

ChatGPT and the (re-)organization of relations in higher education:

A Case Study at the University of Innsbruck

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Abstract:

Over the past years, the proliferation of Generative Artificial Intelligence (GAI) has increasingly (re-)organized practices of academic engagement and knowledge creation in higher education. While most existing research approaches GAI from an instrumental perspective, this thesis adopts a performative-relational lens to explore how generative tools like ChatGPT (re-)organize social relations of students and epistemology. Drawing on a qualitative case study conducted at the Faculty of Business and Management at the University of Innsbruck, this research examines how the use of ChatGPT influences students' self-relations, interpersonal interactions, and their relationship to knowledge. The study employs an interpretive and exploratory research design, combining 25 narrative interviews with participatory observation. The findings indicate four major shifts: the use of ChatGPT for social and cognitive outsourcing. First, generating ambivalent self-relation, because the utilization of ChatGPT does not align with students' identity (values and expectations of the social environment), and simultaneously sensing a loss of core intellectual skills, such as critical thinking and deep engagement. Second, the traditional authority-based relationship between students and instructors shifts toward a more dialogical and trust-oriented relation, aimed at addressing verification challenges. Third, students increasingly adopt epistemic beliefs centered on efficiency, speed, and the automation of problem-solving, positioning themselves more as evaluators than creators of knowledge. Fourth, across all dimensions, a growing dependence on and trust in AI-generated content emerges, often at the expense of human input and peer exchange. Rather than functioning as a neutral tool, GAI performatively shapes academic subjectivities, redefining students' roles and relational dynamics and transforming what it means to access, process, and possess knowledge. This, in turn, raises fundamental philosophical questions concerning the nature of knowledge, who we are as knowers, and agency in an AI-mediated environment.

Key Words: AI on organizations, technology and higher education, generative AI, performativity, relational perspective, students, knowledge

1. Introduction

In recent years, the usage and familiarity with Artificial Intelligence (AI) technologies, especially Generative AI (GAI) tools such as ChatGPT, have grown rapidly in higher education (Yusuf et al., 2024). Unlike previous technological innovations, GAI is grounded in deep learning models, capable of generating textual, visual, or auditory content based on statistical patterns derived from vast datasets (Grassini, 2023, p. 1). These tools support a wide range of academic tasks, providing timely access to information, text generation, and idea generation, and enabling more efficient workflows. Current literature frames ChatGPT, often as an education or research assistant (Imran & Almusharraf, 2023), but this study highlights that its everyday use suggests more far-reaching implications for how academic work (learning, teaching) is organized and experienced (Chen et al., 2020). It changes students' self-relation, interpersonal relations, and epistemology. In other words, it affects how individuals relate to themselves and others, how knowledge is accessed, and how academic work is performed. It's not simply using a new tool to automate things; the usage has far-reaching effects on our social interaction and how we organize (group work, lessons). Whereas earlier debates in epistemology predominantly positioned the human subject as the primary agent of knowledge (Tsoukas & Vladimirou, 2001, p. 979), more recent perspectives increasingly acknowledge the agency of artificial intelligence in specific organizations like universities. Lockhart (2025, p. 25), for instance, conceptualizes AI as an "*epistemic agent*", an "*evolving, generative partner in knowledge formation*". From this perspective, academic engagement, thinking, and knowledge creation are no longer solely produced by humans; *instead, it emerges through dialogical co-processing, where the AI becomes a kind of externalized second self [...].*" (ibid., p. 30). Consequently, it is important to recognize that GAI is not an isolated entity; we must also examine its far-reaching social implications in empirical contexts. Therefore, this study aims to address the following research questions:

- RQ1: How does ChatGPT influence and shape relations (self-relation, between students, between students and professors)?
- RQ2: How does the usage of ChatGPT impact the relation to knowledge?

This paper investigates how the integration of GAI tools reshapes social relationships and epistemological understandings at the University of Innsbruck. The paper begins by reviewing relevant literature, followed by a brief theoretical framework. The subsequent sections outline the methodology, present the empirical findings, and discuss their broader implications.

2. ChatGPT in Higher Education

Universities are increasingly exposed to the widespread availability of GAI tools (Rudolph et al., 2023). As a highly flexible and freely available technology, ChatGPT can be accessed across various devices,

including smartphones, laptops, and tablets, offering users unrestricted availability regardless of time or location (Fuchs, 2023, p. 2). These new opportunities have far-reaching effects on teaching and learning, and our relation in the university context, as well as the development and dissemination of knowledge. I asked Chat GPT how it works in a higher educational context, with the prompt: “*How does ChatGPT work in higher education context, e.g. universities?*”

ChatGPT can assist students, faculty, and administrators in various ways. For students, it provides instant explanations of complex topics, helps with writing assignments, and offers tutoring in different subjects. Faculty members can use ChatGPT to generate lecture materials, design assessments, and streamline research by summarizing articles or generating ideas. Universities can also integrate ChatGPT into administrative processes, such as answering common student inquiries or assisting with application processes. However, ethical considerations like academic integrity, plagiarism, and misinformation need to be addressed when using AI in education (ChatGPT, 2025).

This response highlights how ChatGPT can function as an aid for multiple stakeholders within the academic landscape. ChatGPT can be used for answering questions, searching for information, generating ideas, or writing texts (Bower et al., 2024, p. 15414). It also provides “*comprehensive explanations, including definitions, principles/elements, and practical guidance*” (Salinas-Navarro et al., 2023, p. 17), which can be very helpful in comprehending academic tasks.

A recent survey conducted by Yusuf et al. (2024) explored the utilization of GAI in higher education among students and educators from a multicultural perspective. Their findings revealed a high level of awareness of familiarity with GAI tools among respondents. Notably, ChatGPT emerged as the most widely recognized tool, with 71.8% of participants reporting familiarity with it. Moreover, the survey results suggest a strong inclination toward the continued use of GAI tools, as 35.7% of respondents indicated they were very likely and 27.9% were likely to use such tools in the future. Regarding specific applications, the majority of respondents indicated using GAI primarily for information retrieval (44.3%) and text paraphrasing (39.4%). Additionally, 28.5% of the participants utilized these tools for self-learning, while 29.8% employed them as an aid for assignments. Furthermore, 27.2% of the respondents used GAI tools to generate written content.

ChatGPT’s multifaceted role in education has been explored, particularly in its function as an individualized tutor and writing assistant that responds to students’ unique needs, interests, and abilities (Grassini, 2023; Lo, 2023; Fuchs, 2023; Rudolph et al., 2023; Imran & Almusharraf, 2023), fostering individualized and personalized learning (Fuchs, 2023). It offers “*on-demand support*” (ibid., p. 2), enabling students to overcome learning obstacles in real-time. Students can pose questions directly related to their coursework (Lo, 2023) and assist in problem-solving (Rudolph et al., 2023). Beyond on-demand support, ChatGPT provides tailored learning experiences, “[...] *by analyzing students’ language patterns, feedback, and performance to create customized learning plans*” designed to meet

the respective needs (Chen et al., 2020). Personalized recommendations are instrumental in guiding students toward further study and giving input for new ideas (Fuchs, 2023). Recent literature also underscores ChatGPT's role in assessment-related tasks, such as providing personalized feedback on written assignments by identifying and correcting errors or offering alternative suggestions to help students optimize their written assignments (Lo, 2023; Fuchs, 2023). Additionally, ChatGPT helps with concept checking and lecture and exam preparation, by “*analyze[ing] and process[ing] vast amounts of textual data, such as academic papers, textbooks, [...] [and] course materials*” (Fuchs, 2023, p. 1). It also aids in summarizing information (Lo, 2023) and creating outlines of texts, which can help students to “*overcome learning obstacles and enhance their understanding of material*” (Fuchs, 2023, p. 2).

While there are multiple education opportunities, there are also concerns. Scholars pointed out potential issues related to the use of ChatGPT in education. In general, there are several ethical concerns about academic integrity, issues with plagiarism and cheating (Eke, 2023; Zhou et al., 2024). Moreover, there are concerns about the accuracy and reliability of information and data (Lo, 2023; Fuchs, 2023), and the impact on users' ability to think critically and independently (Fuchs, 2023; Kasneci et al., 2023; Gerlich, 2025).

3. Rethinking GAI through a performative-relational approach

This study wants to shed light on the impact of GAI on relational dynamics at the University of Innsbruck. This perspective allows us to examine the far-reaching, performative character utilizing ChatGPT. As these are understood as ‘*epistemic agents*’ (Lockhart, 2025) that (re-)organize social realities and relations in organizations. A performative-relational theoretical framework introduced by Bailey et al. (2022), “*argues for moving away from an entity based view of technology to one that focuses on the evolving relations and functions between people, technologies, and organizations*” (Hinds & von Krogh, 2024, p. 1; Scott & Orlikowski, 2025). Moreover, the relational perspective acknowledges the idea that “*effects of technologies [...] may trigger changes in relations throughout a constellation of relations*” (Hinds & von Krogh, 2024, p. 4), treating technology and technology use as something that is intertwined with the social context of an organization (ibid., p. 3). In the context of technological development, two fundamental paradigms shape our understanding of technology in organizations and society: the *instrumental perspective* and the *performativity perspective*.

The instrumental perspective on technology acknowledges technologies as tools (entities) that automate and improve (work) processes. Humans utilize technological tools to achieve specific goals more efficiently, but the utilization “*does not change the essential nature of what is being done, only how it is being done*” (Introna, 2019, p. 317).

The performative perspective goes beyond the instrumental perspective by acknowledging the performative character of technology (Gond et al., 2016). Foundational perspectives of performative

study originate from Austin's work, seeing “*performativity as doing things with words*” (ibid. p. 444), referring to the concept of “*speech-acts*”, by “*saying something we do something*” (Gond et al., 2016, p. 443; cited from Austin 1962, p. 12). More recent perspectives of performativity acknowledge that agency is not inherently human but also originates from non-human domains (Butler, 2010; Inrona, 2019; Scott & Orlikowski, 2025; Lockhart, 2025). (Butler, 2010, p. 150) argue that “*it is not the explicit speech act that exercises performative power*” rather she argues it's “*a set of relations and practices are constantly renewed, and agency traverses human and non-human domains*”. Here, performativity refers to the idea that technologies are an active agent having far-reaching ‘*effects*’ (Butler, 2010) on our social practices, roles, relations, and epistemic beliefs (Tushman & Nelson, 1990; Lockhart, 2025). As Barley (1990, p. 67) argues, “*if technologies are to influence forms of social order, they must do more than change people's instrumental acts or abilities, they must also affect the relationships on which social orders are ultimately grounded.*”

4. Research Methodology

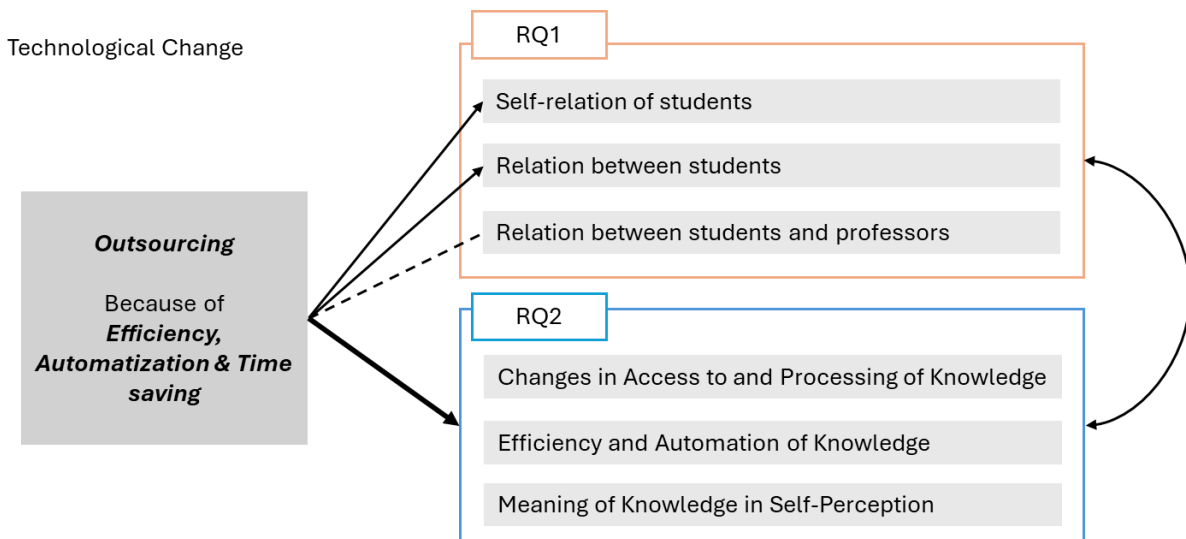
This inquiry adopts an exploratory qualitative case study (Gerring, 2004) research design to identify new areas and realities of students and professors in the context of GAI. Narrative interviews were chosen as the primary mode of data collection to investigate the performative effects of GAI on relational dynamics within the university context (Alvesson & Ashcraft, 2012). 25 narrative Interviews were conducted between late April and early June 2025. The sample included 9 bachelor’s students (Code: 01_0X), 9 master’s students (Code: 02_0X), and 6 professors (Code: 03_0X), all affiliated with the Faculty of Business and Management. A purposive sampling strategy was applied, focusing on individuals directly involved with the faculty, either as students or as lecturers/professors. This selection ensured that all participants had relevant experience within the organizational context and had personally lived through the period before the introduction of ChatGPT. For the bachelor’s student group, only individuals in their fifth or sixth semester were selected to ensure that they also had study experience without ChatGPT. All interviews were audio-recorded with participants’ informed consent. The interviews lasted between 25 Minutes and 1 Hour and 15 Minutes. All participants received detailed information about the study's purpose, procedures, and data use and gave informed consent via email and signed a declaration. They were reminded of their right to withdraw from the study at any time and had the opportunity to ask questions before and after the interviews. Anonymity and confidentiality were strictly maintained by assigning coded identifiers and anonymizing any personal or identifying details.

To complement the narrative interviews, one participant observation was conducted, offering methodological triangulation (Abdalla et al., 2018). The participatory observation took place during a 90-minute workshop on academic writing with ChatGPT on the 27th. May 2025. This approach enabled the researcher to gain a deeper understanding of social interactions and relational dynamics within a

real-life teaching context involving first-semester bachelor students at the Department of Business and Management (Bachmann, 2009). To code the material, MAXQDA 2024 was used. The analytical process was oriented on the qualitative content analysis by Mayring (2010).

5. Results

The interviews reveal distinct forms of outsourcing. First, explanations and queries are increasingly directed to ChatGPT (rather than peers or instructors), a practice referred to here as *social outsourcing*. Second, both routine academic tasks (e.g., summarizing, structuring, outlining, proofreading) and creative activities (e.g., brainstorming, developing case studies, generating ideas, creating multimedia content) are delegated to the tool, classified as *cognitive outsourcing*. Students justify this delegation in terms of increased efficiency, time savings, improved outcomes, and peer pressure, reducing mental load at the same time.



5.1 Impact of ChatGPT on personal relations

Self-relation of Students

Ambivalence towards ChatGPT use and critical self-observation

A central finding of the study was the students' ambivalent relationship with ChatGPT use, while many described the tool as a "relief" and "enormous helpful" (01_01, 01_02, 01_04, 01_06) way to reduce academic effort and manage workload, they simultaneously questioned the impact on their personal learning, development, and academic ideals. Several students expressed that relying on ChatGPT led to decreased critical thinking and a sense of disconnection from meaningful academic engagement. Participants described a tension between efficiency and a loss of pride and depth in their academic work. Students at the University of Innsbruck are aware of potential drawbacks, such as superficial learning,

reduced cognitive effort, or the bypassing of deeper academic engagement; this awareness rarely results in behavioral change. As this statement illustrates:

“But I do notice that you also become lazier and somehow stop critically questioning things [...] I think that maybe I could be learning much more. [...] But I have never come to the conclusion that I should stop using AI“ (01_02)

Rather, what remains is a sense of regret about the missed learning opportunities and the lack of deeper engagement. Another Student said:

“I’m generally a person who always really tries to take the easier way. If it takes less effort for me, then I’m really glad about that, because it makes sense, I think. But in academia, well, you go to university to actually do something and achieve something, I think.” (01_04).

The statements illustrate the inner conflict, recognizing the loss of competencies and that the behavior doesn’t align with their values, while simultaneously accepting this development.

Loss of (traditional) academic competencies & learning of new technical skills

This ambivalence is closely linked to students' perception of a loss of (traditional) academic competencies and learning of new technical skills. Students perceived a loss of academic competencies, especially those related to active and critical thinking, intrinsic motivation for deeper learning processes, and engagement and reading. One student stated: *“Why make the effort if you can just have it done for you?”* („Warum die Mühe machen, wenn du es halt machen lassen kannst?“) (02_06). Some students describe themselves as increasingly “lazy” or overly comfortable with outsourcing academic tasks (e.g., reading, summarizing) to ChatGPT (01_02-01_6, 01_08, 02_03, 02_06/07). Students prefer surface-level summaries, rather than deeper textual immersion, showing that the time-saving benefit is acknowledged, but they also reflect that they have only a superficial understanding of academic papers. One can assume a motivational shift: academic engagement is increasingly guided by efficiency rather than intellectual curiosity. Tasks are outsourced (entirely), sometimes without initial own attempts, and AI-generated summaries replace thorough reading. While students acknowledged that they were unlearning traditional academic competencies, they expressed motivation to acquire new skills, primarily those related to the technology itself and its effective use.

Trust and Dependence on ChatGPT outputs

Another dimension of the findings concerns trust and dependence on ChatGPT: Students expressed a growing trust in ChatGPT’s responses and dependency on ChatGPT (01_01–01_08; 02_04–02_07). Although several participants emphasized the importance of forming independent opinions (01_03, 01_05, 02_04), many described a shift in what is perceived as credible and valuable knowledge. As one student summarized: *“I think you can trust it a lot more now than in the beginning”* (01_06). Another remarked: *“It’s a bit sad how dependent we’ve already become. Every time a question comes up in the*

seminar room, it's typed into ChatGPT immediately" (02_06). Moreover, students described ChatGPT as a source of reassurance and validation in academic work, helping them feel *"feel better, and more secure"* (01_2) in their understanding, decisions, and contributions, particularly in situations of uncertainty or self-doubt (01_01, 01_02, 01_04, 01_06, 02_03, 02_07, 02_08). Some bachelor students acknowledged that their high-quality academic results were inseparable from their use of ChatGPT. One student reflected: *"I'm sure that without ChatGPT, we wouldn't have produced above-average solutions, just average ones"* (01_01). He also admitted: *"If ChatGPT were suddenly taken away, we'd have trouble creating those kinds of results ourselves, or at least we'd need much longer to get there"* (ibid.). Another student expressed a similar sentiment with regard to her thesis: *"Without ChatGPT, for example, I wouldn't be able to deliver such a high-quality bachelor's thesis as I can now. [...] Without the chatbot, it would be significantly worse, less scientific, less pleasant to read"* (01_06). Students feel that without the assistance of ChatGPT, they would not be able to achieve the same level of academic performance.

Relations between Students

ChatGPT as the first point of contact for academic engagement (social outsourcing)

The findings indicate a shift in academic help-seeking behavior; instead of turning to peers or study groups, students now regard ChatGPT as their *"first point of reference"* (*"erste Anlaufstelle"*) when facing academic challenges (01_01, 01_05, 02_02).

ChatGPT for decision-making and problem-solving in group settings

The data indicate that ChatGPT has become a central facilitator in group decision-making and problem-solving, primarily by reducing the time spent on discussion and negotiation. Students described the tool as *"a fifth group member"* (02_07), suggesting that its input provides a shared external reference that can ease compromise. One student reflected:

"[...] yes, that you sit together at the table and ask ChatGPT, and maybe don't have to think together that much anymore, or maybe have to find a bit fewer compromises. Because if everyone has their own stuff and everyone sticks to their opinion, then it's maybe often harder to find compromises. But if you [...] ask ChatGPT [...], then I think it's a bit easier to find a compromise when you do it together" (02_01)

While she initially claims that the tool has not altered peer collaboration, her account reveals that ChatGPT functions as an external agent in the decision-making process. Its use appears to lead to fewer divergent opinions, thereby reducing controversy and narrowing the range of perspectives, though this is perceived positively. As a result, decisions tend to be made more quickly. In this sense, parts of the decision-making process become externalized, and relational work may be diminished.

Trust in ChatGPT output rather than peers' opinions.

Additionally, the findings suggest that students often attributed greater credibility to ChatGPT's output than to their own input or that of their peers, reshaping peer interactions and perceptions of legitimate knowledge. One student noted that *"if someone says something and then you ask ChatGPT, people tend to believe the AI more, or at least double-check whether the person was even right. That really changed the whole dynamic"* (01_03). Similarly, another participant observed that *"students trust ChatGPT more than older summaries or [...] notes [...] from fellow students"* (01_01, p. 8), highlighting a shift in epistemic authority within student groups. The results suggest that social dynamics, particularly concerns about acceptance and legitimacy, can discourage peer-to-peer engagement and contribute to a growing dependence on AI-generated knowledge.

Relation between Students and Professors

Closed vs. Open Dialogue between Students and Professors

In the early stages, professors commonly communicated that AI tools should not be used at all (01_03), which led students to avoid disclosing their use of ChatGPT (01_02). As a result, ChatGPT was used in secrecy, which made students *"not feel so good"* (01_04). Increasingly open dialogue about ChatGPT at the faculty was initially for students, unexpected but ultimately led to a sense of relief and increased comfort (01_04, 02_01). Students don't have to *"hide"* it anymore (01_03). Students describe the interaction with professors as having become *"easier"* and more *"normalized"* (02_01). Clear communication about guidelines and permitted uses of AI tools was perceived by students as fostering transparency and mutual trust.

Moreover, open dialogue between professors and students is perceived very positively by students. Several participants noted that feedback from their professors helped them recognize prior misunderstandings or inappropriate uses of the tool. At the same time, they expressed a need for more structured guidance and greater attention to the ongoing technological advancements. Furthermore, professors' openness about their own use of ChatGPT has reassured students, mitigated fears of penalization, and fostered a more trusting environment. As a result, students feel more comfortable discussing their use of ChatGPT, which, in turn, allows professors to gain deeper insight into students' working processes, potentially restoring a sense of academic trust. Findings from the faculty interviews also underscored that open dialogue and close relationships with students help to build trust and provide valuable insights into students' approaches to academic work. This, in turn, enables professors to assess student performance more effectively in accordance with academic regulations and standards. Through interviews, faculty consistently highlight the importance of maintaining academic integrity while guiding students toward ethical engagement with emerging technologies, an aspect they consider central

to their pedagogical role. Professor 03_01 emphasizes the need for active conversation to assess students' depth of understanding. Likewise, Professor 03_02 cultivates close relationships through regular dialogue to gain insight into students' working processes:

“And that’s where I feel I can compensate a little through personal contact, by talking to someone, by listening, or by noticing the kinds of questions they ask. That’s when I sense: this person is actually doing the work, doing what they’re supposed to be doing. And that gives me a good feeling” (03_02)

Professor 03_04 similarly underscores the value of continuous interaction and exercises during lectures for understanding students' approaches and giving them support, while Professor 03_06 highlights seminars as crucial forums where students are encouraged to develop their own perspectives through open discussion.

5.2 ChatGPT and Relation to Knowledge

The interview data suggest that the use of ChatGPT is associated with significant changes in how students access and engage with knowledge. As one participant noted, *“Before there was ChatGPT, I [...] learned in a completely different way [...]”* (01_03).

Changes in Access to and Processing of Knowledge

Participants reported using ChatGPT for a broad spectrum of tasks, including summarizing academic texts, conducting literature searches, generating ideas and outlines, and correcting grammar and syntax. Moreover, they use it for cognitive and social outsourcing of tasks. Notably, many participants framed ChatGPT as a starting point for academic engagement, as one student put in: *“for me, ChatGPT is really the first point of contact, no matter what I have to do”* (01_05, 01_01). Participants also reported using ChatGPT to bypass individual cognitive effort in situations that would traditionally require their own interpretive or problem-solving capabilities. One student explained: *“When an assignment comes in, I just paste the whole document into ChatGPT and see what it gives me, instead of trying it myself”* (01_02). These statements reveal a shift in students' epistemic engagement, marked by the externalization and automation of knowledge work. Increasingly, students engage in cognitive offloading, using ChatGPT to streamline assignments with minimal effort, often bypassing deeper reflection. Some described this as a deliberate strategy to prioritize efficiency: *“it’s just a lot easier [...] than to think for yourself”* (02_03). This shift alters epistemic positioning, as students often privilege the tool's structured outputs over their own initial thoughts, even in formats intended to foster dialogue and reflexivity. Moreover, it brings into question: Is ChatGPT really a learning assistant or a replacement?

Efficiency and Automation of Knowledge

The data revealed an orientation toward efficiency and automation in students' engagement with knowledge. Participants frequently described the tool as a means of saving time and cognitive effort, allowing them to bypass what one student called "*mental assembly-line work*" (01_05). As he explained:

"I'm actually a fan of AI. Because it does replace a lot of, let's call it, mental assembly-line work for you. Just very simple things. You can have it summarize something quickly if you feed it a whole paper. And then you already know, what it's about" (01_05)

The participant framed ChatGPT as a time-optimization mechanism, especially for tasks he perceives as non-creative or cognitively routine. This framing reveals a view of knowledge as something to be quickly accessed and operationalized, rather than actively constructed through deep engagement and conversations. ChatGPT is used because it is simply faster than doing the task independently, with students accepting potential negative consequences in return. This efficiency orientation was evident not only in the interviews but also during the participant observation conducted in the workshop. One student (S2) succinctly captured the link between time pressure and the use of ChatGPT: "*Because of the speed, I don't have to make the effort to engage with the content anymore. The depth is lost,*" T responded with a critical question: "Is that really the case?" to which S2 replied: "*When you don't have much time, ChatGPT takes over everything*".

Students' role as Evaluators of AI-generated Knowledge

An additional point of interest is a marked shift in how students relate to knowledge and position themselves within learning processes. Rather than approaching academic tasks primarily as producers of original thought, several participants describe themselves in the role of evaluators, those who assess, adapt, and approve pre-generated content generated by ChatGPT. The act of learning appears less driven by exploratory engagement or knowledge construction, and more by efficiency-oriented selection and critical review of AI-generated output. One student (02_06) explained:

"Well, when you get a task [...] the first thing I do is ask ChatGPT if it can help me with it[...] you kind of don't think alone anymore [...] Sure, it's still your duty to look over it again [...] but [...] it does take a lot of effort away" (02_06)

This quotation illustrates how the cognitive starting point of a task has shifted from self-driven ideation to tool-assisted initiation, with the student assuming a primarily curatorial role. Seeing her role and responsibility in checking the output from ChatGPT. The findings indicate that the use of ChatGPT may help to automate reading and other academic tasks, but also revealed changes in self-relation, student team relations, knowledge creation, and group-based task solving. To what extent these dynamics contribute to sustainable education remains open to discussion, and regulations and control mechanisms need to be established to maintain the standards of academic education.

6. Discussion

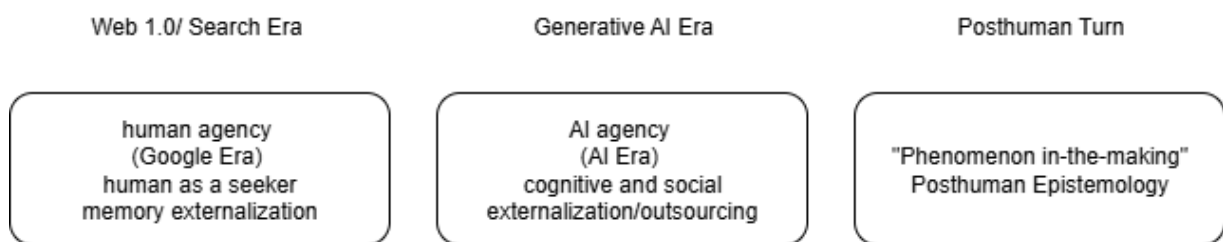
The use of ChatGPT contributes to profound shifts in students' self-understanding, academic engagement, interpersonal interactions, and their evolving understanding of knowledge within the academic field. One central dynamic emerging from the data is the increasing reliance on ChatGPT for both social and cognitive outsourcing in the completion of academic tasks. Gerlich (2025, p. 3) describes this phenomenon as "*cognitive offloading*," drawing on Risko and Gilbert's (2016) definition of the term as the "*externalization of cognitive processes, often involving tools or external agents [...] like AI, to reduce cognitive load*." Such practices can "*improve efficiency*" and "*reduce mental strain*" (ibid.). However, the outsourcing of academic tasks to GAI tools has implications for both research questions in this study. First, social and cognitive outsourcing alters how students perceive themselves and their roles, how group processes are organized (more trust in AI-generated output than human inputs). Relations between students are reconfigured due to the use of ChatGPT in group settings, as argued by (Hinds & von Krogh, 2024, p. 4) a relational perspective acknowledges the idea that "*the effects of technology [...] may trigger changes in relations throughout a constellation of relations*". The present study identified various informal practices that (re-)organize how social relations between students are reshaped. Students regard ChatGPT as the first point of reference, when facing academic task challenges (01_01, 01_05, 02_02), replacing peers, study groups, or collaborative problem-solving as the initial resource. Students compare ChatGPT to a "second opinion" from a peer, friend, or family member. The results revealed that students outsource social interaction and cognitive tasks to ChatGPT, arguing that AI-generated knowledge is perceived as more legitimate, a more correct form other group members than their own thoughts, and it's faster to come to compromises. Which changes how students' group dynamics are organized (Hinds & von Krogh, 2024).

Further, the results indicated how student–professor relations evolve, shifting from authority-based to more trust and dialogue-oriented interactions. Drawing on Foucault's (1984) notion of disciplinary power and mechanisms, the integration of ChatGPT into academic work is reshaping the relational dynamics between students and professors (Hinds & von Krogh, 2024). Historically grounded in hierarchical authority, these relations are increasingly reconfigured toward trust and dialogic exchange. This shift is catalyzed by the difficulty of reliably verifying the extent of AI use in assignments.

While open dialogue can foster transparency and trust, the absence of mechanisms to reliably verify AI use shifts the balance of authority and disciplinary mechanisms (Foucault, 1984) in ways that may diminish professors' ability to evaluate students' work and uphold academic standards. In the past, plagiarism detection tools rendered misconduct visible, enabling institutions to hold students accountable for their actions by sanctioning such behavior (Foucault, 1984). At present, however, cheating or other unethical uses of AI cannot be reliably detected, and misconduct therefore cannot be effectively sanctioned. This, in turn, may lead to an increase in academic dishonesty, a devaluation of university degrees, and a decline in the comparability of grades (McElroy & Girdharry, 2024, p. 581).

As Cotton et al. (2023, p. 230) note, this “undermines the very purpose of higher education, which is to challenge and educate students, and could ultimately lead to a devaluation of degrees.”. Nevertheless, the asymmetry of power in the professor–student relationship remains an essential mechanism for maintaining academic integrity, ensuring the value of the degree, and safeguarding fair and comparable performance assessment. Holding students accountable for misconduct and retaining the authority to set and enforce expectations is not merely an exercise of control and power; it is a necessary condition for sustaining the credibility and legitimacy of higher education in the age of AI.

Second, the findings indicate a redefinition of what constitutes knowledge and academic engagement in an AI-mediated environment, where efficiency and the automation of knowledge production increasingly take precedence. This transformation coincides with a shift in the student role, from active producer of knowledge to verifier and evaluator of AI-generated content. This, in turn, raises questions about human agency vs. AI-agency. The findings of the present study provide stronger support for the notion of AI agency within the academic context. The findings indicate a shifting epistemology aligning more with Lockhart’s (2025, p. 26) concept of “transhuman epistemology,” rather than traditional views of knowledge (human agency) (Tsoukas & Vladimirou, 2001). Transhuman epistemology “*refers to a way of understanding knowledge and knowing that recognizes how human cognition is increasingly intertwined with technological systems. Rather than seeing knowledge as produced solely by individuals, this perspective highlights how humans and machines co-create, mediate, and extend understanding together.*” The following figure, adapted from Lockhart (2025, p. 27), illustrates this shift:



While Lockhart (2025), in the second box of the *Generative AI Era*, describes the human–AI relationship as that of “co-knowers,” engaging in real-time knowledge synthesis, I replace this notion with the concept of AI agency in this context. My reasoning is twofold. First, the results showed that ChatGPT is frequently consulted as the initial point of contact for engaging with academic content. This starting point inherently involves a pre-selection of information and knowledge, effectively framing the scope of what follows. Second, the interviews reveal that students predominantly evaluate AI-generated content rather than producing original material or engaging with primary sources from the outset. This means that any further discussion or deliberation is already grounded in AI-produced knowledge, even if final decisions are made by humans. Taken together, these findings suggest that AI is not merely

participating in co-creation alongside human actors but is actively shaping the epistemic terrain on which human agency operates, thereby justifying the framing of AI as an agent rather than as a partner for co-creating knowledge production or a learning assistant, as assumed in previous literature (Chen et al., 2020; Imran & Almusharraf, 2023). It is essential to further explore what sustainable education truly means, how we define it, and how it can be effectively implemented. A key aspect of this discussion involves the role of AI in education and the issue of unequal access to such technologies. For instance, students with greater financial resources can afford premium versions of AI tools, potentially gaining academic advantages over their peers. This raises critical questions of fairness and equity: Are we creating a system where students can effectively "buy" better results simply because they can afford superior tools?

7. Conclusion

This research investigated how generative AI reshapes self-relations, interpersonal relations between students and lecturers, and the relationship to knowledge within the university context. Guided by the research questions (1) How does ChatGPT impact relations (self-relations and interpersonal relations) and (2) How does it transform students' relationship to knowledge?, the study adopts a performative–relational perspective (Gond et al., 2016; Bailey, 2022; Hinds & von Krogh, 2024; Scott & Orlikowski, 2025). This theoretical lens shifts the focus from viewing technology as an entity toward understanding it as an agent that co-constitutes social and epistemic realities. Using a qualitative, interpretive case study approach (Gerring, 2017), which included narrative interviews and participant observation, the research captured lived experiences and relational dynamics as they unfolded *in situ*.

The findings indicate four major shifts: the use of ChatGPT for social and cognitive outsourcing. First, it generates *ambivalent self-relation* because the utilization of ChatGPT does not align with students' identity (values and expectations of the social environment), and simultaneously senses a loss of core intellectual skills, such as critical thinking and deep engagement. Second, the traditional authority-based relationship between students and professors shifts toward a more *dialogical and trust-oriented relation*, aimed at addressing verification challenges. Third, students increasingly adopt *epistemic beliefs centered on efficiency, speed, and the automation* of problem-solving, positioning themselves more as evaluators than creators of knowledge. Fourth, across all dimensions, a *growing dependence on and trust in AI-generated content* emerges, often at the expense of human input and peer exchange.

The findings suggest that technological developments do not merely introduce new tools or automate processes; they also exert far-reaching effects on social relations, particularly within organizational settings. While this thesis focuses on the university as a case in point, in other organizational contexts, performative effects are likely to emerge, given that relationships and epistemic structures are central to all organizational life (Bailey et al. 2022). Moreover, a broader discussion is warranted on the role AI should play in higher education and how its use can be aligned with university standards to preserve

academic integrity; this remains still a “phenomenon-in-the-making” (Scott & Orlikowski, 2025). At present, there is no shared understanding of its implications, underscoring the need for continued dialogue, exchange, and more standardized guidelines.

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