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Book Review of Jasper Roe (2025). How to use Generative AI in educational research. Cambridge Elements. Research Methods in Education.

Shannon Tan[A] [A]*Amity Global Institute, Singapore*

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Introduction

Jasper Roe's *How to Use Generative AI in Educational Research* offers a clear and well-structured examination of GenAI's growing presence in academic work. Across nine chapters, he develops a careful argument: GenAI is neither a dramatic revolution nor a neutral tool. Instead, it is a context-dependent technology whose outputs can be helpful, misleading, or incomplete depending on how researchers approach it. Roe encourages critical literacy, transparency, and deliberate use—qualities he believes are essential for any meaningful integration of GenAI into scholarly practice.

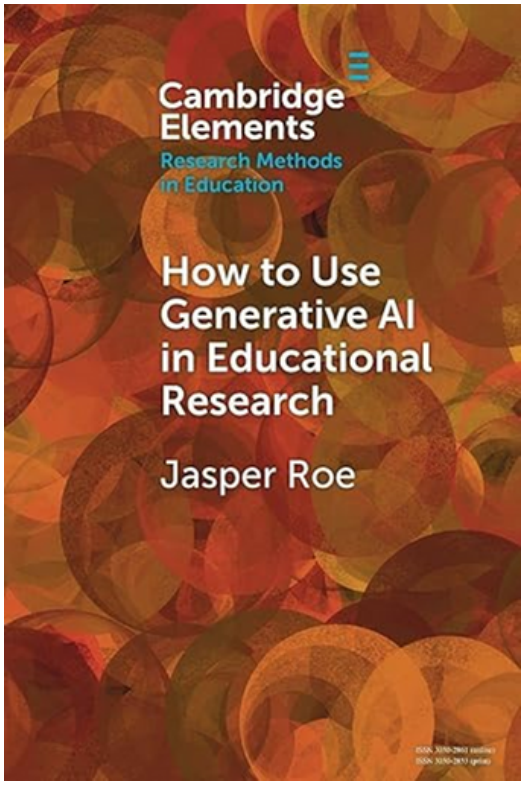

Figure 1: The book cover of *How to Use Generative AI in Educational Research.*

The book opens with an important clarification of terminology. Roe distinguishes between artificial intelligence (the broader field), generative AI (systems that produce content), large language models (the underlying architectures), and branded interfaces such as ChatGPT (user-facing applications). While this may seem basic, Roe demonstrates how conceptual slippage leads to inflated expectations or misplaced fears. For him, precise language anchors responsible research design and prevents scholars from attributing capabilities to GenAI that it simply does not possess.

From there, Roe positions GenAI as both familiar and unsettling. Its convenience makes it easy to adopt, yet its influence on academic thinking is far from straightforward. Roe avoids framing GenAI as inherently positive or negative; instead, he describes it as a cognitive accelerator that alters—not replaces—research labour. Productivity may improve, but this gain comes with heightened responsibility for checking accuracy, tracking sources, and disclosing the tool's involvement.

Roe then situates GenAI historically. Rather than emerging from pedagogical innovation, GenAI entered higher education through broader social and technological shifts: post-pandemic digital adoption, the expansion of commercial EdTech, and increasing pressure to manage academic workload. Roe notes that these tools were built with fluency and speed in mind, not with educational integrity or epistemic accuracy as core design features. This historical context lays the foundation for later warnings about misplaced trust.

The book continues with a theoretical mapping of how GenAI relates to educational perspectives such as social constructivism, connectivism, and critical pedagogy. Roe argues that while GenAI can support idea generation, drafting, and organisation, it cannot interpret meaning, negotiate understanding, or exercise judgement. He cautions against the common tendency to anthropomorphise AI outputs simply because they appear confident or coherent.
Roe then outlines several potential benefits: increased productivity, enhanced creative ideation, support for multilingual scholars, and opportunities for studying GenAI itself. These advantages, however, do not automatically elevate scholarly quality. Roe stresses that efficiency does not guarantee depth, and that cognitive shortcuts can obscure genuine understanding.

He follows this with a detailed discussion of risks, including hallucinations, fabricated sources, and the illusion of coherence that may mislead inexperienced researchers. He also highlights a practical paradox: GenAI makes early drafting faster, but increases the time needed to verify whether those drafts are accurate or conceptually sound. Additional concerns include the reproduction of biases embedded in training data and issues of privacy when users unknowingly share sensitive material.

One of the book's most practical contributions is its walkthrough of how GenAI can support the research process. Roe provides examples of how the technology can help refine research questions, structure literature reviews, draft methodological sections, offer preliminary coding suggestions in qualitative work, and improve clarity in writing. His emphasis, however, remains consistent: these outputs are starting points, not finished products, and must be examined critically.

The final chapters turn toward future developments. Roe anticipates that GenAI will become increasingly integrated into scholarly infrastructure—through automated summarisation tools, AI-assisted peer reviews, and more formal expectations around disclosure statements. At the same time, he warns that overreliance may hinder the development of scholarly identity, especially among early-career researchers. He argues that the long-term value of research will depend less on technical proficiency with AI tools and more on evaluative judgement.

The book concludes by returning to its central theme: intentionality. Roe does not provide rigid rules for using GenAI but instead urges researchers to remain reflective and accountable. GenAI is neither inherently democratising nor inherently dangerous. Its impact depends on how scholars choose to incorporate it into their work, and how they maintain responsibility for the knowledge they produce.

Critical appraisal and reflections

Roe does a great job of striking a balance—his account of GenAI is grounded in theory but avoids both hype and pa-

-nic. That is refreshing in a space often dominated by extremes. His writing resonates with educators who are navigating the complex middle ground between innovation and integrity. The book also feels timely, especially as institutions rush to create GenAI policies without fully grasping their pedagogical impact.

One of Roe's biggest strengths is his insistence on precision—both linguistic and epistemic. Too often, GenAI is discussed as if it were a single, monolithic entity, when it is a complex mix of layered architectures, commercial agendas, and varied capabilities. Roe's push to define terms clearly is not pedantic; it mirrors ongoing debates in higher education about hype and overpromising (Rudolph et al., 2023a; 2023b). His reminder that fluency does not equal truth really hit home for me, because AI's confidence often hides conceptual errors.

Another strong point is his focus on researcher positionality. Roe argues that judgment, responsibility, and meaning cannot be outsourced—and that's not just philosophy, it's practical reality. In a world where students ask, "What does the AI think?" Roe brings us back to basics: AI doesn't think. It predicts patterns based on prior data. This echoes recent critiques warning against attributing autonomy or consciousness to computational systems (Rudolph et al., 2024).

That said, Roe's lens is mostly methodological. While he flags issues like misinformation and surface-level coherence, he spends less time on the socio-economic and environmental costs of GenAI—topics that are gaining traction in current scholarship. Research now shows that GenAI relies on extractive labour, substantial computing resources, and centralised corporate control, shaping who benefits and who is left out (Rudolph et al., 2024). Roe nods to these concerns but does not dig deep.

Reflections on GenAI in educational practice

As a lecturer working with students who are learning to conduct research, some of Roe's observations align closely with my own lived experiences. Students increasingly turn to GenAI before peers or instructors, skipping dialogue and collaborative meaning-making. Yes, GenAI speeds up information retrieval, but it also short-circuits the discomfort and questioning that drive real learning. When answers come pre-packaged, students avoid uncertainty instead of wrestling with it.

In class, I notice fewer students sharing half-formed ideas or testing interpretations aloud. Some prefer polishing AI-generated text over debating perspectives. Roe's warning about flattening cognitive struggle feels spot-on. On the other hand, I also see the democratising potential that Roe mentions. For multilingual learners, GenAI is a game-changer. It helps refine phrasing, improve tone, and reorganise drafts—levelling the playing field where language barriers once overshadowed ability. I have watched students gain confidence in their writing when they use GenAI openly and critically.

But Roe's caution about verification is real. I often get beautifully written paragraphs filled with outdated or fabricated references. Students assume that if something sounds academic, it must be valid. Small errors snowball quickly. I now spend more time verifying sources and definitions than I did before. GenAI reduces visible labour but increases hidden labour for both students and educators.

This shift has changed how I assess work. Checks on rote knowledge no longer tell me much. Instead, I ask students to reflect on their AI use:

- What did you accept or reject from its output?
- What did you verify independently, and why?
- Where did AI mislead you?

These questions put accountability back on the learner. Rather than banning AI, I encourage students to develop epistemic agency—echoing Roe's call for intentionality over avoidance.

Finally, Roe's chapter, with its structured prompts and checklists, is gold for teaching. Many novice researchers stru-

-ggle to articulate questions or justify methods. His templates help scaffold thinking—not as shortcuts, but as starting points for further exploration. When used critically, they move students from "What should I write?" to "Why am I writing this?"

Conclusion

Overall, Roe's book is a valuable addition to the conversation on GenAI in education. It brings clarity where discourse is fuzzy and structure where practice is still emerging. While I wish he had explored the structural dimensions of GenAI more deeply, his strength lies in equipping educators and researchers to engage with complexity thoughtfully. That framing aligns well with what educators are experiencing—GenAI is neither the demise of academic work nor its saviour, but a catalyst for rethinking what meaningful scholarship requires.

Additional references

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