Teaching and Learning Together in Higher Education

Issue 25 *Fall 2018*

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DEVELOPING STUDENT ENGAGEMENT AS A STEPPING-STONE TO PARTNERSHIP: TEACHING AND LEARNING IN CRITICAL THINKING

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Introduction

Meaningful engagement with students and their learning is a stepping-stone to partnership: without the former, it is difficult – if not impossible – to reach the latter. In this essay we discuss and reflect on the challenges to how we engage with students and some of the solutions we have devised as tutors in a Critical Thinking course at Massey.

From 2016, students enrolled in a Bachelor of Arts (BA) at Massey University have been required to complete five core courses in addition to the requirements of their major. The rationale behind this decision was that critical awareness is a sought-after attribute among employers seeking to hire Arts graduates. There are three main branches to the core: writing and research skills, citizenship (the only branch to go beyond 100-level), and critical thinking. This last course is our teaching focus.

When defining Critical Thinking, we realise it is a term used in a wide array of contexts with different meanings. An appropriate definition for us comes from Siegel (1990), who outlines a number of salient characteristics of critical thinking, primarily that it entails subject-independent, logical skills in the assessment of validity, but also requires subject-specific knowledge in order to evaluate credibility. Further, a critical thinker possesses certain attributes among which are a questioning propensity, a sympathetic and impartial character and the willingness to examine evidence objectively. Our brief, then, is to develop students' knowledge in terms of introducing learners to analytical, subject-independent tools, while also encouraging reflection. This means we offer affordances for self-development as this two-stranded approach is most commensurate with our desired learning outcomes. In addition to the direct learning outcomes of the course, one of the goals of the BA Core is to produce informed citizens. It is important that "there be an educated citizenry, capable of rational political debate . . . in the strongest traditions of the Enlightenment" (Belgrave 2016, p. 490). We take the position, then, that a good citizen is a good critical thinker.

Our course, *Tū Arohae*: Critical Thinking, is an interdisciplinary introduction to critical thinking in response to the broad number of disciplines studied across the Humanities and Social Sciences. As such, to accommodate this range of academic representation, the course has been designed (by William Fish and Stephen Duffin, the course convenor and Manawatū/Distance co-ordinator, respectively) to be broadly appealing and practically useful. For instance, we have dropped the use of Latin terminology for specific argument forms taught in more traditional Critical Thinking or informal logic courses, and instead we integrate the application of these argument forms more broadly into our teaching. We try to minimise metalanguage and jargon in an effort to maximise engagement.

We teach students to break down arguments, both large and small, into diagrams so that they can be efficiently dissected and discussed. For example:

The moon is made of cheese, therefore the moon is edible.

The statement "the moon is made of cheese" is the premise, "therefore" is a term indicative of an argument taking place, and the statement "the moon is edible" is the conclusion. Students would mark the argument up and diagram it as follows:

1. /The moon is made of cheese/, <therefore> 2. /<u>the moon is edible</u>/.
1
↓a
2

This allows students to dissect the argument efficiently – we can now talk about "Premise 1," for instance, rather than having to rewrite it each time. This becomes particularly helpful in longer arguments, as it gives students a visual map of the argument in order to evaluate it thoroughly and effectively. This deconstructive approach makes it easier for students to get to the heart of the argument, an invaluable skill in the world of so-called "fake news" and "alternative facts." We acknowledge that this diagramming style does have its roots in informal logic; we continue to use it because of its utility.[1]

What is student engagement?

In reflecting on the ways we have tried to bolster student engagement, it will be useful to have a model of what engagement is and what it looks like. There is growing evidence of its importance to teaching and learning (Kahu, 2013, p. 758). Student engagement is a complex construct, and for the purposes of our work, we use Kahu and Nelson's (2018, p. 59) three-tiered model of engagement "as an individual student's psychosocial state: their behavioural, emotional and cognitive connection to their learning."[2] Alongside this tripartite model are four additional factors which influence – and are in turn influenced by – engagement: self-efficacy – which in this context we understand as "an individual's belief in their capacity to perform a given task'" (Kahu & Nelson, 2018, p. 64) – emotions, belonging, and wellbeing. For ease of reference, we refer to these collectively as the *dependent factors*. Kahu and Nelson refer to structural and psychosocial influences on student engagement as well; for reasons of space we will focus here on the educational interface segment with occasional interludes on the psychosocial influences of the model, partially because it is there that we as tutors have the greatest effect.

What are the problems?

There are three major hurdles to engagement – and partnership – in our Critical Thinking course. First, it is a compulsory course. Second, the largest proportion of the class is engaging with the course by distance learning. Finally, students find navigating the unfamiliar learning environment challenging.

[1] Monroe Beardsley's *Practical Logic* (1950) is the earliest text we know of to use this kind of diagramming. The style we use was developed by Patterson (1989), and refined by Duffin in *Reason in the Real World* (2006) and Fish and Duffin in *Tū Arohae: Interdisciplinary Critical Thinking* (2017). Our style is developed in part to be easy to complete on a computer.

[2] The emotional connection reflects a student's interest and enthusiasm for the subject and the institution, a cognitive connection reflects deep learning and self-regulation, and behavioural engagement is participation, time and effort, and interaction. It is this last aspect of engagement which we as teachers tend to focus on – probably because it's the most quantifiable.

A compulsory course could be seen as anathema to student engagement. Because it is compulsory, some students may feel that they are *forced* to take it, usually in their first year of study. Additionally, the topic is unfamiliar and it looks like we are teaching *common sense*, particularly to mature students who may have been implicitly using critical thinking techniques for some time. This means students are less likely to have emotional engagement with the course. It seems to us that a student who is emotionally engaged with a course is more likely to engage cognitively and behaviourally. That is, such a student is more willing to devote mental resources to learning the skills, and so more likely to participate in the course.

Distance learning is a significant part of most Massey courses. Tū Arohae: Critical Thinking is taught internally at Massey's Manawatū (Palmerston North) and Albany (Auckland) campuses, as well as extramurally all over the planet. The extramural cohort of students is always the largest; internal classes at Palmerston North and Auckland tend to have between 80 and 100 students, where extramural classes are in the 250-300 bracket. Students within the internal classes are comparatively easy to forge a rapport with as we can physically see and enjoy their engagement. We also know when students do not attend tutorials or lectures and typically their grades reflect this choice. There are, of course, students who cannot attend class because of timetable clashes with other classes or work, and students for whom lectures are not suited to how they choose to learn. But, in the main, internal classes offer us an opportunity to create a relationship with students and foster a sense of belonging among our community of learning. The challenge with teaching at distance, especially with a large cohort which is spread out across the globe, is to foster a sense of belonging and forge teacher-student and peer relationships in a way that is as close to the internal experience as we can realistically achieve.

The teaching and learning of critical thinking has a number of unique features not found in many other areas: first, by its very nature, it stands in opposition to the dominant *banking system of education*, characterized by Fahim and Masouleh (2012) as a system that places the teacher as the dispenser of knowledge and students as mute and passive recipients. We see critical thinking inherently as situated within the problem posing ideology of education, and consequently solutions are achieved collaboratively. In this we encourage the development of student input and the potential to develop a *voice*. Second, critical thinking is capable of being applied in multiple areas and in multiple disciplines, although it is certainly true that what the hard sciences interpret as being *critical* does differ dramatically from the understanding of the term in, say, drama studies or literature. Our student cohort comes from diverse backgrounds and may have differing levels of education and computer literacy, which can present challenges for certain students. Coupled with this is the fact that Critical Thinking is a skill untaught through the schooling system in which students are perceived as being passive receivers of knowledge.

Reflections on approaches

To encourage student engagement in our role as tutors we focus on five aspects of Kahu and Nelson's (2018) educational interface framework (p. 64): emotional and cognitive engagement, and the dependent factors of self-efficacy, belonging, and wellbeing. Here we explain these strategies and their purpose.

Distance Students

The distance cohort is divided into three groups – one for each tutor. Each group has a forum, and we post a weekly discussion question loosely connected with that week's course material. One such question, for instance, is the famous Rosie the Riveter poster. The question is: what is this trying to persuade you of, and how is it doing this? This engages students emotionally and cognitively by providing interesting material that they are more likely to care about and which is selected to be thought-provoking. The discussion questions boost students' sense of self-efficacy in that students have an opportunity to apply the skills they are learning, and seeing other students and their tutor making similar comments. It also develops a sense of community and belonging as students can develop peer relationships. This helps us hurdle the problems of distance and unfamiliar territory, in that students feel less isolated and have other students with whom to engage, and applying the skills they are learning helps them become more familiar.

The course material is divided into boxes; at the bottom of each box is an activity and a comments section. Students are invited to provide examples from their own lives which reflect the course material, and take an opportunity to seek clarification or ask questions. Staff read and reply to the comments as required. The system we use has changed; the comments system introduced in Semester One 2018 has proven much more effective than the previous system, as comments are now nested (like comment replies on Facebook, for example). This makes it far easier for students and staff to reply to comments as they receive notifications. The number of comments has been very high and there have been many student-led discussions in the comment sections. This aims to boost emotional and cognitive engagement and develop self-efficacy in much the same way as the discussion questions do, except these engagement activities are presented in the course material itself.

All Students

Internal students have a weekly 50-minute tutorial; we run weekly 30-minute tutorials for distance students through Adobe Connect. Internally, these tutorials offer opportunities for discussion, group work, and exploring the course material from different angles. Online tutorials offer an opportunity to have questions answered in real-time and have more of a connection with staff and other students than is possible through forum posts or email. Online tutorials are student-led rather than a mini-lecture, offering students an opportunity to ask about what is interesting them or concerning them rather than us directing the discussion. We have found that this student-led approach stems from and reflects students' emotional and cognitive engagement with the course material. The tutorials themselves are another opportunity to develop student self-efficacy and a sense of belonging. Online tutorials also go some way to reducing the obstacle of distance, as well. Where they are most useful, though – this is most true for internal tutorials – is in helping navigate the unfamiliar territory of collaborative education. Students are more accustomed to actively participating in tutorials than they are in lectures, and we set up the tutorial environment with the expectation of participation, though we do try to take account of the different ways students like to engage in their learning and allow the more introverted or socially anxious students to learn in an environment in which they are comfortable. Periodically, we use an approach akin to the flipped-classroom, where we provide material for discussion prior to the tutorials.

The first four weeks of the course are assessed by quizzes, the first two of which are deliberately easy to give students a sense of self-efficacy which is likely to improve

engagement later in the course. This also addresses the resentment of compulsory courses as students feel that Critical Thinking is something that they can achieve well in.

Using MediaSite, we produce videos for each major assignment, and videos on course material from time to time. These are particularly targeted at cognitive engagement and students' sense of self-efficacy. The videos help remove ambiguity and demonstrate what we are looking for in an assignment, thereby giving students a clear focus for their thinking. Seeing examples presented and explained in real-time also helps students scaffold their learning, and increase their sense of competence and ability to complete the task. This results in developing their sense of self-efficacy as they can monitor their progress, and the effort required to attain the task. Further, the lecturer Steve Duffin has uploaded humorous weekly introduction videos (Tuckey, 2016).

We try to keep the examples and case studies we use current, and we constantly send each other interesting articles we have read. Students are more likely to care about things happening in 2018 than in the dim mists of history. Additionally, they have more cognitive tools to help them discuss and evaluate current events. Students seem to appreciate the value of the course relative to their day-to-day lives and engagement with politics, news, and so on. This ties in with the core goal of building good citizens as well as thorough academics.

We write and regularly update the major assignments to include current or interesting material, as students are more likely to engage with contemporary debates, particularly given the diversity of majors undertaking the course. As our approach to assessment is primarily, though not exclusively, formative rather than summative, each student receives detailed personalised feedback on their assignment. This is to help them with the next task or, if they fail an assignment, to improve their grade through resubmission. Using tutor feedback students can make another attempt at the assignment and receive a better grade. As an example of co-construction of assessment, we, the staff and students, work together on the assignment in order to achieve the best possible outcome for the student. Including students in this process "may increase their self-efficacy, leading to increased engagement and success" (Kahu & Nelson, 2018, p. 67). We note that this particular kind of co-construction has a high success rate for those students who choose to participate in it. It is not uncommon for students to go from a fail grade to a B or higher on resubmitting. Course feedback supports such an approach: "It is also so good (for the students, maybe not so much the tutors!) to have such in depth and explanatory marking. I really felt like my tutor was trying hard to help me, rather than mark my work pointing out errors" (Anonymous post-course feedback). Rather than adopting a punitive approach to student evaluation, we endeavour to do our utmost to encourage student engagement with the assessment process in order to maximise learning opportunities.

We strive for flexibility. We do not – indeed, cannot – know the situation any individual students finds themselves in regarding time commitments. Students who miss a due date are invited to submit and told their assignment will be marked with no penalty for lateness. We do this to ensure students have the opportunity to remain engaged if they have been distracted – and thus allow for student success – and to help those students whose engagement stumbles to get back up and get back on the wagon. Further, we aim to be flexible in our assessment responses and feedback and avoid dogmatism in the answers. Many of these problem-posing characteristics innate to critical thinking give rise to fresh challenges for both learners and teachers in the study and application of critical thinking. For students accustomed to the banking model of education, the notion of relativism – that the *answer* to a particular issue

may depend on our pre-existing belief systems – or as Hamlet would say 'there is nothing / either good or bad, but thinking makes it so' (II.ii.249-50) – can be challenging on a personal level for many students. Indeed, some are unable to accept relativism as they may incorrectly interpret it as nihilism. As Cottrell (2017) argues, "[it] is also challenging to question our belief systems. We think of these as part of our identity and it can be unsettling if we feel our identity is called into question" (p. 6). This sense of unsettlement among learners, although pedagogically desirable in this area, can act as an affective barrier to effective application of critical thinking processes and can thus hinder the efficient development of communities of learning and collaborative approaches – in many cases and on many topics, we simply have to "agree to disagree," given that our reasoning on an issue may be based on an unshakeable part of our world view. That said, we are open to others' arguments and are willing to allow ourselves to be convinced. As teachers, we mark student work without definitive answers and are receptive to alternative possibilities. Indeed, in a subject such as critical thinking the inherent vagueness of language means that interpretations of a particular argument may differ, resulting in a different, yet equally defensible outcome. We feel this allows the students to feel that their voice is valued within the classroom, which is an important and empowering step towards partnership.

Working towards partnership

Kahu and Nelson argue that their engagement framework is able to explain how partnership influences student engagement (2018, p. 67). It is quite true that partnership can boost student engagement. But in the main, it seems, engagement is a stepping stone to partnership; engagement forms a platform on which a partnership can be built. It is not necessarily feasible to reach partnership in a single semester, but through our engagement strategies, our approach is to create a strong foundation for partnership with staff throughout a student's degree.

As students advance through their courses, partnership between staff and students becomes increasingly important and achievable. Our focus in Critical Thinking is to build a habit of engagement which can flourish into partnership. Student feedback seems to indicate that this is working: "It changed my life and how I consume news and literary works"; "I would go as far as saying it has reformed my entire way of thinking" (Anonymous student feedback). Further, we seem to have made some progress towards mitigating the resentment felt by some about it being a required part of their study: "it was compulsory but totally invaluable.....thank you, thank you, thank you Massey Gods for making it compulsory. I have loved engaging with the content, so much so that every week I diligently printed off all of the screens to keep for future reference" (Anonymous student feedback).

We have made a number of advances in student engagement, and progressed towards partnership. We should consider, though, what *else* we can do in order to foster engagement and progress further towards partnership. For instance, it might be objected that our strategies of engagement privilege those students who are behaviourally engaged anyway; those students at distance who do not, for one reason or another, engage in the digital space are going to miss most of our efforts at boosting engagement. This is a fair criticism, worth considering. Just because we cannot measure engagement does not mean it is not happening, though: "Although I was not particularly active on the forums, I also found the ongoing conversations between staff and students really helpful and encouraging throughout the learning process" (Anonymous student feedback). There is certainly more we can do to assist

at-risk students, who are likely to fall behind. The challenge is to provide support without becoming overbearing.

Apart from this, there are two areas which are not receiving as much attention as the others: emotional engagement and a sense of belonging. To deal with the latter first: it is not clear what else we could do to improve students' sense of belonging, particularly when our end-of-semester feedback surveys indicate that the sense of community in the distance class is appreciated. For instance: "students on the course have been very supportive and whilst not meeting anyone personally, I feel that there are possible friends out there, not just fellow students" (Anonymous student feedback). There is evidence that students would like online tutorials devoted to the assignments, which are recorded for other students to watch. We are planning to continue with our weekly online tutorials but also have additional online tutorials for assignments, which we will record. It might be useful to have these assignment tutorials available to internal students both in the Manawatū and Albany as well.

Emotional engagement, then, is the next step – apart from refining what we are doing currently. Considering that Critical Thinking is compulsory, and is potentially a fairly technical and relatively dry course, this is a considerable challenge. One step is to create some additional material for students to consume in their own time which is not related to the course, but is related to the subject. One way might be to produce a podcast, or similar, which roughly follows the course but can take a different approach to the course material. This can provide students with a sense of relevance as the podcast can show where Critical Thinking is useful, and it can cater to different learners who are find learning from text more difficult than listening to something spoken. Another option is to create more videos, like the ones mentioned above. These would be short clips, explaining technical terms or giving worked examples to cater to our visual/auditory learners. Students have reported that they find it useful to see the process carried out in front of them. Another method is the use of humour to lower affective barriers and consequently reduce impediments to learning - as Horace argued: "what is to prevent one from telling truth as one laughs?" (*Satires* 1.i.24-5). Indeed, with apologies in advance for first-year grammar, student feedback strongly supports such an approach: "my tutor Rebecca James PAY HER MORE AND PROMOTE HER [sic] - she is a fantastic, most helpful tutor, she explains the content so simply to understand, makes the content (which is sometimes boring) funny and engaging" or "the humour expressed by our tutor. it was invaluable and very much appreciated" (Anonymous student feedback). We concede there is a balancing act between effective teaching and stand-up comedy; we do not want students to feel the course material is being trivialised while at the same time aiming to maximise enjoyment and engagement. Horace again: "mix a little foolishness with your serious plans. It is lovely to be silly at the right moment" (*Odes* 4.12). The trick is working out when the right moment is.

Conclusion

We have discussed several strategies we use to enhance student engagement and partnership in our Critical Thinking course. The purpose of engagement – apart from being a good in itself, engaged students are more likely to achieve better than disengaged students – is to provide a platform for partnership between staff and students. We hope the foundations for such a platform can be constructed in a single semester, and if students have certain expectations in engagement from the courses they take at the beginning of their studies they can emerge at the other end not mere students, but as partners. Even in the writing of this

piece, we have found the co-construction of ideas a fruitful source of discussion and debate through which we have identified future areas for development, and we will continue to consider further possibilities by which partnership can be enhanced by engagement.

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