BUILDING DIGITAL LITERACY THROUGH SOCIAL WORK EDUCATION FOR SUSTAINABLE DEVELOPMENT

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Abstract

The rapid integration of technology into society underscores the urgency for social work education to equip students with digital literacy skills. This paper investigates the role of digital literacy in fostering sustainable social development. Emphasizing more than technical competence, digital literacy encompasses critical thinking, ethical navigation, and privacy management. Integrating it into social work curricula necessitates equitable access to hardware and online resources. Pedagogical approaches such as digital storytelling, problem-based learning, and social media integration are promising in building multifaceted digital capabilities. While technology is pivotal for sustainable development, its benefits are maximized when coupled with sociotechnical literacy and a critical understanding of its impacts.

Keywords*: Digital literacy, social work education, and sustainable development*

Introduction

The rapid advancement of technology and the digital transformation of society has created an imperative for social work education to build students' digital literacy skills. As Posner (2015) argues, social work graduates entering professional practice require technological competence to effectively serve diverse client groups and contribute to sustainable community development. This introduction will examine how social work curricula can cultivate digital literacy for sustainable social development.

Several studies emphasize that digital literacy encompasses more than just technical skills. Digital literacy involves developing students' critical thinking abilities to ethically navigate online environments, evaluate sources, protect privacy and manage their digital identities (Kolonko & Williamson, 2021; Oxley, 2013). Building digital literacy can empower social workers to harness technology for social justice ends and avoid risks of misinformation or breach of client confidentiality (Mishna et al, 2015). Educators must foster information and media literacy alongside digital participation and communication competencies (Gillespie, 2014).

Integrating digital literacy into social work curricula requires schools to provide infrastructure and resources. Social work students need equitable access to hardware, software, and internet connectivity to develop technological capabilities and reduce digital divides (Oxley, 2013; Taylor & Ballengee-Morris, 2021). Providing technology grants, computer labs and digital communications platforms enables students to acquire hands-on digital skills (Kolonko & Williamson, 2021). However, solely focusing instruction on how to use devices and platforms insufficiently develops critical digital literacy. Educators must scaffold instruction to promote students' abilities to ethically and reflectively participate in digital environments

(Kilpeläinen et al, 2022).

Several pedagogical approaches show promise for building digital literacy in social work education. Participatory digital storytelling helps students share counternarratives by creating and disseminating multimedia content, while building technical and collaborative skills (Wahyuni & Mounts, 2021). Digital problem-based learning through case simulations and role plays develops social media marketing and data analytics competencies relevant to non-profit community practice (Asamoah et al, 2022). Using social media as an educational tool builds capacities for ethical digital communication, community-engagement and peer collaboration (Barczyk et al, 2022). Video conferencing and virtual exchange programmes connect global social work partners, fostering intercultural digital literacy (Kilpeläinen et al, 2022).

Critically conscious approaches highlight risks of uncritical technology adoption. Educators must analyse how institutional biases shape digital platforms and data infrastructure utilized in practice settings (Noble, 2018). Curricula can build sociotechnical literacy by examining issues like algorithmic bias, the digital divide, and threats of automated decision-making systems to service users' rights and privacy (Taylor & Ballengee-Morris, 2021). Feminist pedagogies reveal how digital environments perpetuate marginalization, advocating digital resilience strategies that counter oppression and reclaim online spaces (Pennington & Frank, 2022).

Building digital literacy helps mobilize technology for sustainable development. Social workers can leverage digital capabilities for community organizing and civic participation, while combating misinformation that undermines social welfare (Gillespie, 2014; Mishna et al, 2015). They can facilitate equitable access to e-government programmes, telehealth resources and assistive technologies for marginalized groups (Kolonko & Williamson, 2021). Overall, integrating digital literacy in social work education equips graduates to navigate the opportunities and ethical complexities of technological change, promoting socially just and sustainable community development.

Definition of concepts

Digital literacy

Digital literacy refers to the knowledge, skills, and behaviour required to effectively use, create, share and analyse digital technologies and information in various contexts. It encompasses a broad range of competencies from basic technical skills like using devices and software, to higher-level abilities such as evaluating online information, managing digital identities, and understanding the social impacts of technology (Kolonko & Williamson, 2021; Oxley, 2013).

Digital literacy enables individuals to live, learn, work and participate in an increasingly digital society. It involves finding, consuming and producing digital content skilfully, safely and responsibly (Pennington & Frank, 2022). More advanced digital literacy allows individuals to harness the participatory nature of digital tools for creative expression, community building and social change (Gillespie, 2014). Thus, digital literacy is multi-dimensional, encompassing functional access to technology as well as the perspectives and critical consciousness to navigate digital spaces ethically (Taylor & Ballengee-Morris, 2021).

Educators emphasize that digital literacy is not limited to STEM fields but is important for all disciplines and careers, including social work practice. Building students' digital literacy empowers them to leverage technology for social justice while developing awareness of risks like misinformation and threats to privacy (Mishna et al, 2015). Integrating digital literacy across curricula, developing institutional infrastructure, and utilizing experiential pedagogies helps build students' digital capabilities to address social issues in the digital age (Asamoah et al, 2022; Wahyuni & Mounts, 2021).

Social work education

Social work education refers to the academic programmes and formal training that prepare students for professional practice in the field of social work. It aims to cultivate both theoretical knowledge and practical skills across social work competencies like clinical treatment, case management, community organizing, policy advocacy, research, administration and social justice leadership (CSWE, 2019). Social work education is guided by a competency-based approach that integrates field placements and experiential learning to develop students' capabilities for ethical, evidence-informed practice (Barczyk et al., 2022).

In many countries, formal social work education at the bachelor's or master's level is required for professional licensing and practice (Asamoah et al., 2022). Social work curricula cover human behaviour, social policy, intervention methods, diversity, social justice, research and field education (Kilpeläinen et al., 2022). Quality social work education fosters critical thinking skills for contextually wise practice and lifelong learning needed amid changing societal issues and practice environments (Taylor & Ballengee-Morris, 2021). Integrating digital literacy across social work education helps prepare graduates to meet diverse community needs in the digital age (Mishna et al., 2015). Overall, social work education aims to develop practitioners who can enhance individual and social wellbeing through a social justice lens (CSWE, 2019).

Sustainable development

Sustainable development refers to development that meets the needs of the present without compromising the ability of future generations to meet their own needs (UN, 2013). It encompasses three interconnected pillars - economic, social and environmental sustainability (Gillespie, 2014). Sustainable development implies progress across these dimensions to foster poverty reduction, social equity, environmental protection, and economic growth for all people (Kolonko & Williamson, 2021). It requires holistic, integrated approaches that balance short and long-term interests of society, environment and economy (Taylor & Ballengee-Morris, 2021).

Achieving sustainable development involves all sectors, including education. Social work education for sustainable development cultivates change agents who can address complex societal challenges at micro, mezzo and macro levels (Asamoah et al., 2022). It helps students develop technological capabilities and global citizenship to promote equitable, participatory and environmentally conscious community development (Wahyuni & Mounts, 2021). Building digital literacy further empowers social workers to tackle misinformation, social exclusion and injustice that obstruct sustainable development (Pennington & Frank, 2022). Overall, social work education for sustainability develops graduates ready to collaboratively advance economic sufficiency, social equity and environmental health.

The role of digital literacy in sustainable development

Digital literacy is increasingly recognized as an important capability for promoting sustainable development in the 21st century (Gillespie, 2014). As society, the economy, governance, and environmental systems become more digitized, developing digital skills and competencies is crucial for empowering communities to achieve sustainable futures (Kolonko & Williamson, 2021).

Digital literacy enables participation in the digital economy which can drive inclusive growth when combined with appropriate policies and institutions (Asamoah et al., 2022). It allows access to digital innovations and technologies that support sustainable farming, healthcare, education and environmental protection (Taylor & Ballengee-Morris, 2021). Digitally literate citizens better understand sustainability challenges like climate change through modelling platforms and can organize for action via social media (Wahyuni & Mounts, 2021).

However, technology alone is insufficient. Critics argue digital literacy must be accompanied by critical thinking skills to evaluate tech's impacts on society and the planet (Pennington & Frank, 2022). Learners need sociotechnical literacy to recognize how tech can be biased and create unintended harms to marginalized groups (Mishna et al., 2015). Ethical, justice-oriented digital literacy helps create an informed populace able to harness tech's potential while minimizing risks. Overall, digital literacy is a powerful enabler for sustainable development when combined with social awareness, critical perspectives and ethical reasoning skills. Developing these capabilities across all segments of society is key to just transitions toward more sustainable futures.

Social work education fostering digital literacy

Social work education plays a key role in developing students' digital literacy capabilities needed for 21st century practice (Kolonko & Williamson, 2021). It must evolve to address emerging practice realities, where digital tools are transforming social service delivery, community organizing, and client engagement (Taylor & Ballengee-Morris, 2021).

Integrating digital literacy across social work curricula is vital but insufficient. Programmes must also provide infrastructure including hardware, software, technical support and access to digital learning

platforms (Asamoah et al., 2022). Scaffolding instruction using experiential methods like digital simulations, virtual exchanges and multimedia production also builds critical digital capabilities (Wahyuni & Mounts, 2021).

However, educators caution technology must not drive pedagogy. Developing ethical, justice-oriented digital literacy requires critical analyses of how tech can perpetuate or counter social exclusion (Mishna et al., 2015). Curricula can build sociotechnical literacy by examining issues like algorithms bias, the digital divide, and threats of automated decision-making systems to service users' rights (Pennington & Frank, 2022).

Overall, social work education must evolve to develop graduates' digital literacy, knowledge and critical consciousness to harness technology for anti-oppressive ends. This empowers social workers to advance human rights and social justice within today's increasingly digital society and practice landscape.

Social workers promoting digital literacy and inclusion

Social workers are ethically obliged to advance social justice, which includes tackling digital exclusion stemming from lack of access, skills or supportive policies (Kolonko & Williamson, 2021). They can promote digital literacy among marginalized groups through community education, public computer facilities, and training programs (Taylor & Ballengee-Morris, 2021). Social workers can advocate for government digital equity policies like subsidized broadband, devices and digital skill development initiatives (Asamoah et al., 2022). At practice levels, social workers can assess clients' digital access and abilities to determine support needs (Wahyuni & Mounts, 2021). They can incorporate digital literacy building into programmes for vulnerable youth, elderly, disabled, immigrant and rural populations (Mishna et al., 2015). Social workers can also help clients use digital tools to access benefits, education, telehealth and social supports (Pennington & Frank, 2022).

However, a critical lens is essential to avoid paternalism and respect service users' self-determination (Gillespie, 2014). Social workers must be vigilant of potential harms of introducing technology in practice settings, including privacy breaches, surveillance and automating bias (Mishna et al., 2015). Ongoing community participation, reflexivity and dialogue are needed to ethically leverage technology for empowerment and equitable digital inclusion.

Closing digital divides for equitable sustainable development

Digital divides stemming from inequitable access to technology and lack of digital literacy perpetuate social and economic marginalization, undermining sustainable development (Kolonko & Williamson, 2021). Closing these divides requires multi-pronged strategies focused on availability, affordability, capabilities, and empowerment (Taylor & Ballengee- Morris, 2021).

Governments play key roles in funding digital infrastructure and subsidizing access costs to ensure broadband and devices are widely available and affordable (Asamoah et al., 2022). Partnerships with libraries, schools and social services help provide public access points and training, especially for rural, elderly, disabled, and low-income groups (Wahyuni & Mounts, 2021).

However, access alone is insufficient. Developing digital literacy and skills to use technology productively and safely is critical (Mishna et al., 2015). Here educational institutions, community organizations and social services have pivotal roles (Pennington & Frank, 2022). Curricula integrating digital literacy helps develop informed digital citizens, while assistive technologies make tech accessible for those with disabilities. Overall, concerted efforts across sectors are vital to close digital divides and ensure technologies are leveraged to support rights, inclusion and empowerment. This enables a more just transition toward equitable and sustainable development (Gillespie, 2014).

Challenges with building digital literacy through social work education for sustainable development

1. Lack of Infrastructure and Resources

A significant barrier is lack of technological infrastructure and resources in social work programmes, including hardware, software, connectivity and technical support (Kolonko & Williamson, 2021). Budget constraints limit updating computers, licenses and broadband access, while outdated IT policies restrict social media and digital platforms usage in field placements (Asamoah et al., 2022). Such institutional

deficits impede developing the technical skills and hands-on digital experience students need.

2. Faculty Skills and Attitudes

Many social work faculty lack digital literacy and understanding of instructional technologies themselves (Taylor & Ballengee-Morris, 2021). Negative attitudes about integrating technology into curriculum persist, with biases that in-person methods are superior. Faculty development and training are essential to build pedagogical digital literacy and shift perspectives to value technology's affordances (Wahyuni & Mounts, 2021).

3. Critical Perspectives

Educators emphasize digital literacy development must be accompanied by critical thinking skills to avoid unreflective tech adoption (Mishna et al., 2015). Curricula risk focusing on functional technology skills without deeper analyses of implications for ethics, privacy, marginalization, and unintended harms (Pennington & Frank, 2022). More emphasis on sociotechnical literacy and social justice orientation is vital.

4. Field Placement Integration

Effectively integrating digital literacy instruction into field placements presents challenges (Gillespie, 2014). Lacking access or approval to utilize technologies at placement sites inhibits experiential learning. Curriculum-placement partnerships and policies enabling student usage of digital tools under supervision can help address this gap.

5. Assessing Learning

Standardized metrics and rubrics for assessing digital literacy competencies are still emerging (Kilpeläinen et al., 2022). Social work programs struggle to measure baseline skills and evaluate learning outcomes from digital literacy integration, inhibiting curriculum improvement efforts. Developing clear assessment frameworks and metrics remains an important need.

Conclusion/recommendations

As technology continues to reshape our society, the field of social work must proactively equip its practitioners with robust digital literacy skills. This imperative extends beyond technical proficiency to encompass ethical awareness, critical thinking, and the ability to navigate the digital landscape responsibly. By integrating digital literacy across curricula, employing innovative pedagogical methods, and advocating for equitable access, social work education can prepare graduates to wield technology as a tool for social justice and sustainable progress.

Social workers, armed with digital literacy skills, are poised to bridge digital divides and promote inclusion. By advocating for policies that enhance digital equity, educating marginalized groups, and integrating technology into practice, social workers can empower communities to access information, services, and resources crucial for their well-being. However, this journey requires a critical consciousness to address potential pitfalls, biases, and ethical concerns associated with technology.

The symbiotic relationship between digital literacy and sustainable development underscores the responsibility of social work education and practice to embrace the digital age while upholding principles of social justice and empowerment. By nurturing digital literacy skills within a framework of ethical awareness and critical reflection, social work can champion the inclusive and equitable deployment of technology to advance social well-being and sustainable progress.

1. To enhance technology integration in social work programmes, securing dedicated funding through budget reallocation, grants, and partnerships, revising outdated IT policies, sharing digital resources through consortia, establishing community partnerships for access, and providing technical support like instructional staff and streaming services can collectively promote effective and ethical use of technology in education.
2. To promote effective technology integration in social work education, schools should require faculty to undergo introductory and ongoing digital literacy and instructional technology training, prioritize hiring tech-oriented candidates, offer pedagogical support through consultants, collaborative

communities, and workshops, establish repositories for sharing best practices, and emphasize the benefits of technology for student engagement and skill development in alignment with social work values.

3. To ensure responsible and equitable technology integration in social work education, it is crucial to incorporate dedicated modules addressing ethical considerations, biases, and potential harms of digital technologies, utilizing critical theories to illuminate societal impacts, engaging service user perspectives, fostering critical consciousness in students to assess technology's alignment with social work values, and implementing assessments that gauge both technical skills and ethical discernment for socially just technology adoption.
4. To enhance students' digital literacy and preparedness for technology-mediated practice in social work field placements, schools should update policies to allow supervised technology use, provide pre-placement training on ethical technology use, encourage collaboration with placement sites to foster skill development, consider virtual placements focused on digital social work skills, and implement clear assessment tools to monitor and guide students' technology integration.
5. mplementing a comprehensive approach to digital literacy assessment involves mapping digital literacy instruction, utilizing standardized rubrics and self-assessments, collecting multi-modal data, and analysing assessment findings to inform ongoing curriculum improvements, faculty development, and resource allocation for effective technology-integrated education.

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