

TRENDS AND DESIGN THINKING SKILLS: EMPOWERING 21ST CENTURY LEARNERS THROUGH DIGITAL AND COMPUTER LITERACY

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The shifts taking place in the education world today are driven by digital and computer literacy. Indeed, it is a challenging and new digital world that faces both challenges and opportunities for today's learners. Equipping students with such essential skills falls squarely on the shoulders of teachers, and taking into all those emerging trends will facilitate coexistence in society. Such literacy prepares students for future work in the job market as it provides a means for effective use of technology in communication, collaboration, and critical thinking.

According to UN Educational, Scientific, and Cultural Organization (UNESCO) Institute for Statistics in 2018, digital literacy is being able to access, manage, understand, integrate, communicate, evaluate and create information in a safe and appropriate way through digital technologies for work and business. This includes competencies such as ICT, processing information and engaging with media. With this, if the Philippine education produces digitally literate students, we will also be producing confident members of the society contributing to the economic development of the community.

To achieve this, it is therefore essential that teachers start to integrate and harness emerging technologies such as Artificial Intelligence and Virtual Reality to positively change how students learn. These tools can cater needs of each student providing more effective and engaging experiences (Van Der Vorst & Jelacic, 2019; Luckin, 2017; Walkington, C., & Bernacki, M. L. 2020). Such technologies will not only open a new way to engage them with content but also provide many other options for engagement to use

the content. For instance, AI-based platforms can allow personalization in learning, processing their own data to recommend resources or assessments. This gives students learning experiences suitable for their learning strategies, comfort, and their interests. As for Filipino students, it can provide them study approaches they prefer according to International Study Specialists. Having such a platform in a high school provides opportunities to gain tailor-made support, which encourages engagement and more self-study. Also, VR can be used to place the student inside historical events or in scientific contexts where phenomena can be explored within an environment that can further strengthen understanding and also possibly improve retention of information.

In addition to that using AI in developing digital literacy among students, design thinking is another very significant feature for equipping them with skills in critical and analytical thinking not just in school, but also in their life after school. A theory based intervention used in education to develop a skill needed to survive in this technological world (Revano & Garcia, 2020), this gears the focus to empathy, ideation, prototyping, and testing, which do help develop creativity as well as critical thinking. Teachers can implement design thinking by giving projects that will require students to find and address real-time problems. For example, students tasked with the redesign of a local basketball court which will work through community interviews to understand user needs and then brainstorm possible solutions, ultimately working to models and present the project to subject teachers. The process not only encourages collaboration and innovation but also inculcates a sense of responsibility and connection to their community. They can also be engaged in an activity where they could construct their own researches or documentaries to understand a phenomena on a certain place.

Capping this, according to Center for Strategic and International Studies, as digital literacy is a necessary skill that needs to be taught in the modern education landscape giving the students what they need in school, in their professions, and in their personal

lives in the digital world, it has to be prioritized in the educational curriculum. This is also agreed by Digital Skills standard as according to them, it is a significant component in student success in the 21st century.

In this emerging new learning paradigm, there is a call for students to learn about appropriate digital tools that would enhance their communication and collaboration with one another with the help of teachers who can further heighten this by developing partnerships between schools around the community where they can enable the students to work together on joint projects while engaging in dialogues among the members of the place. Along with social-emotional learning and digital literacy, they would further be equipped to successfully navigate the complexity of their lives towards responsible citizenship.

In other words, 21st-century learners need to be empowered through a multifaceted approach that combines digital literacy and design thinking while educators ensure that learners become innovative, skilled, and responsible in an evolving education system as it is more critical than it ever has been in the past. Heeding emerging technologies, questioning the world, and teaching through critical thinking will better prepare students for an adaptive and collaborative workforce ready to raise the economy of the Philippines.

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