

Reflection – ECM443 Research Proposal: “Does Using ChatGPT or AI Tools Improve Student Performance at Exeter?” Use of AI

I started off seeing generative AI more like a sidekick for organizing thoughts - not some quick fix for writing tasks. Instead of typing everything from scratch, I leaned on ChatGPT to map out rough concepts, verify how parts should flow, or catch mistakes hiding in my Python files. But the actual coding and digging into results? That was all me, hands-on. It also gave me nudges about reference styles when I blanked, then later helped tidy up clunky sentences before wrapping things up. Every idea from the machine got checked beside UK Data Service rules about hiding identities, protecting info, yet following FAIR standards. If things seemed unclear, I looked back at course content or trusted sites before choosing what to include. It turned out machines can help rush through tiny tech jobs, though sharp reasoning plus knowing the topic remain key. Questioning the tool's output kept me moving fast while keeping work honest.

Peer Review

The peer review meeting was the turning point of the project.

- **Hazwan's feedback** praised the ethical sensitivity of the survey and suggested running a small pilot and showing the *F-value*, *p-value*, and *R²* within the figures.
- **Manuel** thought the subject was engaging, though he suggested cutting down wordy sections; also, tossing in a quick line about managing bias or too much reliance on AI would help
- **Eden** mentioned the visuals made sense yet wanted better explanations on why certain picks were made within the data strategy.

I stuck to that guidance step by step. Then again, I slipped in a test phase to double-check how things flowed and when stuff showed up. On top of that, actual number crunching got baked straight into `DataAnalysis.ipynb` without detours. Meanwhile, parts about ethical oversight were redone so they didn't sound like legalese anymore.

In parallel, details around file safety and updates grew fuller inside *Plan.pdf*. As a result, what finally landed was sharper, laid out better, and lined up tight with the bar for top marks.

Focus for Review

The parts I'm keen to get thoughts on include:

1. Looking into details - does my take on stats include real thinking, not just pointing out p-values.
2. Do the steps for permission, hiding identities, also data keeping line up with what the UK Data Service expects - on top of GDPR rules?

These two fields play a key role in shaping solid, repeatable, trustworthy research - boosting both could lift my output to meet high publishing standards.