

ePortfolio URL

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End of Module 6 Reflection

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In the beginning

I started this module not fully appreciating the mental challenges that lay ahead. It was complex and challenging because of three items: statistics, literature review (LR) and literature proposal (LP). Also, the course's structure was confusing; several units had indicators like "For MSc students". I was unsure if this applied to students on the diploma route looking to move into the final project. The advice obtained from student support and the module tutor clarified my misunderstanding.

Discussion Topics

I desperately needed time to contribute to the LR (and later, the RP) and felt that needlessly engaging in the discussion forum hindered my focus on these two components. Although the interactions were higher in this module than in previous ones, I note that engagement depends on how captivating a student's post is; not everyone engages, therefore bringing no real value. Nevertheless, the topic of ethics in research was thought-provoking because research can be suppressed (Elisha et al., 2022), remain unpublished (Bonato, 2018), or lack integrity (Moher et al., 2020). It instilled in me the need to be mindful to behave with integrity, especially when undertaking research.

But are my numbers trustworthy?

I do not have a statistics background, so terminology like two-tail, mean, mode and p-value were new to understand (though I heard “mean” before). The example worksheets were beneficial and aided a basic understanding, but I think statistics deserve several more weeks. And considering that statistics is an essential requirement of an RP, I feel I would have benefited from less time on discussion forums and more time on statistics. Regardless, the brief exposure in this module triggered thinking of new ways to present data; I am intrigued by the hidden meaning of data. For example, downward trends imply *something*. Clusters of numbers mean another thing. Both of which might not necessarily be revealed by the visible data.

Hello? Is any literature out there?

I feel this module also did not sufficiently prepare students to understand an LR or RP in the context of real-world use. Why? Because, despite the e-book, searching YouTube videos, broader internet searches, and tutor engagement, I had no clue *what* was required. For example, students were instructed that they could submit an RP based on either a unique topic or their LR¹. But they must not use the topic of their LR for their RP². This contradiction took a massive toll on my mind while preparing for the RP.

For the LR, I am pleased with the outcome and experience of completing it. It was challenging and confusing, yet my experience is that it is an excellent way to improve my understanding of a topic of interest. The formative draft submission feedback was tremendously valuable, which I used to guide the content by addressing each point raised. Also enjoyable was learning to structure an LR chronologically, topically, or thematically. This knowledge was a lightbulb moment because I saw the similarities in how researchers structure their systematic literature reviews. Overall, I feel the LR assignment contributed positively to my skill set.

In contrast, preparing an RP was awful and horrendous; I will not do this in a hurry. Too much time was wasted reading literature, looking for gaps. Apart from a few pages in the e-book (Dawson, 2005), the module provided little practical guidance on developing an RP. I was mentally paralysed and did not know *what to focus on*. I tried overcoming the paralysis by listing topics from several university computer science courses (see “Unit 6 - Thoughts: Resolving Topic Conflicts”). However, this list (and research questions (RQ)) did not help to

¹ Found in Unit 10: “This can be based on the literature review topic you chose in Unit 1 or the topic of your capstone project (MSc students)”

² Found in Unit 1: “Your literature review **cannot** be on the same topic as your capstone project.”

identify topics of specific interest. Why? For several reasons: (1) all my RQs were answered to some extent; (2) I felt the RQ would not produce sufficient data; (3) I felt the project might require more than six months (if using Internet of Things (IoT) devices); or (4) I lacked experience with technology like AI tools.

So, I tried choosing a topic from the LR: IoT for traffic accident prevention. I thought about networks, architecture, protocols, and interoperability. Yet again, I discovered that researchers *already* dealt with these points. Therefore, I branched into medical IoT, software architecture, UML automation, programming languages and research automation. After reading several research papers (see “Unit11 - Research Proposal – Literature Pain”), I became disheartened and ready to accept failure: I deviated from the original draft proposal several times, and the deadline was fast approaching. The framework by Müller-Bloch and Kranz (2015) provided a starting point to guide my thoughts, but it did not help identify bleeding-edge research gaps.

Finally, I relied on work experience and concluded that—considering research gap failure—it is better to *try* than *not try at all*. So, I settled on the topic of topic modelling using datasets from programmer QA sites and recorded the presentation the day before submission, piecing together something half-decent. Although dissatisfied with the chosen topic, making the presentation was enjoyable by comparison. Writing a script, recording, replaying, listening, and re-recording was enjoyable because it was *practical*. It forced me to think about speech patterns, pace, and presentation structure. Here too, formative feedback was a handy beacon to help guide the design and content for the presentation.

Conclusion

In summary, I often contemplated the value of this master's degree versus *practical* certifications. Is the mental anguish worth it? I think the answer is both yes and no. Yes, because I gained valuable research and presentation skills, which benefit my career. And “no” because my goal is not to be an academic researcher. Time management was problematic, something to improve upon in the days ahead. Maintaining and improving the e-portfolio was always a welcome, creative relief when the RP became too much. Overall, I realise that the biggest hurdle to an RP is finding a meaningful research topic and gap. Had I prepared earlier in the module (asked questions, inquired, and looked ahead), perhaps the present experience would not be so bad.

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