

Generative AI and Education Choices

Large language models are already influencing labour markets, with evidence showing that highly exposed firms and occupations have reduced hiring since the introduction of ChatGPT in November 2022 (Brynjolfsson et al., 2025; Hosseini & Lichtinger, 2025; Klein Teeselink, 2025). This raises the important question whether young people are adapting to this new reality. This project aims to investigate that question by studying whether pupils, who are making their educational choices, are shifting away from fields like creative writing, legal studies, and data analysis toward less automatable disciplines. This is a fundamentally important question, as it gives us insights into the future of skills supply and human capital formation in the economy.

What You'll Do

You will use a novel measure of **education-level LLM exposure** created by the mentor, which links educational credentials (degree subject, level, graduation year) to subsequent career paths, and calculating how "exposed" the career tracks of each educational program are to automation by LLMs.

The core empirical work involves obtaining and analysing UK university application data from 2020–2025. You'll test whether applications to high-exposure fields have declined relative to low-exposure fields. There are potential extensions to the demand for microcredentials, vocational programs, and other types of educational choice.

Why This Matters

Most research on AI and labour markets focuses on demand: which jobs are disappearing, which firms are hiring fewer workers. There is much less research looking at supply. Yet if students are already pivoting away from automatable fields, this has major implications for:

- Future skill shortages and surpluses
- The returns to different types of education
- Retraining programs

What You'll Gain

- Experience working with large-scale education and labour market data
- Hands-on application of causal inference methods (difference-in-differences)
- A potential publication-quality output on an important policy-relevant question
- Mentorship from an active researcher in the economics of AI

Ideal Background

MSc Economics or related field. Comfort with R preferred, Python also acceptable. Interest in labour economics, education economics, or the economics of technological change. No prior AI expertise required.

References

Brynjolfsson, E., Chandar, B., & Chen, R. (2025). *Canaries in the coal mine? Six facts about the recent employment effects of artificial intelligence* (Working Paper). Stanford Digital Economy Lab.

Hosseini Maasoum, S. M., & Lichtinger, G. (2025). *Generative AI as seniority-biased technological change: Evidence from U.S. résumé and job posting data*. SSRN.

Klein Teeselink, B. (2025). *Generative AI and labor market outcomes: Evidence from the United Kingdom*. SSRN.