



A Review of the 21st Century Skills Integration in the Alternative Learning System (ALS) Digital Literacy Curriculum

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This policy brief examines the integration of 21st century skills within Learning Strand 6 (Digital Literacy) of the Philippines' Alternative Learning System (ALS) curriculum. While the curriculum emphasizes technology literacy, gaps exist in the comprehensive integration of other crucial skills like innovation, collaboration, and career & life skills. Addressing these gaps is crucial for equipping ALS learners with the necessary competencies to thrive in the 21st century workforce and contribute to Philippine society. This brief analyzes the current state, highlights policy gaps, and recommends actionable steps to enhance the curriculum and ensure equitable access to digital literacy skills for ALS learners.

Keywords: Alternative Learning System (ALS), 21st Century Skills, Digital Literacy, Curriculum Integration

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Introduction

One way to deliver Non-formal education (NFE) in the Philippines is through its Alternative Learning System (ALS), catering to Filipino out-of-school children, youth, and adults (Department of Education, 2022a). This framework emphasizes essential skills necessary for navigating today's complex world. The ALS responds to the 1987 Philippine Constitution that mandates the state to provide 'non-formal, informal, and indigenous learning systems... particularly those that respond to community needs.' This provision has prompted the Department of Education to primarily deliver ALS through learning modules and flexible in-person classes, helping learners acquire essential skills for a technology-driven society (Department of Education, 2022b). It is vital for ALS to not only meet necessary competencies from its curriculum, but also to prepare learners for modern challenges. As the world becomes increasingly complex and competitive, it is crucial for learners to acquire 21st century skills. These skills are essential for success in today's society (Scoular, 2020).

In the 21st century, literacy and digital technology proficiency are essential as life and work have transitioned toward technology-driven contexts (Erwin & Mohammed, 2022). To address the needs of ALS learners, the Department of Education has incorporated a new learning strand focusing on digital literacy and citizenship. This new strand aims to develop essential ICT skills and digital literacy among ALS learners and to produce 21st century digital citizens confident in using ICT and digital tools ethically. ALS learners are expected to demonstrate ICT-related knowledge and skills and seamlessly integrate them across the competencies of the other four Learning Strands— Communication Skills (English and Filipino), Scientific Literacy and Critical Thinking, Mathematical and Problem Solving Skills, and Life and Career Skills (Department of Education, 2017). Thus, Digital Literacy/Citizenship encourages learners to use digital knowledge and skills effectively to communicate and solve problems in life and in their career.

The current Philippine ALS framework emphasizes flexible learning approaches that address diverse learner needs, making it an ideal context for incorporating 21st century skills. This study examines whether the current ALS curriculum for the Digital Literacy learning strand effectively integrates 21st century skills. To review the integration of 21st century skills, a curriculum audit of the Digital Literacy learning strand was conducted. A heat map highlighted the presence of 21st century skills in the curriculum. Firstly, competencies from the curriculum guide were extracted. These competencies were then mapped against 21st century skills. Mapping classified

integration levels as Completely Present, Moderately Present, or Slightly Present.

The findings encourage ALS curriculum experts to revisit the Digital Literacy strand to effectively integrate 21st century skills.

Key Findings

The learning strand Digital Literacy has a total of 150 competencies extracted from its curriculum guide. The findings revealed that there is an uneven integration of 21st century skills. While technology literacy is heavily emphasized in the integration, other 21st century skills like innovation, collaboration, and career and life skills are less integrated.

1. **Technology Literacy Dominates.** Technology Literacy is the most "completely present" skill, with 104 out of 150 competencies aligned. This is expected, given the focus on ICT skills. This implies that the ALS Digital Literacy curriculum strongly emphasizes technical skills and knowledge related to computer hardware, software, and basic ICT operations. This aligns with the immediate need to bridge the digital divide by equipping learners with foundational digital skills. However, focusing predominantly on technical skills may risk neglecting broader aspects—digital literacy encompasses more than just technical proficiency. It is essential for learners to apply their knowledge meaningfully in real-world contexts. For instance, while learners may acquire the ability to operate software or hardware, they might lack the critical thinking skills needed to assess the credibility of online sources or the digital citizenship skills required to engage responsibly in online spaces
2. **Digital Citizenship and Ethics are Addressed.** Communication (44 out of 150 competencies integrated), Information Literacy (19 out of 150 competencies), Critical Thinking (31 out of 150 competencies), and Problem Solving (41 out of 150 competencies) were integrated to a lesser extent compared with Technology Literacy, these skills were still present in the learning competencies. The mapped competencies in these skills are often related to digital ethics and responsible technology use. There is a reasonable focus on digital citizenship, ethics, and responsible online behavior, integrated within Information Literacy and Critical Thinking. This is a positive aspect of the curriculum, promoting



responsible technology use. However, a greater focus on higher-order thinking skills (HOTS) is needed, especially in Innovation, Problem Solving, and Critical Thinking. This would encourage learners to not just use technology but also to analyze, evaluate, and create with it.

3. **Innovation as “Slightly Present”.** While only a total of 20 competencies were integrated in Innovation, it is also the skill most frequently identified as “slightly present”. These competencies aim for students to use programs in software applications in creating outputs such as word document, spreadsheet, and presentation. This indicates a potential for further development or revision of the language of the competencies to show Innovation.
4. **Collaboration and Career & Life Skills are Undervalued.** These two skills were the least integrated in the competencies of digital literacy. Collaboration was integrated in three competencies, while Career & Life Skills have only two competencies integrated. The lack of emphasis on these skills is a significant gap. Collaboration and career and life skills are crucial for success in the modern workforce because it enables individuals to work effectively in teams, foster creativity and innovation, and adapt to diverse workplace environments. Without these competencies, the curriculum risks producing learners who are proficient in using technology but lack the ability to collaborate effectively, or apply their digital skills strategically in their careers.
5. **Integration Across Learning Strands Could Be Improved.** While the curriculum aims to integrate digital literacy across other learning strands, the analysis suggests that this integration could be strengthened. More opportunities to apply digital skills in real-world contexts and across different subject areas would be beneficial.

learners for the demands of the 21st century workforce and society.

Key Recommendations of Policy and Practice

1. **Refinement of the Learning Competencies**
 - a. **Infuse Innovation.** Modify existing competencies and add new ones that explicitly require learners to innovate, create, and develop original solutions using digital tools.
 - b. **Promote Collaboration.** Competencies must reflect activities that involve collaborative projects and activities that require learners to work together online, share ideas, and co-create digital content.
 - c. **Integrate Career & Life Skills.** There should be competencies that connect digital literacy skills to career exploration, job searching, online entrepreneurship, and other relevant life skills.
 - d. **Regular Review of the Curriculum.** The curriculum should be regularly reviewed and revised to incorporate new technologies, ensuring that ALS learners and teachers stay at the cutting edge of educational progress.
2. **Focus ALS Teacher Training on Project-Based Learning.** Training and capacity-building of ALS teachers must equip them to design and implement project-based learning activities that integrate digital literacy with other learning strands of ALS. Moreover, there should be professional development programs focusing on effective teaching for innovation, collaboration, and critical thinking as digital citizens.
3. **Collaboration and Partnership with Institutions and Organizations.** Collaborating with local government bodies and private organizations to provide specialized practical training is also essential. It is clear that investing in infrastructure and the professional development of educators is necessary to keep pace with the swift advancement of technology.
4. **Upgrading of Technological Infrastructure with Complementary Teacher Training.** It is equally important to upgrade current facilities and the digital literacy skills of ALS mobile teachers for teaching purposes. Modern educational environments require robust digital infrastructure, including high-speed internet, reliable hardware, and advanced software, to support the needs of ALS learners who are already using digital technologies in their everyday life and, for some, in their work. Meanwhile, teachers equipped with strong ICT and digital literacy competencies can integrate technology effectively into their instructional



practices, fostering innovation and improving learning outcomes. Hence, while upgrading technologies, teachers are also “updating” their competencies in using these emerging technologies.

The authors retain full responsibility for the content and findings of this research.

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By implementing these recommendations, the Philippines can ensure that the ALS Digital Literacy curriculum truly prepares learners to be 21st century digital citizens who are not only proficient in using technology but also capable of innovating, collaborating, and contributing to society. Additionally, by taking these steps, the ALS can ensure that its Digital Literacy curriculum not only imparts essential ICT skills but also prepares learners to be effective contributors in a digital society

Conclusion

The ALS Digital Literacy curriculum reveals both strengths and weaknesses in its integration of 21st-century skills. While the curriculum excels in technology literacy and digital citizenship, it falls short in incorporating essential skills like innovation, collaboration, and career & life skills. This imbalance poses a risk to ALS learners, who may become proficient in using technology but lack the ability to innovate, collaborate effectively, or apply digital skills in career development. Hence, it is recommended to have a curriculum revision, ALS teacher training on project-based learning, establishing collaboration and partnership with institutions and organizations for enhancing digital literacy, and upgrading both the technology infrastructure with complementary teacher training. Through these recommended actions, the ALS can ensure that its Digital Literacy curriculum not only imparts essential ICT skills but also prepares learners to be effective contributors in a digital society. This will enhance their employability, social participation, and ability to innovate and collaborate in a rapidly changing world. Ultimately, these enhancements will bridge the gap between technical proficiency and the broader skills needed for success in the 21st century.

Declaration

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