Positioning the student as researcher: The Extended Investigation

By Micah Wilkins

Snapshot

This article explores how we position research students to be reflective and critical thinkers. Constructed to support the literature review of the VCE Extended Investigation subject, Michah Wilkins, offers strategies and insight that have broad application.

Almost 20 years ago, wide eyed and more than a little anxious, I started my tertiary adventures studying such things as environmental change, histories of nature, and even mathematics (mathematics was a particularly short and rather disastrous misadventure, but certainly taught me what I did *not* want to continue with! Sometimes doors closing are more important than doors opening). The plan was always to become a secondary school teacher, something that I have now been doing for the past 15 years.

In one of those circular moments we have in education, and perhaps in life more generally, in 2024 I find myself teaching a topic that I have not visited since my first year of university; Medieval Europe to a group of Year 8s. Recently I spent some time perusing old documents, essays and readings that I have kept from that time to see if there was anything that could be used with my current class. What began as a shallow dip ended up a deep dive into lecture notes and assignments from across my first year. It was at times embarrassing (*did I really write like that?!*), affirming, thought provoking, challenging, and even a little terrifying (predictions from 2025 about what the world will look like in 2025 are almost too real).

...it is perhaps more important than ever to equip our students with mindsets, toolsets and ways of thinking to navigate our world.

The final two slides of a lecture in week one stopped my dive and forced a return to the surface. For I had stumbled upon something that demanded attention, required a slowing down, and warranted a response.

> Take note of this, the slide said. You need to know a body of information (facts). You need to be able to organise that information to construct an argument and be able to communicate it. You need to understand how arguments are constructed for your own benefit and to assist you in assessing the work of others and forming your own opinions (Finlayson, 2005).

We were being explicitly instructed to learn to be reflective and critical thinkers. We were being encouraged to ponder, wonder and slow down. This was by no means a new concept

20 years ago, but it was new for me and probably for the 300 other students in the lecture hall that day (I can only assume!).

We were being explicitly instructed to learn to be reflective and critical thinkers. We were being encouraged to ponder, wonder and slow down.

In an era where we are bombarded with [mis]information and fake news, it is perhaps more important than ever to equip our students with mindsets, toolsets and ways of thinking to navigate our world. This is even more pertinent due to the proliferation of GenAI which can 'accelerate the spread of rumour, conjecture, inadvertent misinformation and deliberate disinformation' (NSWPL, 2024: 49) and has led to peer-reviewed scientific journals being filled with thousands of fake AI-generated papers (Nova, 2024).

So, how might we educate students to be critical of the information they come across? It starts with the teacher in the room making careful and informed curricular and pedagogical choices based on the context they work within and the students they have in front of them. We need to slow down and not rush through the content and curriculum in order to fit everything in. If we really want our students to get to know something, we (individually and collectively) need to spend time with it. People spend an average of eight seconds looking at a work on display in a gallery. But what happens when we spend five minutes, fifteen minutes, an hour or an afternoon really looking in detail at an artwork? This is 'slow looking' (TATE, n.d). Whether we are studying a text in English, a function in Maths or technique in Art, if we want our students to be critical and reflective thinkers then we might need to consider taking a 'slow looking' approach to our teaching.

Students first need to know a 'body of information' and have at their disposal a range of tools to work with that information ('assess the work of others'). A significant part of my teaching over the past decade has involved working with Year 12 students as they undertake an 'extended investigation' on a topic of their choosing. Students develop a research question, situate their research within the broader body of research, as well as collect, synthesise and analyse data. The investigation culminates in a 4000 word research report and 20 minute oral defence of their research findings. What follows is a brief overview of one of the ways I have worked with students as they learn to read and write critically in the context of an extended investigation.

Through this process students learn to construct arguments, communicate them and ultimately form their own opinions.

Hosting a dinner party

When working with postgraduate research students, Kamler and Thomson (2014) use the metaphor of a dinner party to help students understand how to position themselves and situate their research within a community of scholars. They write:

> The researcher invites to the table the scholars she would like to join her for a conversation over the evening meal. The emphasis is on the company and the conversation that happens at the table. The researcher has selected the menu, bought the food, and cooked the dinner which she offers her guests. As host to this party, she makes space for the guests to talk about their work, but in relation to her own work. Her own thesis is never disconnected from the conversation, for after all it lies on her table. It is part of the food the guests eat, chew and digest.
>
> The dinner party metaphor makes it clear that she cannot invite everyone because they will not all fit at her table. She is not just a bystander or 'reviewer' of the conversation, but a participant (p. 38).

The dinner party metaphor might not resonate with many high school students, so I extend it to a family dinner or a birthday party. We discuss questions including:

- What was it like?
- What did you do?
- What did you eat and drink?
- Where did you sit?
- What were the topics of conversation?
- What was the flow and mood of the party?
- How artificially generated was the party?

...entering an academic field can feel like navigating occupied territory, where established scholars hold significant influence.

By participating in a teacher-led discussion about a party (birthday, dinner), students are acting as the scholars invited to share their experiences, opinions and perspectives. This modelling of the types of interactions and behaviours is important as it creates an experience that students can come back to as they go about their investigation.

One way this approach can be fostered is to create a visual representation of the dinner party in the form of a hierarchical structure or flow diagram (Cresswell, 2009). This involves considering the sub-headings, links between ideas/concepts/themes, and references used. Students should consider what arguments are being made and what reasons and evidence are being used to support them.

This practice can help students identify connections, contradictions, and potential areas for further research.

It is important to remember and recognise that this process is not without its challenges, particularly for the novice researcher. Literature reviews are the 'quintessential site of identity work' and entering an academic field can feel like navigating occupied territory, where established scholars hold significant influence (Kamler and Thomson, 2009, p.29). This is akin to navigating complex social dynamics at a dinner party, where pre-existing relationships and hierarchies exist. Guidance is required as students enter this space, helping them understand the power dynamics and established perspectives at play, while finding their voice and developing their identity. Through this process students learn to construct arguments, communicate them and ultimately form their own opinions. This is identity changing and forming.

Therefore, we must teach our students to become critical of their own thinking.

The dinner party metaphor can be used to illuminate the process of writing a literature review, highlighting the active role researchers take in shaping the conversation within their field. Finally, any good host who ensures their guests leave with a satisfying and memorable experience, a well-executed literature review should leave readers with a clear understanding of the field's current state, the researcher's position within it, and the potential for future research.

Students evaluate each new experience, and what the experience implies, against their prior knowledge and beliefs. Student misconceptions, blind spots and biases are difficult to spot and even harder to unpack and unpick. Therefore, we must teach our students to become critical of their own thinking. As Mead suggests, 'the ultimate goal [of teaching thinking] is to safely leave our students with some sense of dissatisfaction with their current thinking' (2019, p. 23). As students become more established and confident party hosts, and more critical of their own thinking, the 'haze of blissful unawareness' will be lifted from the table.

And this, my first week university slide concluded with, ***never believe anything***.

References

Creswell, J. (2009). 'Review of the literature'. In J. Creswell, *Research design: Qualitative, quantitative and mixed methods approaches*, Sage, 23-47.

Finlayson, B. (2005). 121-171 'Environmental Change'. Lecture. The University of Melbourne.

Mead, D. (2019). *The Expert Teacher: Using pedagogical content knowledge to plan superb lessons*. Wales: Independent Thinking Press.

New South Wales Parliament Legislative Council. (2024). 'Artificial intelligence in New South Wales'. Portfolio Committee No. 1 - Premier and Finance. Report no. 63.

Nova, J. (2024). 'So much for "peer review" — Wiley shuts down 19 science journals and retracts 11,000 gobbledygook papers'. Accessed July 2024. https://joannenova.com.au/2024/05/so-much-for-peer-review-wiley-shuts-down-19-science-journals-and-retracts-11000-fraudulent-or-gobblygook-papers

TATE. (n.d). 'A Guide to Slow Looking'. Accessed July 2024. https://www.tate.org.uk/art/guide-slow-looking

Thomson, P. & Kamler, B. (2014) *Helping Doctoral Students Write: Pedagogies for supervision*. Chapter 3 ('Persuading an octopus into a jar'). Hoboken: Taylor and Francis.

Micah Wilkins *is the Digital Learning Leader at Mount Scopus Memorial College. He has specialist teaching experience in Geography, History and Extended Investigation. Alongside his teaching, for the past decade, Micah has served in leadership positions across two leading girls' schools with particular responsibility for learning innovation, digital learning and staff professional learning and engagement.*

Micah is a proud supporter of SLAV, and the SLAV Extended Investigation Network, and has contributed by running workshops on designing and asking 'good' questions as well as how to read literature critically. He can be found on LinkedIn here