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Assessment Task01: Practical Qualitative Research Exercise

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Introduction

The rapid integration of generative artificial intelligence (GenAI) tools, such as Microsoft Copilot and OpenAI's ChatGPT, has introduced new opportunities and challenges in higher education. These technologies are increasingly embedded in students' daily learning practices, providing benefits such as faster information retrieval, improved writing support, and enhanced productivity. However, they also raise significant concerns about academic integrity, over-reliance, and the future role of human critical thinking in education.

Qualitative research is particularly valuable for exploring these issues because it captures the *lived experiences* and *subjective meanings* students attach to their use of GenAI, going beyond numerical measures to uncover personal motivations, ethical concerns, and identity-related impacts (Creswell, 2014). This report therefore presents a small-scale qualitative research design that investigates how university students perceive and experience the use of GenAI tools in their studies.

The report is structured around five key requirements: (1) a justification of the topic and research question, (2) a comparison and selection of appropriate methodologies, (3) a detailed data collection plan, (4) a mock thematic analysis of sample data, and (5) reflexivity on the researcher's role and engagement with GenAI. Together, these components demonstrate how qualitative approaches can generate deep insights into contemporary ICT challenges while ensuring ethical and transparent research practice.

Section 1: Topic Justification and Research Question

The increasing integration of GenAI tools, such as Microsoft Copilot and ChatGPT, is transforming university learning environments. While these tools provide efficiencies in writing, coding, and problem solving, they also raise questions about academic integrity, learning depth, and the changing role of students and educators. This study focuses on exploring students' lived experiences with GenAI in learning contexts, including both the benefits and challenges of adoption.

A qualitative methodology is appropriate because the study seeks to capture the subjective perspectives and nuanced experiences of students rather than measure statistical outcomes. As highlighted by Creswell (2014), qualitative methods enable researchers to understand the context, motivations, and meanings participants attach to their experiences. In this case, it is not enough to know “*how many*” students use GenAI; instead, it is essential to explore “*how*” and “*why*” they use it, and what impact it has on learning, ethics, and self-perception. Qualitative research also allows for flexibility, enabling the researcher to follow emerging insights, which is critical given the rapidly evolving nature of GenAI technologies.

In framing this topic, GenAI was used as a reflective partner. ChatGPT was engaged to brainstorm potential areas of controversy, such as plagiarism risks, skill dependency, and shifts in collaborative learning. This initial exploration provided diverse perspectives that informed the narrowing of the research question. However, its influence was critically assessed to ensure that the final framing reflects genuine research intent and not just AI suggestions.

Research Question:

How do university students perceive and experience the use of generative AI tools, such as Microsoft Copilot and ChatGPT, in their learning, and what meanings do they attach to these experiences?

Section 2: Methodology Comparison and Selection

When designing a qualitative study on students' experiences with generative AI in university learning, two methodological approaches emerge as particularly relevant: Phenomenology and Case Study.

Phenomenology seeks to explore the lived experiences of individuals and uncover the essence of how a phenomenon is perceived (Husserl, 1970; Van Manen, 1990). Applied to this context, phenomenology would allow the researcher to understand how students personally experience GenAI, how they make sense of its role in their studies, and what meanings they attach to its use. It is especially appropriate for topics involving perceptions, ethics, and emotional responses, since it highlights subjective meaning rather than objective measurement.

Case Study, on the other hand, investigates a contemporary phenomenon in its real-life context (Yin, 2018). Using a case study, the research could focus on a bounded context such as one course, faculty, or university and examine how GenAI adoption is embedded in teaching practices, policies, and student behaviours. A case study would allow for the use of multiple data sources (e.g., interviews, documents, observations) to provide a holistic view of how GenAI impacts academic practices within a specific setting.

While both methodologies are valuable, phenomenology is the most suitable choice for this study. The research question focuses on *how* students perceive and experience GenAI, which aligns directly with phenomenology's emphasis on lived experience and meaning making. Case study would risk narrowing the scope to institutional practices, whereas the aim here is to privilege the voices of students. Moreover, phenomenology enables the exploration of shared themes across diverse individuals, providing insights into common concerns (e.g., academic integrity, skill dependency) as well as unique personal narratives.

Thus, phenomenology will be adopted to capture the depth and richness of students' subjective experiences with GenAI in their learning environments.

Section 3: Data Collection Plan

Participants and Recruitment

The study will target undergraduate and postgraduate students who have used GenAI tools such as ChatGPT or Microsoft Copilot in their coursework. A purposive sampling strategy will be adopted, as it ensures participants have direct experience with the phenomenon of interest (Creswell, 2014). Recruitment will be carried out via MyLO announcements and student society mailing lists, with a brief invitation outlining the study purpose, ethical safeguards, and voluntary participation. Approximately 6 to 8 participants will be recruited, which is appropriate for in-depth phenomenological interviews.

Data Collection Method

The primary method will be semi-structured interviews, as they balance consistency with flexibility. Semi-structured interviews provide a guiding set of questions while allowing the researcher to probe deeper based on participants' responses (Braun & Clarke, 2006). Each interview will last around 30 to 40 minutes, conducted online via Zoom or in person depending on participant preference. Permission will be sought to record the sessions, and detailed notes will also be taken.

Ethical Considerations

Participation will be voluntary, with informed consent obtained before interviews begin. Students will be assured of anonymity, confidentiality, and the right to withdraw at any stage. Given the sensitivity of discussing academic integrity and reliance on AI tools, care will be taken to frame questions neutrally to reduce discomfort. Data will be securely stored and accessible only to the researcher.

Sample Interview Questions

1. Can you describe your experience of using generative AI tools in your learning?
2. How have these tools influenced the way you approach assignments or study tasks?
3. What challenges or concerns have you faced when using GenAI (e.g., ethical, skill development, trust)?
4. How do you think GenAI has changed your relationship with lecturers, peers, or learning in general?
5. Have you ever felt conflicted about using GenAI? If yes, could you explain why?
6. Looking ahead, how do you see GenAI shaping your future learning experience?

Constraints and Reflections

The main constraint is the short two-week timeframe, limiting the number of participants and the opportunity for longitudinal follow-up. To address this, interviews will be carefully structured to maximise depth within limited time. Another constraint is potential self-censorship from students fearing judgment; hence, anonymity and non-judgmental framing will be emphasised. While a larger focus group might have encouraged discussion, one-to-one interviews were chosen to ensure participants feel safe sharing potentially sensitive perspectives.

Section 4: Mock Data Analysis

4.1 Mock Interview Excerpt

“I started using ChatGPT at the beginning of this semester, mainly to help me brainstorm ideas for assignments. At first, it felt exciting, like I had a study partner who was available 24/7. It helped me organise my thoughts, especially when I was stuck. But over time, I noticed I was relying on it more than I expected. Sometimes I would copy its explanations directly into my notes without really thinking critically about them. That made me a little uneasy, because I worried, I might not be developing my own skills as much as before. Another concern is ethics. I know the university encourages innovation, but I’m always afraid someone might think I’m cheating if I mention I used AI. On the positive side, it has saved me hours on simple tasks, like rewriting paragraphs or summarising articles. So, I see both sides: it’s efficient, but I also worry about over-reliance and whether I’m really learning deeply.”

4.2 Initial Coding

- Idea generation
- Constant availability
- Dependency
- Passive learning risk
- Skill erosion
- Ethical concern
- Efficiency
- Tension between efficiency and depth

4.3 Theme Development

- Learning support
- Dependency and skill erosion
- Integrity concerns
- Productivity
- Efficiency vs depth

4.4 Coding Table

| Excerpt Quote | Code | Theme |
|---|-----------------------|----------------------------|
| “Brainstorm ideas for assignments” | Idea generation | Learning support |
| “Study partner 24/7” | Constant availability | Learning support |
| “Relying on it more than expected” | Dependency | Dependency & Skill Erosion |
| “Copy explanations directly” | Passive learning risk | Dependency & Skill Erosion |
| “Not developing my own skills” | Skill erosion | Dependency & Skill Erosion |
| “Worried about cheating” | Ethical concern | Integrity concerns |
| “Saves hours on simple tasks” | Efficiency | Productivity |
| “Efficient but worried about deep learning” | Tension | Efficiency vs Depth |

4.5 Interpretation

The analysis shows that students have mixed feelings about GenAI. Many see it as a useful tool that helps with brainstorming ideas and saving time. At the same time, some worry about becoming too dependent on it, losing their own critical thinking skills, or accidentally crossing ethical boundaries. Instead of seeing GenAI as completely positive or negative, students seem caught in between, appreciating the convenience but also feeling uneasy about the long-term effects.

This contrast highlights a bigger issue for universities: how to balance efficiency with deeper learning. GenAI can make study tasks easier, but it should not replace the skills students are expected to develop during their education. Such ambivalence underscores the need for balanced integration of AI tools in higher education (Braun & Clarke, 2006; Creswell, 2014).

4.6 Critical Reflection on Data Realism

The mock excerpt, generated with GenAI support, appears highly balanced and neatly structured. Real-world data would likely be more fragmented, emotional, or contradictory. Thus, while useful for illustration, GenAI-generated data must be treated cautiously and distinguished from authentic participant voices.

Section 5: Reflexivity and GenAI Use

As a postgraduate ICT student, my positionality influences this research design. I am personally interested in the role of GenAI in education and have used tools such as ChatGPT for brainstorming and clarifying technical concepts. This creates potential bias toward perceiving AI as beneficial. At the same time, I am aware of academic integrity risks, meaning I approach the topic with both curiosity and caution.

To minimise bias, questions are framed neutrally, and reflexivity is maintained throughout. As Berger (2015) emphasises, reflexivity requires researchers to continually interrogate their own assumptions and positionality, thereby enhancing the transparency and trustworthiness of qualitative research.

GenAI was used in this assignment for three main purposes:

1. Brainstorming potential research topics and ethical dilemmas.
2. Phrasing support when refining interview questions and the mock transcript.
3. Analytic prompting for identifying initial codes.

Its use was critically assessed, acknowledging that while GenAI is efficient and polished, it lacks the authenticity and messiness of real student voices. By explicitly reflecting on this engagement, the research process maintains ethical responsibility and transparency. This reflexive approach enhances credibility and aligns with best practices in qualitative research transparency (Berger, 2015).

Conclusion

This assignment presented a qualitative research design exploring students' lived experiences with GenAI in higher education. Using phenomenology, semi-structured interviews, and thematic analysis, the study foregrounds the tensions between support and dependency, efficiency and deep learning, and innovation and academic integrity. Reflexivity and transparency ensured researcher bias and GenAI influence were acknowledged, strengthening the credibility of the design.

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