

Reflection of my Research Methods & Professional Practice Module using: (Gibb's Reflective Cycle)

Link to my E-Portfolio: <https://bayr-harrison.github.io/eportfolio/index.html>

Description

I entered the Research Methods and Professional Practice module with a clear sense of what was missing from my skill set. Technically, I was confident. In my professional role, I work daily with data, dashboards, reporting systems, and operational analytics. What I lacked was confidence in the research process itself, how to identify a meaningful research problem, engage critically with literature, design a methodologically sound study, and address ethical considerations in a structured and defensible way.

The module pushed me into that space gradually. Early units focused on professional, legal, and ethical issues in computing, using codes of conduct and case-based reasoning. Later units moved toward research design, statistical reasoning, and independent investigation. The artefacts produced across the module reflect this progression, from ethics-focused discussions and statistical worksheets to a full literature review and research proposal. By the end of the module, I was no longer thinking only about how to analyse data, but about how research decisions determine what data can legitimately say (Gibbs, 1988).

Feelings

At the start, I felt motivated but uncertain. Research felt slower and less concrete than technical work. In analytics, success is immediate, a query runs or fails, a visual works or it does not. Research involves ambiguity, delayed feedback, and uncertainty about whether the question itself is well formed.

The ethical discussions, particularly around AI, triggered a stronger response than I expected. I had only recently begun using large language models regularly and was seeing their benefits everywhere, including in my own work and study habits. At the same time, I felt uneasy. The idea that constant assistance might weaken other skills resonated with me personally. This tension between usefulness and dependence became a recurring thread throughout the module.

Choosing a literature review topic forced me to confront that tension directly. I initially leaned toward safer topics aligned with my professional background, such as dashboards in business practice. However, I realised the question I genuinely cared about was what sustained LLM use does to human thinking and writing. Committing to that topic felt risky, but intellectually honest.

Receiving a distinction for the literature review marked a turning point. It validated both the topic and my ability to engage critically with it. Positive feedback on the research proposal presentation, particularly around criticality and structure, reinforced that I was developing the judgement needed for independent research.

Evaluation

The most valuable shift produced by this module was how it reframed ethics as part of research design rather than a compliance exercise. The Unit 4 case study on GDPR principles showed that decisions about consent, access, transparency, and data minimisation shape a study from the outset.

This prompted me to move beyond GDPR and examine how these principles operate in my professional context in Saudi Arabia. I independently researched the Saudi Personal Data Protection Law (PDPL) and compared it with GDPR. While both emphasise lawful processing, purpose limitation, and data minimisation, PDPL places particular weight on data localisation, explicit consent, and the responsibilities of data controllers within the Kingdom. Unlike GDPR, PDPL is still developing through guidance and phased enforcement, which places greater responsibility on organisations and data professionals to interpret and apply its principles proactively.

This comparison challenged my assumption that ethical frameworks transfer cleanly across contexts. It directly influenced my research proposal, where I avoided invasive data collection, minimised identifiable data, and ensured participation and withdrawal were clearly separated from academic assessment. Ethics became a design constraint that strengthened the study.

The statistical worksheets also grounded my thinking. Exercises on summary measures highlighted how easily a single metric can mislead, a problem I routinely encounter when reporting performance data at work. They forced me to ask what a measure represents, whose perspective it privileges, and what it hides (Menold and Bogner, 2016).

The literature review and proposal were the strongest learning moments. The review pushed me beyond summarising sources toward identifying patterns, tensions, and gaps. The proposal then required translating those gaps into a feasible study design.

Analysis

The central insight from this module is that research quality is largely determined before any data is collected. Choices about research questions, constructs, instruments, and ethics shape what conclusions are possible. This became clear when designing my proposal on long-term LLM use in academic writing.

The literature showed consistent short-term improvements in fluency and organisation, but weaker evidence around long-term independence and critical thinking. I initially assumed this gap reflected a limitation of existing tools. Through the research process, I came to see it instead as a methodological problem and a research opportunity. Designing a study that tested learning transfer, rather than performance with AI present, required more deliberate methodological thinking.

My earlier work on questionnaire critique sharpened my awareness of how easily

measurement can fail. Ambiguous wording, inconsistent scales, or poorly defined constructs can undermine findings while appearing rigorous. This informed my decision to separate language proficiency from academic reasoning in the proposal.

Ethically, the module shifted me away from broad assurances toward concrete safeguards. Avoiding AI detection tools, minimising data collection, and prioritising transparency were not only ethical choices but methodological strengths. They reduced bias, protected trust, and aligned the study with developmental rather than punitive approaches to academic integrity.

Conclusion

This module changed how I think about research and my role within it. I moved from seeing research as abstract to something grounded in real institutional contexts and ethical responsibility. The most important lesson I take forward is that analytical skill without methodological and ethical awareness is incomplete.

The confidence gained from completing both the literature review and research proposal is particularly important as I approach the dissertation. Having already navigated this process makes the next stage feel challenging but achievable.

Action Plan

As I move into the dissertation and computing project module, I will actively apply the research methods, ethical frameworks, and critical thinking skills developed in this module to the design and execution of my project.

In parallel, I will pay closer and more deliberate attention to the Saudi Personal Data Protection Law (PDPL) in my professional role. Given its evolving regulatory status, this responsibility often falls to data professionals to interpret guidance, model good practice, and raise awareness among colleagues. I intend to apply these principles consistently in both research and operational contexts.

References

Dillman, D.A., Smyth, J.D. and Christian, L.M. (2014) *Internet, Phone, Mail, and Mixed-Mode Surveys: The Tailored Design Method*. 4th edn. Hoboken, NJ: Wiley.

Few, S. (2013) *Information Dashboard Design: Displaying Data for At-a-Glance Monitoring*. Analytics Press.

Gibbs, G. (1988) *Learning by Doing: A Guide to Teaching and Learning Methods*. Oxford: Oxford Polytechnic.

Menold, N. and Bogner, K. (2016) 'Design of rating scales in questionnaires', *GESIS Survey Guidelines*. Mannheim: GESIS.