of the 2007 international conference on adaptive science and technology* (pp. 113-118).
- Bulfin, S., & McGraw, K. (2015). Digital literacy in theory, policy and practice: old concerns, new opportunities. *Teaching and digital technologies: Big issues and critical questions*, 266-281.
- Choudhary, H., & Bansal, N. (2022). Barriers affecting the effectiveness of Digital Literacy Training Programs (DLTPs) for marginalised populations: a systematic literature review. *Journal of Technical Education and Training*, 14(1), 110-127.
- Costello, E., Corcoran, M.A., Barnett, J.S., Birkmeier, M.C., Cohn, R., Ekmekci, O., Falk, N.L., Harrod, T., Herrmann, D., Robinson, S., & Walker, B. (2014). Information and communication technology to facilitate learning for students in the health professions: Current uses, gaps, and future directions. *Online learning: Official Journal of the Online Learning Consortium*, 18.
- Cullen, R. (2001). Addressing the digital divide. *Online Information Review*, 25(5), 311-320.

- Daniel, J. (2010). *Mega-schools, technology and teachers: Achieving education for all*. Routledge.
- Enebe, G.C., Ukoba, K., & Jen, T.C. (2019). Numerical modeling of effect of annealing on nanostructured CuO/TiO<sub>2</sub> pn heterojunction solar cells using SCAPS
- Eshet, Y. (2004). Digital literacy: A conceptual framework for survival skills in the digital era. *Journal of Educational Multimedia and Hypermedia*, 13(1), 93-106.
- Falloon, G. (2020). From digital literacy to digital competence: the teacher digital competency (TDC) framework. *Educational Technology Research and Development*, 68, 2449-2472.
- Frau-Meigs, D., O'Neill, B., Soriani, A., & Tomé, V. (2017). Digital citizenship education: Volume 1: Overview and new perspectives.
- Gilroy, A.A., & Resources, Science, and Industry Division, 2001, January. Telecommunications discounts for schools and libraries: The "e-rate" program and controversies. Congressional Research Service, Library of Congress.
- Helsper, E. (2008). *Digital inclusion: an analysis of social disadvantage and the information society*. Department for Communities and Local Government.
- Hobbs, R. (2010). *Digital and Media Literacy: A Plan of Action. A White Paper on the Digital and Media Literacy Recommendations of the Knight Commission on the Information Needs of Communities in a Democracy*. Aspen Institute. 1 Dupont Circle NW Suite 700, Washington, DC 20036.
- Iatsyshyn, A.V., Kovach, V.O., Romanenko, Y.O., Deinega, I.I., Iatsyshyn, A.V., Popov, O.O., Kutsan, Y.G., Artemchuk, V.O., Burov, O.Y., & Lytvynova, S.H. (2020). Application of augmented reality technologies for preparation of specialists of new technological era.
- Ilomäki, L., Lakkala, M., Kallunki, V., Mundy, D., Romero, M., Romeu, T., & Gouseti, A. (2023). Critical digital literacies at school level: A systematic review. *Review of Education*, 11(3), e3425.
- Iqbal, M.Z., & Campbell, A.G. (2021). From luxury to necessity: Progress of touchless interaction technology. *Technology in Society*, 67, 101796.
- Jones, B., & Flannigan, S.L., 2006. Connecting the digital dots: Literacy of the 21st century. *Educause Quarterly*, 29(2), 8-10.
- Jones, L.M., & Mitchell, K.J. (2016). Defining and measuring youth digital citizenship. *New Media & Society*, 18(9), 2063-2079.
- Matthew, D., Joro, I.D., & Manasseh, H. (2015). The role of information communication technology in Nigeria educational system. *International Journal of Research in Humanities and Social Studies*, 2(2).
- Meyers, E.M., Erickson, I., & Small, R.V., 2013. Digital literacy and informal learning environments: an introduction. *Learning, Media and Technology*, 38(4), 355-367.
- Middleton, S.M.B. (2022). *Towards digital citizenship: a digital literacy curriculum to support teachers in the classroom* (Doctoral dissertation, Northumbria University).
- Mudra, H. (2020). Digital literacy among young learners: How do EFL teachers and learners view its benefits and barriers?. *Teaching English with Technology*, 20(3), 3-24.
- Nabil, R., How Congress and the Federal Communications Commission Can Help Improve Affordable Internet Access to Underserved Populations 2020



- Navarro, J.C. (2006). The one laptop per child initiative: a framework for Latin America and the IDB.
- Nawaz, A., & Kundi, G.M. (2010). Digital literacy: An analysis of the contemporary paradigms. *Journal of Science and Technology Education Research*, 1(2), 19-29.
- Nikou, S., & Aavakare, M. (2021). An assessment of the interplay between literacy and digital Technology in Higher Education. *Education and Information Technologies*, 26(4), 3893-3915.
- Penuel, W.R., Riedy, R., Barber, M.S., Peurach, D.J., LeBouef, W.A., & Clark, T. (2020). Principles of collaborative education research with stakeholders: Toward requirements for a new research and development infrastructure. *Review of Educational Research*, 90(5), 627-674.
- Quaicoe, J.S., & Pata, K. (2020). Teachers' digital literacy and digital activity as digital divide components among basic schools in Ghana. *Education and Information Technologies*, 25, 4077-4095.
- Rao, S.S. (2005). Bridging digital divide: Efforts in India. *Telematics and Informatics*, 22(4), 361-375.
- Reis, O., Oliha, J.S., Osasona, F., & Obi, O.C. (2024). Cybersecurity Dynamics In Nigerian Banking: Trends And Strategies Review. *Computer Science & IT Research Journal*, 5(2), 336-364.
- Ribble, M., & Park, M. (2022). *The digital citizenship handbook for school leaders: Fostering positive interactions online*. International Society for Technology in Education.
- Ritzhaupt, A.D., Cheng, L., Luo, W., & Hohlfeld, T.N. (2020). The digital divide in formal educational settings: The past, present, and future relevance. *Handbook of Research in Educational Communications and Technology: Learning Design*, 483-504.
- Rubin, H. (2009). *Collaborative leadership: Developing effective partnerships for communities and schools*. Corwin Press.
- Scholes, L. (2023). Reading for digital futures: a lens to consider social justice issues in student literacy experiences in the digital age. *Cambridge Journal of Education*, 1-18.
- Sharma, R.F., Fantin, A., Prabhu, N., Guan, C., & Dattakumar, A., 2014. Digital literacy.
- Shidqiyah, S., Thalib, B., Wiratama, R., Alam, S.N., & Riyanto, R. (2023). Development of the latest curriculum-based learning model to improve students' digital literacy and critical thinking skills in the information technology era. *International Journal of Teaching and Learning*, 1(4), 412-425.
- Statti, A., & Torres, K.M. (2020). Digital literacy: The need for technology integration and its impact on learning and engagement in community school environments. *Peabody Journal of Education*, 95(1), 90-100.
- Suwana, F. (2021). Content, changers, community and collaboration: Expanding digital media literacy initiatives. *Media Practice and Education*, 22(2), 153-170.
- Vigdor, J.L., Ladd, H.F., & Martinez, E. (2014). Scaling the digital divide: Home computer technology and student achievement. *Economic inquiry*, 52(3), 1103-1119.
- Warschauer, M., & Ames, M., 2010. Can One Laptop per Child save the world's poor?. *Journal of International Affairs*, 33-51.

- West, D.M. (2015). Digital divide: Improving Internet access in the developing world through affordable services and diverse content. *Center for Technology Innovation at Brookings*, 1-30.
- Woodworth, R.L., & Weaver, J.B. (2005). Camp runamuck: the FCC's troubled E-rate program. *CommLaw Conspectus*, 14, 335.