

## **Book Review**

*Teaching with AI: A Practical Guide to a New Era of Human Learning*, authored by Jose Antonio Bowen and C. Edward Watson, Baltimore, Johns Hopkins University Press, 2024, pp. 270. Paperback & E-book: \$ 24.95. ISBN: 978-1-4214-4922-7 (Paperback), ISBN: 978-1-4214-4923-4 (E-book)

Artificial Intelligence (AI) is revolutionizing the way we work and live. Almost every profession is influenced by AI, if not eliminated. Education and training are no exception. In this context, Jose Antonio Bowen and C. Edward Watson have authored Teaching with AI: A Practical Guide to a New Era of Human Learning. The book is structured into three parts, each containing four chapters, making a total of twelve chapters. These three sections focus on thinking with AI, teaching with AI, and learning with AI, respectively. Each chapter begins with a thoughtfully selected epigraph that sparks the reader's interest and encourages them to delve deep into the text. The book introduces basic ideas about AI, and establishes the point that while AI is a powerful and influential tool, it cannot replace human intelligence or creative teachers. It highlights AI as a double-edged sword with both pros and cons and advocates for its use in enhancing creativity and improving learning outcomes.

The first part of the book explains AI's functions and impact on human life. Chapter 1 introduces the basics of AI, including key terms defined in embedded glossaries within the text. The authors vividly describe the chronological development of AI and

provide examples of commonly used AI tools, particularly in the field of education in 2024. In Chapter 2, the authors argue that AI has ushered in a new era of work. The book makes a very significant point that AI will replace some jobs, while it will transform every job. The authors emphasize that those who can work with AI will replace those who cannot. The presentation of findings from research studies on the potential impact of AI in different occupational sectors is thought-provoking. More interestingly, the authors discuss how AI is reshaping human relationships with the rise of digital care. The authors portray AI as more of a collaborator than a mere assistant. Chapter 3 delves into AI literacy, covering essential skills such as defining problems, selecting the right AI tool for a task, crafting effective prompts, and refining responses through iteration. The authors stress that students will need both general and discipline-specific AI skills to thrive in the future. They also express concerns and warn that AI could widen the existing digital divide, thereby further marginalizing the already marginalized people. In Chapter 4, the discussion centers on AI surpassing the average worker in some tasks, although humans remain more creative than AI. Nevertheless, AI can enhance our creativity by helping us clarify our thoughts, explore new ideas, and expand divergent thinking.

The second part of the book focuses on teaching with AI. Chapter 5 explores AI's capacity to assist faculty in research, writing, classroom discussion, assessments, and course design. One of the key topics discussed in Chapter 6 is AI-related cheating and detection. The authors cite various studies showing an increase in cheating while also questioning the reliability of AI detection tools due to their lack of trustworthiness. Instead, they advocate for redesigning assignments and assessments, and introducing low-cost cheating prevention strategies. Chapter 7 examines the required policies to uphold academic integrity in the age of AI. With the advent of AI, traditional definitions of plagiarism are becoming obsolete, necessitating new policies that clarify how work should be done and why. Moreover, Chapter 8 calls for rethinking of conventional assessment and grading system, emphasizing the need for defining what constitutes work that is "better than AI".

The last part of the text sheds light on learning with AI and designing assessments and assignments for today's world. Chapter 9 explains AI's ability to help customize learning and provide students with personalized feedback. If context and specificity are clearly provided in the prompt, AI can whet students' thinking and offer new perspectives. However, it will not eliminate the need for creative teachers, the

authors duo remind. Chapter 10 introduces new design ideas to improve guidance and clarify the learning process. The authors build on the principle of intrinsic motivation, emphasizing that students learn best when they feel "I care" (purpose), "I can" (self-efficacy) and "I matter" (agency). They emphasize that assessments should be redesigned to minimize cheating and maximize learning. Chapter 11 elucidates AI's role as a writing assistant. Readers are intrigued in this chapter by the authors' apt analogy: just as having calculators does not mean we no longer need math, having AI does not mean we no longer need to write well. The final chapter, Chapter 12, provides practical ideas for integrating AI into assignments and assessments, including incorporating creative projects and asking students to describe the process, with the goal of preparing them for an AI-influenced future.

The book offers valuable insights into the application of AI in the teaching-learning process. The fundamental concepts of AI and its potential applications are very useful to TVET instructors and trainers. Although the book primarily focuses on higher education, it presents fundamental concepts and strategies that are equally relevant to TVET. Written in clear and simple language, it is research-based, and each chapter can be completed in a single sitting. As indicated by its title, the book serves as a practical guide, mainly emphasizing AI's role in writing, content generation, and refinement. However, it offers little discussion on AI's applications

in practical activities. For example, in TVET fields like welding, AI-powered augmented and virtual reality can enhance learning by minimizing resource waste and reducing risks during skill practice.

Hands-on skills and practical experiences are paramount in the field of TVET. However, TVET instructors and trainers can utilize AI tools to simulate real-world scenarios, enabling students to practice and refine their skills effectively. Preparing students — especially those from developing countries — to compete in a world where industries have already embraced AI is a significant

challenge. The book thus provides insights that are useful for revising TVET curricula by integrating AI skills, managing and upgrading resources, updating instructional methodologies, and refining assessment strategies. AI is a force multiplier and has both merits and demerits. The book has effectively warned us of the downsides while encouraging us to take advantage of its positive aspects. At present, technical instructors, too, have no option but to gradually internalize the technological changes and challenges brought forth by AI and advancements in education and instruction.

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