Education, Teaching and Learning

08 - 10 November 2024

Bangkok, Thailand



Artificial Intelligence and Authenticity: Chatgpt as Your Extended Mind in the Classroom

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Abstract

As Large Language Models (LLMs), such as ChatGPT, become increasingly integrated into our daily lives and educational settings, we are beginning to see the potential for these tools to enhance our cognitive abilities. Despite their efficiency, concerns regarding data privacy, biased inputs, inaccuracies, plagiarism, and transparency persist. A particularly pertinent issue in education is the authenticity of outputs generated with AI tools, which some argue constitutes a form of cheating or plagiarism. We challenge the claim that using AI tools is "unnatural" and explores where our cognitive boundaries truly lie. We examine two perspectives that argue for cognitive processes extending beyond the brain: the Extended Mind Thesis (EMT) (Clark & Chalmers, 1998; Clark, 2010) and Cognitive Integration (CI) (Menary, 2010). According to EMT, tools can become part of our cognitive machinery under specific conditions, but ChatGPT's outputs often require scrutiny, which suggests that the tool does not fully qualify as a cognitive extension. In contrast, the CI approach posits that external tools, when effectively integrated with internal cognitive processes, enhance cognitive tasks, regardless of functional parity with internal processes. We demonstrate that using tools like ChatGPT aligns with human nature's inherent inclination toward cognitive enhancement through external resources, concluding that integrating AI tools is both a natural and authentic aspect of human cognition. We propose that effective use of ChatGPT could be seen as authentic cognitive work, provided that users learn to integrate it into their cognitive processes skillfully. To support our claim, we utilize survey data collected during a seminar where firstyear undergraduate students, who were unfamiliar with AI, conducted statistical analysis using the programming language R with the assistance of ChatGPT.

Keywords: Aritificial Intelligence, AI in education, Large Language Models, LLMs, authenticity, extended mind, cognitive integration