Generative Artificial Intelligence and Postsecondary Education: Rethinking Policy and Course Design

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EXECUTIVE SUMMARY

Employing generative artificial intelligence (GAI) for educational purposes has implications for both pedagogy and policy. Many postsecondary educators fear GAI will prevent students from developing the necessary skills that are typically associated with graduates of higher education institutions and prohibit valid assessment of course- and program-level objectives. However, GAI also offers affordances for ensuring student accessibility as they seek to engage in literacy and social practices indicative of their disciplines and future careers. In this chapter, the authors discuss approaches and considerations for leveraging GAI in postsecondary education in ways that align with the Universal Design for Learning (UDL) Guidelines. They also

share flowcharts developed at their institution to support instructors' development of course policies and assignments with consideration for GAI.

INTRODUCTION

Paradigm shifts in different fields and industries can be met with skepticism and resistance. The "moneyball" movement in professional baseball, popularized by the work of Bill James, allowed a team like the Oakland Athletics to apply data-driven sabermetrics approaches to analyzing players and optimizing their roster rather than evaluating players by the unproven, biased approaches historically employed by scouts. Oakland achieved winning seasons despite having one of the lowest payrolls in Major League Baseball.

Initially dismissed by traditional-minded thinkers and scouts, sabermetrics is now being used and further refined across both professional and collegiate baseball (Kilanowski & Moloney, 2024) and has even been taken up by many baseball fans as they draft and manage their fantasy baseball team rosters (Middleton et al., 2020). Analysts and decision-makers in professional baseball adapted to maximize their teams' performances and remain competitive.

Much like the initial decrying of sabermetrics in baseball, much has been made about the paradigm shifts of generative artificial intelligence (GAI) in all sectors of our global society, including postsecondary education (McDonald et al., 2024). Unlike sabermetrics and baseball, though, employing GAI for educational purposes has implications for both pedagogy and policy. The use of GAI in higher education raises many issues including those related to educational assessment and academic integrity, as well as broader concerns regarding privacy, bias, propagation of misinformation, and copyright (Bobula, 2024).

While the majority of faculty have at least some familiarity with GAI tools, many are not confident in their abilities to use these tools in their instruction and still question their value in educational contexts (Ruediger et al, 2024). In a national survey of instructors Ruediger et al. Found that only 19 percent of faculty agree or strongly agree that GAI adoption would benefit teaching in their fields and roughly 4 in 10 faculty are still prohibiting GAI use in their courses. For some, resistance to GAI adoption comes from a fear that it will prevent students from developing the necessary skills that are typically associated with graduates of higher education institutions (Wise et al., 2024). Some, however, argue that since students can use AI tools to do many subject-specific tasks, instructors should adjust learning goals and reframe assessments to focus on improving students' creativity and critical thinking rather than general skills (Zhai, 2023).