

LEVERAGING ARTIFICIAL INTELLIGENCE (AI) TO TRANSFORM BASIC EDUCATION IN THE PHILIPPINES

by:

Richard M. Alboro

Information Technology Officer I

In present, the Philippines occupies a central position in radical transformations of what prevails within the education sector brought about by global integration and technological innovations. Specifically, Artificial Intelligence (AI) promises to revamp foundational education in the country by solving problems which have been prevalent today and ensure improved experiences for both the learners and the educators. However, this is possible only if several barriers are first dissolved and a conducive infrastructure is gradually built. The artificial intelligence-based tools can make differentiated learning experiences after the test of strength and weaknesses of each learner. This allows the adaptive learning system to allot the resources, tasks, and assessments differently in a way that enables the learner to understand material at their own pace. It is particularly helpful in vast classrooms where individualized attention for each learner cannot be provided. Optimization of those administrative tasks that artificial intelligence can support frees up more time for instructors to teach. For example, the AI-enabled resources can aid in planning lessons by providing resources and content aligned with curricular benchmarks while examining grading software will make it easy to grade an exam. Therefore, it may gradually reduce teacher fatigue and potentially improve the quality of education. In addition, AI learning analytics may give educators and school administrators better insights into student progress. AI can be used to reduce the learning gaps, as it identifies areas of difficulty and provides several solutions to students. AI chatbots and tutoring programs also offer real-time support to students so that they are exposed outside the classroom. AI could be used in career counseling with the aim of providing students with customized insight into possible career choices based on their

achievements, interests, and talents. Through this, AI could be used in bringing curriculum into conformity with future trends in employment because exercise in novel domains such as data science, robotics, and digital marketing can be recommended.

The current basic education curriculum of our country was badged for failing to meet the demands of the labor market and 21st-century abilities. Limited access to modern learning materials by the learners creates gaps of knowledge and expertise in digital literacy, STEM, and critical thinking. Most Filipino teachers have heavy academic workloads. Consequently, they hardly spare time to personalize lessons and attend to the special learning requirements of every child. In addition to this, resources are often insufficient in rural and underdeveloped regions, such as books, digital tools, and teaching materials themselves.

Various results of learning emanate from socioeconomic inequalities such as what students learn. While some pupils lack adequate educational support, others in better-funded schools have many alternatives for digital learning. This brings about the issue of the digital divide affecting academic achievements and the readiness of pupils for future occupations.

Proper high-speed internet access as well as proper numbers of PCs and tablets will be necessary for schools to meaningfully use AI. The Department of Education, in coordination with both local governments and business players, must upgrade and build the appropriate number of national digital infrastructure in schools that should be among its top priorities. Actually, using AI in education requires a need to protect students' privacy and data. Lest this happens, there must be an outline of clear rules and regulation from the Philippine government to ensure that AI tools will be appropriately applied and in due respect to the privacy of learners. Pilot programs may utilize the efficacy of AI solutions in single schools or regions prior to national dissemination. Data from such pilot programs can turn out very insightful and may allow some adjustments to be made so that AI integration is beneficial to all parties involved. Schools could leverage the best AI

capability and expertise by linking with technology companies or academic institutions or some other cluster. The partnership may also open up sources of fund and resource sharing as needed to sustain the AI project.

The integration of AI in basic education in the Philippines will offer tremendous scope for transformation in learning experiences, solving of important problems, and preparation of learners to meet the needs of future workforces. But prior to this change is born, there is a need for extensive preparation, infrastructural spending, and then the creation of moral standards. Applying AI would really be quite the gap-bridging move in order to ensure that the educational experience for Filipino students is improved, thereby allowing them to grow and thrive in an increasingly digital world.

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