

Generative AI's Impact on Student Achievement and Implications for Worker Productivity (Joint with Naomi Hausman and Sarit Weisburd)

Abstract

Student use of Artificial Intelligence (AI) in higher education is reshaping learning and redefining the skills of future workers. Using student-course data from a top Israeli university, we examine the impact of generative AI tools on academic performance. Comparisons across more and less AI-compatible courses before and after ChatGPT's introduction show that AI availability raises grades, especially for lower-performing students, and compresses the grade distribution, eroding the signal value of grades for employers. Evidence suggests gains in AI-specific human capital but possible losses in traditional human capital, highlighting benefits and costs AI may impose on future workforce productivity.