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Liberal Arts for Ethical and Critical AI Adoption

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Abstract

The rise of generative artificial intelligence (AI), led by tools like ChatGPT, is reshaping how we teach, learn, and think. While these technologies promise greater efficiency and access, they also raise urgent questions: What is the true purpose of education in the age of AI? How can we prepare students not just to use these tools, but to use them wisely and ethically? This paper explores how liberal arts education, rooted in centuries of inquiry, moral reasoning, and civic responsibility, can offer a vital compass for navigating these challenges, especially in the context of Cambodian higher education. By combining technical skills with critical thinking and ethical reflection, liberal arts can help students engage with AI in ways that preserve the human core of learning. Drawing on both classical foundations and modern curriculum models like the T-shaped approach, the paper calls for deeper integration of cross-disciplinary courses, such as philosophy, technology ethics, and digital humanities, into Cambodia's Foundation Year programs. It also offers practical strategies for curriculum reform, pedagogy, assessment, and institutional policy, highlighting local innovations such as CamTech University's Center for Buddhist AI Ethics. Finally, the paper encourages further exploration into how these ideas can take root in Cambodian classrooms, from higher education to K–12, and how culturally grounded ethics, particularly from Buddhism, can shape the future of AI in a meaningful way. Rather than resisting change, this paper urges us to reimagine education as a space where human-machine interaction enhances learning.

Keywords: Liberal Arts Education, Generative AI, Cambodian Higher Education, T-shaped Curriculum, AI Ethics

Introduction

The public release of ChatGPT by OpenAI on November 30, 2022, marked a transformative moment in the mainstream adoption of artificial intelligence. The tool's unprecedented growth, reaching 100 million users in just two months, made it the fastest-growing consumer software application in history (Hu, 2023). Users were astonished by its capacity to produce human-like conversations, generate code, and create content across text, image, and video formats. In the months since, hundreds of generative AI tools, such as Claude, DeepSeek, and Gemini, have emerged across sectors including education, research, business, and creative industries. Their power, accessibility, and rapid integration into daily practices are reshaping knowledge production and use at a fundamental level.

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Nowhere has this transformation sparked more debate than in the education sector. While generative AI presents opportunities for enhanced personalization, efficiency, and access, it also raises difficult questions about the nature and purpose of learning. Algorithms now curate lesson plans, grade essays, and even simulate mentorship, streamlining workflows and expanding instructional reach (Zawacki-Richter et al., 2019). Yet this same efficiency risks reducing education to a transactional process, one that privileges technical skill acquisition at the expense of critical thinking, creativity, and ethical reflection (Selwyn, 2022). As students and educators grow increasingly reliant on AI-generated outputs, concerns about academic integrity, engagement, and intellectual depth have come to the fore. Though evidence is still emerging, preliminary studies suggest that this reliance may contribute to declines in cognitive engagement and memory retention (Kosmyna et al., 2024).

These developments force us to confront key questions: Can education maintain its humanistic core in a machine-driven age? How do we equip students not just to use AI, but to use it wisely? And what kind of citizens are we cultivating in the process? In response to this uncertain terrain, we argue that liberal arts education offers a robust, historically grounded framework for navigating the opportunities and dangers of generative AI. In what follows, we trace the conceptual foundation of liberal arts education and propose strategic recommendations for its implementation in Cambodian higher education.

Liberal Arts Education: A Timeless Framework for Human-Centered Learning

It is essential to start with the axiological question: What is the purpose of education, and what role should generative AI play in fulfilling that purpose? If we assume that all higher education institutions align with the Ministry of Education, Youth and Sport's (MoEYS, 2014) stated vision, to develop "human resources with excellent knowledge, skills, and moral values for the global knowledge society", as a foundational benchmark, then generative AI must be harnessed to enhance human development in both utilitarian and humanistic terms (p. 3). Realizing this objective requires the deliberate integration of liberal ideals into curriculum design, pedagogical strategies, knowledge application, assessment practices, and the broader institutional stance toward AI.

Curriculum Design and Integration

Efforts to modernize and expand higher education in Cambodia have increasingly emphasized general education. The Ministry of Education, Youth and Sport (MoEYS) mandates that all universities implement a Foundation Year curriculum, typically comprising up to 30 credits – approximately 25% of an undergraduate degree – covering the arts, humanities, social sciences, and languages. While this policy aligns with the T-shaped curriculum model and reflects a commitment to holistic education, its implementation across Cambodian institutions remains inconsistent and underleveraged, particularly in addressing

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the complex implications of rapid technological change.

To fully realize the potential of liberal arts education in the age of AI, Cambodian universities should consider adopting a more innovative and contextually grounded T-shaped curriculum model, combining deep disciplinary expertise (65-75%) with broad cross-disciplinary competencies (25-35%) within the Framework of the Foundation Year. For example, students pursuing degrees in AI, engineering, or other STEM fields should also take courses in history, philosophy, literature, sociology, technology ethics, and digital humanities. This integration enables students to approach complex problems from multiple perspectives and better anticipate the societal consequences of their work. As a compelling case for the value of liberal learning, Steve Jobs famously credited his exposure to calligraphy with profoundly influencing Apple's design philosophy. These courses should be integrated in a systems thinking format, allowing students to connect the dots, for instance philosophy and history of technology.

AI literacy courses should be introduced across all disciplines, tailored to ensure understanding not only of AI's technical aspects but also its ethical, social, and philosophical implications. Along with the courses from other fields, these courses must prioritize cultivating reflective and responsible use over mere technical proficiency, questioning established assumptions and triangulating various sources of information before making decisions. Embedding such programs within the broad-based education curriculum can foster a university-wide culture of critical engagement with AI. Furthermore, universities like CamTech University, have established a Center for Buddhist AI Ethics to study the wider impact of AI in society, particularly from ethical perspectives.

Pedagogy and Experiential Learning

Teaching and learning approaches should be grounded in epistemological frameworks that promote critical engagement. First, the cross-disciplinary courses should be taught using a systems thinking approach, explicitly helping students connect concepts across fields – such as linking the philosophy and history of technology to contemporary technical and ethical practice. Also, experiential learning opportunities should be expanded to reinforce classroom knowledge with real-world application. Institutions like CamTech University and Kirirom Institute of Technology already embed hands-on internships early in their programs. These experiences not only enhance technical capacity but also foster adaptability, creativity, and civic awareness – all key goals of liberal education. International exposure through student exchanges and collaborative projects can further develop global competencies and prepare students to navigate diverse cultural and disciplinary contexts.

Assessment Practices

Assessment practices must evolve to emphasize reflective and process-oriented learning. Instead of relying solely on

traditional exams or essays, universities should diversify their assessment approaches by introducing reflective journals, learning portfolios, and peer evaluations. Regular individual and group presentations should be offered to students, enabling them to learn how to defend their viewpoints convincingly and, in the process, engage meaningfully with AI. These methods promote intellectual growth, self-awareness, and academic integrity. Faculty must be supported through professional development and guidelines to design assessments that discourage passive reliance on AI tools. At CamTech, in-class handwritten or typed examinations have been introduced to ensure the authenticity of student work, particularly in doctoral comprehensive examinations that assess students' theoretical and foundational knowledge of their field.

Policy Implementation and Institutional Commitment

While policy recommendations should, in principle, precede practice, innovation frequently emerges from the ground up, with implications becoming clear before formal policies are established. This dynamic is particularly relevant for fast-evolving technologies like AI, where premature or restrictive policies can hinder learning. Given AI's long-term impact, higher education institutions must proactively develop AI-informed and AI-resilient policies. These policies should ensure equitable access and resources, protect academic integrity, and align with core learning objectives across disciplines. Overall, this liberal arts adoption should be treated as a process, starting from the design to the implementation of staff capacity development, student assessment and evaluation. Dedicated institutional units, such as Centers for Teaching and Learning Excellence or Centers for Higher Education Research, should play a leading role in driving this curriculum reform. Crucially, while establishing these institutional frameworks, universities should preserve lecturer autonomy. Individual instructors should retain the final decision on the extent of AI use permitted within their specific courses. CamTech University exemplifies this approach, beginning the process of institutional adaptation, where AI adoption is accelerating across all educational levels.

Conclusion

By adopting these strategies, Cambodian higher education can empower students to become not merely users of AI, but thoughtful, ethical, and engaged citizens. Liberal arts education, reimagined and applied with intentionality, provides the essential moral and intellectual foundation for navigating a future shaped by generative AI. Grounded in historical tradition yet adaptable to contemporary challenges, the liberal arts preserve the human essence of education in an increasingly automated world.

While this paper has focused on AI adoption in higher education through an epistemological lens informed by liberal arts principles, future research should explore and expand the following areas:

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1. The practical implementation of this approach by lecturers across Cambodian universities.
2. AI adoption at the K-12 level, recognizing its distinct pedagogical context compared to the more independent learning environment of universities.
3. The ethical adoption of generative AI, particularly from a culturally relevant perspective, for example, the role of Buddhism in shaping AI ethics in Cambodia.

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