PTAS Project Report   (for REGULAR PROJECT GRANTS)

Project Title: Critical Thinking Retreat

Project type (delete as appropriate) :
B Innovation Project (introduction and evaluation of an educational innovation, usually taking a practical approach)

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Schools/department : MHSES; Institute for Education, Community and Society

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Project teams must submit a report within 4 months of the conclusion of their project.
Copies of dissemination material (eg journals/newsletter articles, conference papers, posters should be listed and attached (separate to the word count). The brief report will be published on the IAD web pages.

Report (maximum 1500 words)

What did you do?

We developed materials for a *critical thinking retreat* to allow Master's students to develop their understanding of critical thinking within the context of *positioning theory,* using everyday examples of critical thinking as well as texts in their first language.   There were four sessions of the retreat. Our project was primarily aimed at students studying in a language other than their first language. In the context of the retreat, participants were 100% Chinese international students. The retreat had three components to support students with their learning of critical thinking skills. Firstly, we wanted students to consider their agency within the task of critical thinking. Using Positioning Theory (Reference) as a starting point, we aimed to show how different positions might influence approaches to critical thinking. We also aimed reduce any excessive cognitive load that might be present when learning a new skill in a language beyond the first. To do this, we designed tasks around papers that students were familiar with in their first language, rather than only teaching in English western texts. Finally, we were keen for learners to learn as apprentices within an authentic situation. Often critical thinking is taught as an additional course or learning endeavour that students can do beyond their courses or programmes. We embedded some of the materials within the context of the Master's dissertation, which is something that all students taking part, we in the process of starting. There were four sessions of 1 hour, spread across four weeks. Each week, in addition to the one hour session, students completed independent tasks. The one hour synchronous session was used to discussion the independent tasks and to allow students to engage in discussion with their peers about their learning. The contents of each session are attached as pdfs, with a brief overview below:

Session One: Positioning
We developed a series of three short videos which illustrated different *positions* that students could take in relation to critical thinking (student, practitioner and researcher). These positions were based on research by Pu & Evans (2019). The videos represented a discussion between a student and their personal tutor, where the student was discussing her reasons for choosing the University of Edinburgh. The text from the videos came from authentic interviews with students and represented 'real life' representations of the process of choosing University of Edinburgh. We discussed how different positions might reflect different approaches to critical thinking and then asked students to identify which position each video was reflective of. We also asked them to consider which position they most readily identified with in relation to their studies.

Session Two: Critical Reading
Students were invited to critically read a text that they were already familiar with (in their first language) to try to mitigate the challenges of reading in L2. The session gave an overview of critical reading and an opportunity for students to reflect on the process.

Session Three: Critical Writing
We used a text in English to allow students practice in identifying instances of critical writing displayed in the text. To overcome any potential issues of discipline-specific CT skills, we chose a text that would likely be of relevance, and hopefully interest, to all students.

Session Four: Application to dissertation
The final session focussed on supporting students to apply what we had covered in the previous sessions to their approach within their dissertation studies. Students were encouraged to consider the development of their position from the start of their Master's degree until the point where they were starting their dissertations. There was opportunity to discuss and reflect on how their positioning related to their approach to critical thinking and how they might develop further within the context of their dissertation writing.

As part of the retreat each week, students completed questions in response to the tasks. We used these as part of the evaluation of the project. We also conducted a number of small group interviews with 15 students.

What did you find out?

Student positioning
Even when students aspire to researcher positioning and critical thinking, they perceive other challenges that get in their way.   All students were able to correctly identify the student positioning in the videos that were created, suggesting that this was a useful tool for teaching. They could also articulate how the positioning might influence the critical thinking (e.g. the learner positioning was not proactive in finding out information and wanted someone else to tell them the answer). Almost all students said that they started their degree as a learner positioning, expecting teaching staff to tell them how to do critical thinking with concrete examples and lots of feedback. However, they suggested that their positioning had changed through becoming more familiar with the concept of critical thinking, and being on the retreat as the following interview excerpt shows:

> …before I came to study the Master programme I defined myself as a learner. [Laughs] Even when I first began my study. … But now, I found that myself kind of change because I realise that I can have my own thinking and others can have their own, and everyone has differences. There is no one right answer. And so, I want to be a researcher role in the video, but I don't think I actually do it because I still need to study more. Yeah. So now I would like to think that I combine myself as maybe learner and researcher. Yeah.

From the above, it is clear that although students might aspire to one positioning in regards to CT, there may still be obstacles in their way. Throughout the retreat, it became clear that many students had started their Master's degree not really being aware of what was meant by CT. They misunderstood it in the context of the Mandarin phrase *pipan* which, they reported, to mean criticise. However, there were differing perspectives amongst the students with some suggesting that pipangxing siwei is more like the western conceptualisation of critical thinking, encompassing an evaluative component:

> I think I had a little different opinion from [Participant 1]. Like, the critic side, the critical thinking, is pipanxing siwei. I agree with that. But pipan is not just pipan, but pipanxing siwei, which is kind of to understand it and then analyse it and evaluate it based on your understanding. It's not just like criticise, but you have to evaluate it. So but I think most of us had misunderstood this word in a negative way. Like, I agree with that. We all think in a negative way.

Having viewed the videos, students were able to identify instances in everyday life where they used critical thinking skills. They noted that this helped them to understand CT skills required for academic work. However, they were aware that in everyday situations, they had a lot more knowledge about a situation so it was easier to apply critical thinking skills:

> *Because when we apply critical thinking in some academic field we are not knowing so well, we first we need to learn more about this topic. Then we can be critical. But in a familiar context we, like … knowing this situations, and we can make our judgment based on our experience. But in academic field, we need to – first we need to know more. To know more and more, and we can trying to be critical.*

Knowing more so that they can engage in critical thinking was identified by most participants. They found challenges in knowing more because it meant that they had to read more in an L2 language. Effectively, they had the double challenge of understanding the requirements of CT but also dealing with the cognitive load of reading in a second language.

Critical Reading in First Language:
There were mixed responses to the use of a text in the first language to practice CT skills. Many students found the reading easier. However, the structure of English language texts was easier to follow in relation to CT. Students said that they found the texts in Mandarin that they used, had very few examples of CT and were not good for learning the skill. Many of the students reported that they would often translate the English papers into Mandarin in order understand the text. However, when they then had to construct their critical argument, they struggled because they were not familiar with how this should look. Having some form of direct instruction of this within their discipline would be beneficial.

Applying to Dissertation
Most of the students reported that the retreat materials were useful and especially the application to the dissertation writing process. This was particularly because there were specific examples that could be related to what they were doing at the time:

> *Yeah, OK. So first, I would say the material definitely help, and it help more than just me. [Laughs] So for Week Two and Week Three, I think we specifically – and Week Four, honestly – we specifically discuss about, like, how should you critically – what does it mean to critically view an article? What does it mean to critically write? And how to critically view your own writing? So that's very helpful, I would say, because it's more specific, rather than just telling you, oh, be critic.*

Timing and future delivery
Students said that the timing of the retreat might be brought forward in the academic year. We ran the retreat in May, when most were starting their dissertations. The students agreed that early semester one is not a good time since they are trying to settle in and get to know all University systems. However, mid semester one, before assignment deadlines would be optimum timing. The one addition that students overwhelmingly asked for was feedback on a portion of their writing. Throughout the retreat, and in the context of the group interviews, the theme of independent learning was clear. Expecting students to understand and master critical thinking skills without support seems to go against any good practice in relation to learning. Yet, the first feedback students receive is from their first essay. Our students reported that they did not really know they

had a 'problem' with CT until they received feedback late in semester one – too late for good semester one marks.

> *I think this critical retreat is really helpful. Like, is it possible that if this can be held before the – like in Semester One? During the Semester One? Like, before the first assignment, the first essays? Because in Semester One, we received our feedbacks of our essays nearly at the same time. Even if we can – we don't have other ways to get the feedbacks on how to be critical. Am I doing this? Is that critical? Is that counted as critical thinking? So I think some of the students would feel confused. They don't know how to – they don't know whether they are critically thinking or not.*

Overall, students reported difficulty in understanding the concept of CT due to differing Mandarin terminologies, they also did not feel it was their place to critique scholars. The positioning videos were helpful in identifying how positioning might relate to CT approach. Even when students understood CT and aspired to researcher positioning, they still found difficulties in reading in a second language and acquiring enough background knowledge to effectively critique (acknowledging they can do this in everyday situations as they do have the background knowledge). Finally, to support the students further, they suggest brining the retreat forward in the academic year and integrating some feedback on writing each week.

How did you disseminate your findings?

We disseminated in the following ways:
University of Edinburgh Learning and Teaching conference session.
Presentation at UK Council for Graduate Education Conference (presentation pdf attached).

We are also in the process of writing an academic journal article. However, this has been delayed and we are aiming for end November now. A copy of the paper will be forwarded.

What have been the benefits to student learning?

Around 125 students accessed the critical thinking retreat materials to support their learning in the dissertation phase of their degrees. For the students who responded to our questions and interview groups we can identify that the retreat helped them to more fully understand what is meant by CT and how to apply it in the context of their assignments, particularly the dissertation. Of importance were a number of factors that have been raised from the retreat that can be used to shape future teaching and learning in our programmes. We would suggest the following:

We should not assume that students of similar demographic backgrounds will have similar experiences or understanding of CT. Teaching staff should therefore spend some time understanding their students and being clear what it means in the context of their course or discipline. This is particularly important since CT is part of the marking criteria and students want to do well. We suggest it should be the responsibility of courses and programmes to support this, alongside more central supports.

The use of positioning and real life CT situations can support students to be able to identify the potential relationship between positioning and CT skills.

Embedding critical thinking examples through situated pedagogy allows students to see concrete examples of what is expected of them. This can be done by being explicit in lectures to show where the lecturer is being critical, identifying critical writing in texts and supporting learnings in constructing their own critical arguments.

How could these benefits be extended to other parts of the university?

The video materials are available openly on media hopper. We would be happy to make the weekly materials available also in a central location and then teaching staff could amend to suit their particular discipline.

Financial statement (please delete as appropriate):

Either
This project has utilised the funding awarded to it by the PTAS adjudication committee and the Principal Investigator or School Administrator appropriate can provide financial statements showing the funding usage as and when required by the UoE Development Trusts who may require it for auditing purposes.

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