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The collective cure: How group project collaboration may counter the GenAI challenge

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Abstract

GenAI is transforming academic writing and raising urgent questions about authorship, originality and student agency. Nowhere are these tensions sharper than in collaborative group project writing where knowledge is co-constructed. If AI shortcuts the hard work of framing problems and negotiating meaning, students risk becoming passive information managers. Yet I argue the opposite is also true: collaboration itself can be a safeguard. Shared authorship and inquiry foster reflection, responsibility and critical engagement. To sustain meaningful learning, we must defend and strengthen such pedagogical models against automatisation.

Introduction

GenAI is rapidly transforming how knowledge is produced, communicated and valued. In higher education, this shift poses urgent questions about authorship, originality and student agency. Nowhere are these tensions more acute than in group project writing, where students co-construct dialogue and shared responsibility. If GenAI shortcuts the hard work of jointly framing problems, synthesising perspectives or finding a common path, it risks hollowing out precisely those practices of collaboration and critical engagement that define the model. In this article, however, I suggest that the very collaborative nature of group work may protect against the potential harm of GenAI's automatisation of knowledge as it fosters a sense of meaningfulness.

As AI tools, such as LLMs, become embedded in academic writing, we must critically reassess what it means to think, write and learn, and whether we are to abandon the concept of 'making' knowledge. Based on recent literature on these aspects, I want to discuss how GenAI challenges and redefines agency in student group project writing, and how the path forward to maintain agency and the students' sense of 'becoming' may indeed be embedded in the very collaborative, interpersonal construction of such work. This discussion is a continued theoretical reflection on contested student agency in my recent study of students' mixed perceptions of GenAI in an academic English writing course at Roskilde University (Klitgård, 2025).

Literacy and agency: self-reflective and intentional actions

To understand agency and GenAI in project writing, we need to first unfold the aspect of literacy as, e.g., explained by UNESCO:

> *It involves a continuum of learning and proficiency levels which allows citizens to engage in lifelong learning and participate fully in community, workplace and wider society. It includes the ability to read and write, to identify, understand, interpret, create, communicate and compute, using printed and written materials, as well as the ability to solve problems in an increasingly technological and information-rich environment.*

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> *Literacy is an essential means of building people's knowledge, skills and competencies to cope with the evolving challenges and complexities of life, culture, economy and society (UNESCO, 2016, p. 7).*

This definition underscores literacy as an all-encompassing transformative tool for personal development, active societal participation and adaptability, and thus a foundation for agency as a kind of empowerment in life.

Attention to such agency in higher education in an AI-driven world is on the rise (Stenalt & Lassesen, 2022). UNESCO has now also launched guidance on GenAI in education based on a human-centred vision (UNESCO, 2024). As I acknowledge such a vision, Klemenčič's theoretical definition of student agency may qualify this outlook:

> *Drawing from social cognition theory and sociological theories of human agency, student agency is conceptualised as a process of students' self-reflective and intentional actions and interactions during studentship, which encompasses variable notions of agentic possibility ("power") and agentic orientation ("will"). Student agency refers to the quality of actions and interactions […] and not something students possess (Klemenčič, 2015, p. 13).*

This conceptualisation positions student agency as a situated, evolving process that reflects students' self-organising, proactive, self-regulating and self-reflective role in their "studentship", which is described as a process of being "oriented towards the formation of the projected future self, towards 'becoming'" (Klemenčič, 2015, p. 12). Similarly, Damşa et al. (2021) perceives agency as students' abilities "to act upon their ideas and plans to transform current thinking or practice" (p. 2). Hence, Stenalt and Nielsen (2025), for example, advocate for teaching strategies that support student autonomy and a sense of belonging.

All in all, Klemenčič reminds us that agency is not something students simply "have," but something they enact and negotiate in context (Klemenčič, 2015, p. 17). It grows out of motivation and intention, yet always in relation to people, materials and ideas. Its strength fluctuates: sometimes students step forward with confidence, at other times their scope of action narrows. Agency is also temporal, as students draw on routines from the past, make judgements in the present and orient themselves towards future goals (Klemenčič, 2015, p. 18). I find this view compelling because it frames agency as dynamic, situational and collaborative – a conception that aligns closely with student-led learning and with the challenges and possibilities that AI now brings into project writing.

Group project writing: professional, collaborative action

Roskilde University's Problem-Oriented Project Learning (PPL) model, which I have been practising for years, is an example of group project writing. It is a student-centred, interdisciplinary and collaborative approach that emphasises learning through real-world problem-solving and is applied across all study levels to foster critical thinking, teamwork and independence. The core principles include problem orientation, interdisciplinarity, participant-directed learning, group work and exemplarity, encouraging students to engage deeply with complex issues and develop transferable academic and professional skills (Petersen & Sørensen, 2020, pp. 27–32).

These principles are manifested in research processes, such as formulating research questions, conducting empirical studies and applying theoretical frameworks leading to a group project report like real scholarly work, which will be defended in an oral group exam together with the assigned group supervisor from the academic staff and an external examiner. Throughout the research and writing process, students continuously share drafts, comment on each other's sections and revise collectively – often facilitated by structured peer feedback workshops or mid-project supervision checkpoints. As in Klemenčič's definition of student agency as agentic

possibility and orientation in a social, cultural and temporal context, this research and writing process, too, focuses on the project work as professional, collaborative action rather than on psychologising the individual's needs, strengths and weaknesses (Petersen & Sørensen, 2020, p. 11-12). Thus, there is a strong emphasis on student agency as active participation in a concrete situation in which joined forces work towards a goal.

Academic writing literacy: meaningful engagement

A crucial aspect of group project work at Roskilde University is of course the writing process, which is traditionally a matter of learning by doing throughout the educational programmes. Petersen and Sørensen explain the collaborative agentic aspects of writing in a group while refraining from prescribing certain academic writing norms:

> *Although writing for most people is traditionally a private matter – something you have done alone most of your life – it is then necessary in group work to practice sharing what you write, and most of all, perceive it as a work in progress. It is also beneficial to think about text as something shared, and not as 'mine' or 'yours', and that can be challenging (Petersen & Sørensen, 2020, p. 105).*

In this way, the writing process becomes a learning process in its own right, aligning with key definitions of writing in the international academic writing association, Writing Across the Curriculum:

> *A fundamental tenet of Writing Across the Curriculum is that writing is a mode of learning. Students develop understanding and insights through the act of writing. Rather than writing simply being a matter of presenting existing information or furnishing products for the purpose of testing or grading, writing is a fundamental means to create deep learning and foster cognitive development (WAC, 2023).*

Writing collaborative group projects is indeed an act of deep cognitive learning development in which situated engagement is at the forefront. In fact, as I see it, academic writing per se may be regarded as embodying an expanded notion of UNESCO's literacy, as it involves learning how to operate the specialised discourse, genres and rhetorical practices that characterise scholarly communication in academia. For instance, Lea and Street (1998) agree by conceptualising academic literacy as encompassing not only text production but also a critical awareness of institutional power structures, disciplinary conventions and the negotiation of meaning within academic communities. This awareness enables students to adopt adaptive agentic strategies in the progression of their writing, which, in turn, lead to a greater sense of engagement and empowerment. And in the realm of group project writing, such agency is produced through shared collaboration in a social, cultural and temporal context. In this way, group project writing is aimed at preparing students not just for academic success, but for meaningful engagement in producing knowledge in a complex world.

Philosophical perspectives: A challenge to agency

To explore how GenAI complicates students' roles as knowledge producers, I want to turn to three complementary theoretical perspectives: Cox's epistemic framing, Anson's critique of cognitive disruption and Kim et al.'s empirical findings on student use. Together, I think these perspectives clarify the stakes for pedagogical practice.

Cox (2023) argues that we are witnessing an epistemic shift – from students making knowledge to merely maintaining it. In this new "anthill" paradigm, learners become curators of machine-generated content rather than original thinkers: "in an anthill, there is no such thing as a free thinker" (p. 27). Cox suspects we may face a fourth world-historical revolution displacing human supremacy in our understanding of the world. The preceding revolutions – Copernican, Darwinian and Freudian – reshaped humanity's self-understanding. Cox argues that the current technological revolution does the same, redefining epistemic agency in ways that no

longer align with traditional educational aims (Cox, 2023, p. 15).

As in Klemenčič's ideas of power and will, Cox's starting point is

> *that epistemic agents are beings for whom knowledge is salient to their formation of beliefs, their dispositions, and their actions. Educators want their students to seek knowledge and to be motivated, guided, and empowered by it. Epistemic agency entails a preference for knowledge and both the ability and the will to be guided by it (Cox, 2023, p. 16).*

Traditionally, epistemic agency meant 'making' knowledge, he adds, through diligence, evidence and ownership of ideas (Cox, 2023, pp. 20-22). The contemporary view of epistemic agency, however, is that of 'managing' knowledge. Here epistemic agency becomes extended cognition as we deposit knowledge to on-demand notebooks, systems, the internet and smartphones (Cox, 2023, p. 22). The same goes for "other cognitive achievements as well, including the mastery of other languages, computer coding, mathematical computation, writing, and other skills" (Cox, 2023, p. 23).

To widen this scope, Cox's epistemic critique – centred on the erosion of authorship and intellectual autonomy – finds a practical echo in Luo's (2024) policy analysis. In her review of 20 university policy documents, she shows how institutional approaches to GenAI often reinforce narrow concepts of originality and plagiarism. These frameworks, Luo argues, risk further marginalising student agency by framing GenAI use primarily in terms of misconduct rather than learning. Instead, originality must be reframed as part of a spectrum in a time when technology is blended into human thinking, writing and doing, she says (Luo, 2024, p. 659-62). Together, Cox and Luo highlight strongly how both epistemic assumptions and institutional frameworks risk reconfiguring students from thinkers to passive processors – undermining the foundations of meaningful learning.

But where is this taking us? In the future, and due to our contemporary massive development of AI, we are bound to become information organisms, so-called "inforgs", Cox continues, in a close human-machine relationship, which turns the concepts of 'making' and 'managing' knowledge into 'maintenance' of a vast joint knowledge community – just as ants work to maintain their colony (Cox, 2023, pp. 25-27). In a rather dystopian sense, he believes we are headed for "an information universe that seems to make obsolete the very idea of personal knowledge and epistemic autonomy" (Cox, 2023, p. 17). And this shift toward maintenance underscores the urgency of preserving collaborative practices like group project writing, I propose, which foster epistemic ownership and active learning.

Kim et al. (2024) seems to agree, as their interview analysis of the expected role of GenAI in academic writing from 20 Chinese students' perspectives demonstrates a complex relationship between passive acceptance and active management of GenAI. They found the top advantages to be enhancing ideation, improving writing quality and the infusion of joy into writing (Kim et al., 2024, p. 1276). The disadvantages were severe: A lack of higher-order thinking, such as the analysis, creation and evaluation levels of Bloom's learning taxonomy, emerged in GenAI-assisted writing as students failed in critically evaluating GenAI-produced content. Another problem was the lack of task-topic knowledge in GenAI suggestions (Kim et al., 2024, p. 1283). Finally, students' lack of writing competencies "acted as a barrier in collaborative writing with GenAI. Students expressed that a certain level of writing proficiency was deemed essential for optimising the quality of AI-generated drafts. They conveyed a sense of limitation in making additional modifications and adjustments to the drafts, suggesting that a lack of writing skills hindered their ability to fully capitalize on AI support" (Kim et al., 2024, pp. 1283-84). In this way, the students remained on a managerial level in terms of fully extracting the potential of applying GenAI to writing. Once again, this shift highlights why collaborative authorship remains essential – not only for

critical literacy, but for resisting the erosion of students' individual epistemic agency.

When Bloom turns upside down: AI and the crisis of cognitive learning

Surprisingly, with the AI paradigm shift, Bloom's seminal taxonomy of educational objectives may look completely different. In a creative dialogue with Lea and Street's academic literacy theory, Anson (2024) addresses the dilemma of LLMs' reversal of the higher and lower-order thinking processes in Bloom's taxonomy as mentioned by Kim et al. above (2024). When immersing in academic literacy, students need time and cognitive effort to read carefully, but "student use of LLMs stands to disrupt these processes" (Anson, 2024, p. 1469). As a result, the lower and higher orders of cognitive process are at risk:

> *tools like ChatGPT may actually invert the hierarchy; processes like create are now almost instant and require only a prompt, while processes like remember are now the domain of experts who take the time to read and learn information rather than relying on explanations from LLMs. Consequently, LLMs have the potential to disrupt what was once considered a relatively stable hierarchy of cognitive complexity"(Anson, 2024, p. 1470).*

No longer engaging in the cognitive processes of thinking, arguing and synthesising may damage the important academic socialisation in academic culture and may lead to the imposter syndrome, Anson claims (Anson, 2024, p. 1473). The way forward, Anson suggests, is to exchange so-called "cognitive off-loading" – outsourcing of cognitively complex tasks to GenAI – with the concept of the "extended mind" in which AI is regarded as offering opportunities the mind alone would never have had access to (Anson, 2024, p. 1471). Even though Anson's ideas represent Cox's traditional view of epistemic agency as 'making', the disruption of Bloom's hierarchies poses important questions about the learning levels of student agency and empowerment. And what does all this mean to the principles of group project writing, which are traditionally geared toward achieving higher-order skills? Here, I suggest that group collaboration may in fact offer an antidote by slowing down the cognitive process, restoring the iterative nature of thinking and anchoring students in collaborative, reflective practice.

Girdharry & Khachatryan (2023) offer a useful corrective as they, too, remind us that academic writing should not be viewed as an isolated skill which takes place between the individual student and the LLM. One way to enhance meaningful writing is to remember Klemenčič's personal aspect of "becoming" in studentship: "students were telling us that the personal connection resulted in a meaningful writing experience because of opportunities for them to grow, develop, or imagine future selves; to take on identities as writers or authors; to have a venue for self-expression; or to tap into previous experiences" (Girdharry & Khachatryan, 2023, p. 329). Thus, meaningful writing takes place:

> *when (a) students have agency while writing—that is, when students have the opportunity to make their own choices when developing writing projects; (b) writers feel engaged with other people and opportunities—that is, when writing involves discussions with professors and peers and/or personal thought towards goals beyond the classroom (e.g., presentations, publications, applications) that might aid in career or other post-graduation plans; and (c) learning for transfer—that is, when students actively draw from prior knowledge in order to think in new ways or when they can see how their work may be applied in future contexts (Girdharry & Khachatryan, 2023, p. 2.)*

Consequently, Girdharry and Khachatryan prescribe technological use of GenAI as tools, never as creators, and continuously coupled with higher-order reflection and critical thinking, which stabilises the hierarchical order of Bloom's learning taxonomy and the deep cognitive learning development of writing: "Who knows, in the age of generative AI, maybe this is the new path to reinvigorating writing as an iterative process that fosters and preserves critical thought?" (Girdharry & Khachatryan, 2023, p. 9).

I support this pragmatic view. In my previously mentioned study on student perceptions of using GenAI in academic English writing, the majority expressed that GenAI was most helpful when used to clarify ideas, not generate content. This suggests a clear desire to retain cognitive ownership, and thus I advocate for a balanced and responsible GenAI integration to enhance individual efforts and skills while acknowledging potential benefits and risks. Thus, hopefully, there will be room for 'free thinkers' in the anthill after all. And the road to this balance lies in the collaborative and relational processes of group work, I argue.

Conclusion

If education is to remain a space for critical thought, creativity and meaningful becoming, and not an anthill of knowledge maintenance, we must confront how LLMs alter not just what students write, but how they learn and who they become in the process. While the above theories explore different facets of GenAI's impact, they converge on one key point: the erosion of agency through automation. This is precisely where group project writing regains its urgency. The challenge is to adapt group project writing to harness GenAI without surrendering the core of human inquiry.

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