A Review of Transformation and Digital Literacy for the Sustainable Development in the Greater Mekong Subregion – Working Paper

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Abstract

This comprehensive review delves into the crucial interplay between transformation and digital literacy as drivers of sustainable development in the Greater Mekong Subregion (GMS). As this region grapples with the challenges of economic growth, environmental sustainability, and social equity, understanding the dynamics of transformation – particularly the shift towards more sustainable industries and practices – is imperative. Equally significant is the role of digital literacy in enabling individuals and communities to harness the potential of digital technologies for personal and collective advancement. By examining the synergies between these two factors, this review sheds light on the strategies necessary to bridge disparities, protect the environment, and unlock the region's full potential in the context of sustainable development. The insights drawn from this working paper may offer valuable guidance for policymakers, practitioners, and stakeholders seeking to foster positive change in the GMS and, by extension, contribute to the global sustainability agenda.

Keywords: Transformation, Digital Literacy, Sustainable Development, Greater Mekong Subregion.

Transformation and Digital Literacy for GMS Sustainability

The Greater Mekong Subregion (GMS) is a natural economic area bound together by the Mekong River, encompassing 2.6 million square kilometers and a combined population of approximately 326 million people. With the launch of the GMS Economic Cooperation Program (the GMS Program) in 1992, the six countries along the Mekong River — Cambodia, People's Republic of China (PRC), Lao People's Democratic Republic (Lao PDR), Myanmar, Thailand, and Viet Nam — formed the Greater Mekong Subregion (Duong et al., 2020; Tran, 2020; Singh et al., 2021).

Figure 1. The Greater Mekong Subregion Map (Singh et al., 2021)

According to the Asian Development Bank (2008) and Manakul et al. (2021), for more than two decades, the Greater Mekong Subregion (GMS) countries of Cambodia, Laos, Myanmar, Thailand, and Vietnam (CLMTV) have been cooperating economically to realize their vision of a prosperous, integrated, and harmonious entity. The GMS Program employs a three-pronged approach: 1) improving connectivity through physical infrastructure and the creation of economic corridors; 2) increasing competitiveness through market integration and the facilitation of cross-border trade and travel; and 3) cultivating a sense of community through the resolution of shared social and environmental concerns. As reported by Bangkok Post (2019), The Nation (2019), and Xinhua (2019), a CLMTV Forum was held in Thailand in 2019 with the goal of bringing together the region's top minds from the private and public sectors, as well as thinkers and academia, to identify, brainstorm, and share ideas. More importantly, the forum encouraged participants to join forces in order to propel the region toward becoming a valuable chain hub of trade and investment in the dynamic global economic landscape while meeting emerging new challenges. CLMTV came together and identified a common agenda to develop their policies and strategies, despite being strategically located in the heart of Asia, with a fast-growing economy, cutting-edge infrastructure, abundant natural resources, and competent human capital. The agenda proposed by each country constitutes seven main approaches which offer full use of information and communication technologies (ICT) to promote innovation and economic progress (Manakul et al., 2021).

Digital intelligence, often referred to as "DQ" (Digital Quotient), is a term that encompasses a range of competencies and abilities related to the use, understanding, and management of digital technologies and information in various aspects of life. It reflects an individual's capacity to effectively navigate the digital world, make informed decisions, and interact with technology in a meaningful and responsible manner (Marnewick & Marnewick, 2021; Rahman et al., 2021). Digital intelligence has recently emerged as a key demographic factor influencing the Greater Mekong subregion's socio economic activities. Digital intelligence is the first global standard relating to new measures of human skills relating to digital technology, and as such, it has been approved by the IEEE Standards Board. Digital intelligence plays a critical role in a country's economy and social life, particularly in the context of the world's rapid digital revolution. It has been observed that all societies go through changes that result in a shift in a human's perceived worth. Digital intelligence's structures include eight interconnected areas: digital identity, digital use, digital safety, digital security, digital emotional intelligence, digital communication, digital literacy, and digital rights. Furthermore, it is evident that digital skills are necessary in a variety of fields, including administration, journalism, collaborative information exchange, and so on. Technological progress is characterized by a pattern of software or hardware acquisition and an increase in the rate at which users consume information transmitted via various channels. In the twenty-first century, it is essential to develop a well-rounded digital capability. The bridge between digital immigrants and natives is being built by encouraging citizens to use critical and open information sources. The objective of this project is to contribute to the transformation and digital literacy for the sustainable development in the Greater Mekong Subregion (Manakul et al., 2021).

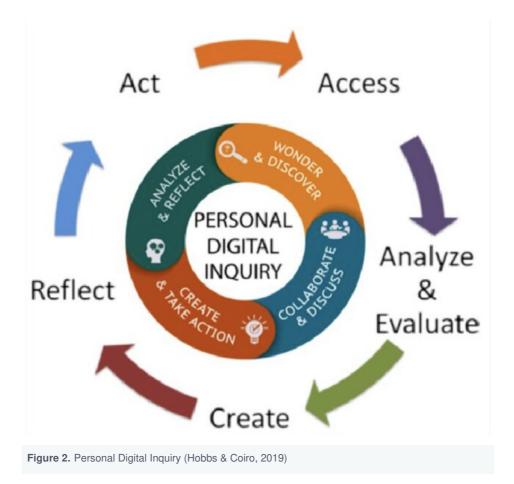**Figure 2.** Personal Digital Inquiry (Hobbs & Coiro, 2019)

Figure 2 depicts the visual model of personal digital inquiry. Personal emphasizes the importance of instructors' personal relationships with learners, as well as their' roles in the learning process. Digital reflects the significant role that digital texts and tools have come to play in inquiry-based learning and teaching. Inquiry is at the heart of personal digital inquiry as it allows learners to identify problems, generate personal questions, and engage in collaborative dialogue, making learning relevant and lasting. Additionally, participants engage in collaborative inquiry as they wonder and discover, collaborate and discuss, create and act, and analyze and reflect. They use communication and information to access, analyze, create, reflect, and act. To develop competencies in teaching digital literacy, educators must first go through the process as learners themselves (Hobbs & Coiro, 2019).

According to Grand Canyon University (2023), digital literacy is undeniably a vital skill in the modern era. In a world where digital technologies have become integral to daily life, the ability to navigate, understand, and effectively utilize these technologies is vital for personal and professional success. It encompasses the skills needed to access, evaluate, and apply information in a digital context, from deciphering online news to collaborating on virtual platforms. With the rise of the internet, social media, mobile devices, and other digital tools, being digitally literate has become synonymous with being an informed and engaged citizen. Moreover, it is a gateway to countless opportunities for learning and employment, making it crucial for individuals of all ages and backgrounds to acquire and continuously develop their digital literacy skills (Sharma & Satpathy, 2022).

Figure 3. Payton and Hagues' Eight Components of Digital Literacy (Watkins, n.d.)

Figure 3 presents Payton and Hagues' eight components of digital literacy. As reported by Baptiste (2019) and Watkins (n.d.), Payton and Hague's perspective on digital literacy extends beyond the foundational skills, placing a strong emphasis on leveraging digital tools for problem-solving. This advanced digital literacy involves not only the ability to find information but also to employ digital resources to address complex issues. It stresses the importance of collaborating with diverse audiences, recognizing that digital technology enables global connectivity and cross-cultural collaboration. Furthermore, it highlights the creation of effective digital products, emphasizing the need for individuals to produce content that is not only technically proficient but also engaging and relevant. In addition to problem-solving and content creation, Payton and Hague assert that digital literacy encompasses effective practices for safety and communication. This aspect involves the critical skill of identifying fake news and misinformation in the digital space, a crucial capability in an era marked by the proliferation of online disinformation. Furthermore, it underscores the importance of avoiding practices that may expose digital users to risks, whether those are related to cybersecurity or personal privacy. Finally, their model introduces a critical dimension by exploring the influence of cultural and social factors on digital technologies. They delve into whether and how these external influences affect the adoption and use of digital tools. Equally significant is their examination of how digital technology and practices, in turn, shape cultural and social beliefs. This dynamic relationship

between technology and society is fundamental to understanding the broader implications of digital literacy and its impact on individuals and communities in our increasingly interconnected world.

In conclusion, transformation and digital literacy are pivotal components in driving sustainable development in the GMS. The region, comprising Cambodia, China, Laos, Myanmar, Thailand, and Vietnam, has witnessed significant economic growth in recent years. However, this growth must be aligned with sustainable practices to address environmental and social challenges. Transformation, in this context, pertains to the shift towards a more sustainable and resilient society. It involves transitioning from resource-intensive industries to cleaner and more environmentally friendly ones. This transformation is essential for achieving the United Nations Sustainable Development Goals (SDGs) in the region, especially in sectors like agriculture, energy, and transportation. Digital literacy is the ability to use and leverage digital technologies effectively. In the GMS, enhancing digital literacy is vital for equitable access to information, education, and economic opportunities. Digital literacy enables people to harness the potential of digital tools for innovation, education, and entrepreneurship, thereby reducing inequalities and fostering economic growth. By combining transformation and digital literacy efforts, the GMS can advance sustainable development. For example, digital literacy programs can empower local communities to participate in sustainable agriculture practices and gain access to global markets. Additionally, digital technologies can facilitate efficient energy management, leading to reduced environmental impact.

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