


Chapter 12


Digital Strategies for Supporting Education Aligned With the Sustainable Development Goals (SDGs)

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ABSTRACT

Digital strategies are essential for advancing education in line with the United Nations Sustainable Development Goals (SDGs), particularly SDG 4, which focuses on inclusive, equitable, and quality education. By utilizing mobile learning, online platforms, and artificial intelligence (AI), education systems can enhance access, equity, and learning outcomes for diverse students. These tools enable personalized

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learning, foster global collaboration, and support professional development for educators. Digital strategies also contribute to SDG 13 by incorporating sustainability education, equipping students with the skills to address environmental challenges. Moreover, these strategies promote SDG 17 by fostering global partnerships and cross-cultural understanding. However, addressing the digital divide and ensuring equal access to technology is crucial for achieving these goals and creating an inclusive, sustainable future in education.

INTRODUCTION

The incorporation of digital agendas in education significantly contributes to solving global issues in particular those defined in United Nations Sustainable Development Goals (SDGs). SDG 4 that aims at creating inclusive, equitable, and quality education and life long learning options for all is one of the most urgent goals of today's ever changing world. As digitalization revolutionizes education, technology can be harnessed strategically toward achieving this mission as increased access, equity, quality, and sustainability/collaboration are promoted globally for learners and educators alike.

The improvement of access is one of the spheres in which the digital strategies are revolutionising education. In many parts of the globe and especially in rural areas and low income areas have limited access to traditional learning infrastructure such as schools, teachers, and resources. Digital platforms and mobile learning have grown into great tools to fill this gap. By leveraging online learning environments digital textbooks and mobile apps it is possible to access top quality educational content from anywhere at anytime. Aker et al. (2016) demonstrate that in the remote regions of sub-Saharan Africa, mobile phones play a role in provision of educational content and students are also enabled to weaken the geographical and infrastructural barriers. Likewise, online courses and digital platforms; including Massive Open Online Courses (MOOCs) allow learners in different world regions to participate in world-class learning, which bisects the traditional barriers of access.

Equity in learning is another sphere in which the digital strategies have been the source of significant effect. Personalized learning is individualization of education in differentiating to suit individual needs, strengths and interests of individual students. This approach differs from a one size fits all, as it enables students to learn at their own pace, with possible use of the specific methods and sources that work best for each student. This may be adapted lessons, activities or support that would enable every student to succeed as far as learning is concerned. Personalized learning technology can serve the varied needs of students and fit in with the need to close the achievement gaps. Tasks that traditionally rely on human intelligence

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