Critical Thinking: Teaching Foreign Notions to Foreign Students

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The internationalisation of Australian universities presents a double challenge for student support services, to provide academic support programs that address perceived culturally based academic differences and to provide support programs which are culturally sensitive, inclusive and which contribute to the success of international students. Critical thinking is a paradigmatic case. Universities insist that critical thinking is a requirement of quality academic work while academics bemoan the lack of a critical approach to study by international students in general, and Asian students in particular. The challenge for transition programs is how to incorporate critical thinking within their framework without adopting either a deficit or assimilationist approach. This paper will discuss the difficulties inherent in this challenge and put forward a possible approach adapted from a strand of the Introductory Academic Program (IAP). However, questions are raised about the overall value of teaching critical thinking in this context.

International student, critical thinking, assimilation, deficit, academia

BACKGROUND

One of the outcomes of the continuing internationalisation of Australian universities is that academics are being exposed to an increasingly diverse student population from increasingly diverse language-speaking cultures. In Australia, this has meant extensive exposure to students from the South-East Asian region who make up over 80 per cent of the international student body (DETYA, Selected Higher Education Statistics, 1999). Problems arise for academics when they are confronted with what appear to be academic differences between this cohort of students and mainstream or local students. Any discrepancy between the academic standards and expectations of the academic and those of the international student will have an impact on the potential success of that student. If those discrepancies really do exist, then the institution has a responsibility to address them.

Both international students and academics tend to identify language proficiency as the major problem and, hence, addressing the language proficiency of international students as a means of resolving the difficulties (Murray-Harvey and Silins, 1997). One cannot dispute the importance of this focus. The need for bridging programs to support language programs for international students is well documented (Baker and Panko, 1998; Choi, 1997; Kinnel, 1990; Macdonald and Gunn, 1997) and Macdonald and Gunn (1997) found a significant relationship between the level of English proficiency and psychological distress for international students at one British university.
However, research findings have revealed that the problems are much deeper than just language proficiency. Academics identify more extensive areas of conflict such as learning styles, participation, collaboration, independence, plagiarism and structured/non-structured learning. In particular, South-East Asian students are commonly stereotyped as passive, non-critical rote-learning students who do not engage in deep learning (Ballard, 1995; Mills, 1997). Even when the problems are identified as stemming from different learning styles and attitudes, these are seen as a reflection of different learning capacities and, hence, as a deficit that needs correcting by additional teaching strategies. As a consequence, bridging programs designed for international students have tended to focus on both language proficiency and perceived inadequacies in students' background knowledge and skills (Samuelowicz, 1987; Fraser, Malone and Taylor, 1990).

According to Biggs (1997), the problem with this approach is that it stems from what he terms ‘conceptual colonialism’. Basically, one takes one’s own limited cultural or, in this case, teaching experience as the paradigmatic case. As a consequence, the differences manifested by international students are identified as deviations from that norm, which become problems to be resolved. The solution is seen as bringing all students up to scratch with one’s own standards and models of teaching. Many academics reflect this attitude and most of the current support programmes offered to international students are devised with this objective in mind.

An alternative approach is to acknowledge the existence of equally legitimate culturally relative differences to academic study. This approach recognises differences in attitudes to knowledge acquisition as stemming from different cultural perceptions and understandings. No single cultural perspective is seen as more valid than another. An attempt is then made to teach students from within their own cultural parameters. Although this latter position is seen as an improvement on ‘conceptual colonialism’, and is currently seen as the only politically correct one, it is not without its problems (Biggs, 1997). It is extraordinarily difficult to understand and work effectively within an alternative cultural paradigm. At the same time, focusing on culturally specific differences tends to not only exaggerate differences (rather than similarities) but may actually identify some cultural differences as being educationally or cognitively significant when this may not be the case. It can also create what can be called the ‘alien’ syndrome. An over-emphasis on difference could lead either side of a supposed cultural divide to an inability to relate to each other as fellow human beings. Hypersensitivity to perceived differences could then become a potential obstacle to understanding and productive interaction, rather than a means to enable understanding and positive interaction.

There is some evidence that cultural differences in approaches to educational learning do exist, in particular with students from a Confucian-heritage Culture, although we need to be cautious about what we can draw from this (Mills, 1997). Even so, students from South-East Asia are not an homogenous cultural group and differences between them are quite marked. Some Asian groups reflect only a few or, in some cases, none of the characteristics identified as problematic by academics (Smith, 2001). There is also evidence that rote-learning per se is not a good indicator of surface rather than deep learning, that passivity has more to do with what students feel is culturally appropriate in particular environments and that often collaboration, rather than independent learning, is valued more highly in some cultures than individual achievement (Kiley, 1998).

It is easy for academics and advisors to become fixated on the differences between South-East Asian students and the local student population. Biggs (1997) argues that any perceptions of academic difference need to be treated with caution. Firstly, there is an assumption that if certain students are unable to cope in a particular learning environment, then the problem lies with the student rather than the teaching methodology. Secondly, it is not evident that the differences
identified between student cohorts of differing nationalities do exist and, even if they do, that they represent a learning deficit that needs correcting. He further claims that any such differences can be accommodated within good, flexible teaching methodologies.

**CULTURAL SENSITIVITY AND LEARNING**

If we are to accept that there are significant enough differences in learning styles and attitudes between different cultural groups to be problematic, then these need to be addressed or accommodated in order to facilitate successful transition. Yet it would appear that both 'cultural colonialist' and 'culturally relativist' models are equally problematic. In addition, some researchers claim that universities have displayed a lack of appreciation of the 'depth of the cultural...shift needed for students to successfully adjust to the new environment' (Rosen, 1999, p.7). Ballard and Clancy (1988; cited in Beasley and Pearson, 1998, p.14) argue that to become literate at university means “a gradual socialisation into a distinctive culture of knowledge”. Therefore, bridging programs should not only address language and academic proficiency, but the cultural and social transition of students into the Australian university context.

An extension of this view is presented by Perry (1999). He claims that international students must become adept in the culture of the host country as well as the university they find themselves studying in, in order to develop their levels of thinking. There is some limited support for this statement (Hird, 1999). However, this again reflects a form of 'cultural colonialism' and an insistence on assimilation or integration to achieve success. It is debatable to what extent international students should be expected to accommodate the two cultures, and to what extent they should be encouraged to critique and resist dominant models and norms. At the same time, students who resist or fail to adopt the institutions standards or practices may very well be academically and socially disadvantaged.

In relation to this issue, Macdonald and Gun (1997) probed the views of a number of international students through informal interviews. They found that students, in the main, resented the notion of having to integrate into the new culture to achieve academic success. This expectation has been variously described by them as patronising, demeaning and unjustified. Similar research findings have emerged in relation to Indigenous and Maori students (Farrington, DiGregorio and Page, 1999; Gorinski and Abernethy, 2003). If institutions want to improve the satisfaction levels of international students, then they need to ensure that the students feel capable and included. It is, therefore, contingent on any transition program aimed at International students to try to induct students into the expectations of their particular institution, without making the student feel academically or culturally deficient. Programs need to familiarise the student with the academic requirements of their institution while ensuring the student engages positively with the university without feeling that their own cultural and academic values are compromised. This is particularly challenging when it comes to teaching something like critical thinking.

**THE ROLE OF CRITICAL THINKING**

Critical thinking is considered the most distinguishing feature separating University academic standards from Secondary Schools and the one academic area not overtly addressed at high school. In fact, academics often complain about the paucity of critical thinking skills in commencing students' work. Although critical thinking has always been viewed as a necessary attribute of all successful tertiary students, there has been an increasing emphasis in recent years on the overt acquisition or teaching of critical thinking skills, with most academic disciples now making this requirement explicit. There is no longer an assumption that students will acquire the skill in the normal course of their academic degree. Subject topics specify the need for a critical approach or evidence of critical thinking by including the role of critique, critical reflection, or
critical analysis in their course outlines. Essay questions clearly state that critical analysis and evaluation will be a part of their grading. It is becoming increasingly common for academic staff to request sessions on critical thinking for first-year students, (it is part of the Flinders Accelerated program), and it has even been included as a component of most university postgraduate training programs. Critical thinking is considered such a crucial skill that it has become a marketable asset. Each university advertises a list of generic graduate attributes that they claim their students acquire as part of their degree. Critical thinking and related areas such as problem-solving skills, argumentation and text analysis skills, figure prominently in those lists.

In regards to international students, a critical thinking capacity has been picked out as an important distinguishing feature between Western academic models of study and non-Western or Confucian-based learning systems (Biggs, 1997; Cadman, 2000; Mills, 1997). In line with this finding, South-East Asian students are generally perceived to be non-critical in their approach to academic texts and are considered to lack an understanding of the requirements of analysis and critique. Coupled with this is the demand itself from International students. They have heard of critical thinking, are concerned about critical thinking and express an interest in finding out about it. In their courses, they are often disconcerted by critical thinking language; what it means and what it entails.

Given the demand from the University, the academic staff and the international students, it is clear that critical thinking needs to be incorporated into any transition program. Yet, as Macdonald and Gun (1997) show, international students can feel patronised by the attitudes of academic staff and transition programs that work from a deficit model, or which focus heavily on assimilation. This outcome is particularly likely when dealing with the overt transmission of an intellectual skill which is largely viewed as essential to academic inquiry, is seen as self-explanatory within the culture, and is seen as predominantly lacking in South-east Asian students. The challenge is how to familiarise students with the concept of critical thinking in a way that is neither assimilationist nor working from a deficit model, and to do it in a way that can avoid the reaction that Macdonald and Gun highlight.

PROBLEMS WITH THE CRITICAL THINKING CONCEPT

First, it needs to be acknowledged that the teaching of critical thinking is not without its problems anyway, regardless of who we are teaching it to. Even though we may all have an understanding of what critical thinking entails, in a broad sense, it is not always clear what the concept encompasses. This can be seen by the various ways it is defined. According to the National Council for Excellence in Critical Thinking Instruction (Scriven and Paul, 2003), critical thinking is “the intellectually disciplined process of actively and skillfully conceptualising, applying, analysing, synthesising or evaluating information gathered from or generated by, observation, experience, reflection, reasoning, or communication as a guide to belief or action”. Others describe it variously as “self-directed, self-disciplined, self-monitored and self-corrective thinking” (Paul and Elder, 2000) or “the process of analysing, evaluating and synthesising information in order to increase our understanding and knowledge of reality” (Sievers, 2001). It is also viewed as purposeful, involving “the use of those cognitive skills or strategies that increase the probability of a desirable outcome” (Halpern, 1997).

Although these definitions are fairly typical, they are very broad and non-specific, giving no clear indication of what needs to be taught. Likewise, there is seldom a clear enunciation of or general

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1 All universities' Research Training Programs can be viewed on their websites.

2 Again, graduate attributes are listed on all university websites under that title or under teaching and learning outcomes. Similar graduate attribute lists appear on University of Nottingham and University of Sheffield advertising material.
agreement between academics across disciplines in regards to what they believe critical thinking is. Rather, there is an assumption that all academics, from whatever background, can reliably ascertain the presence of or lack of critical thinking skills in a piece of work. Yet what counts as evidence of critical thinking is rarely shared with the student. The lack of clear guidelines makes it difficult for students to know what the requirements entail in practice and also makes the general teaching of critical thinking problematic. If we are not clear what we are teaching, we are unlikely to have clear goals in place and a clear set of student outcomes to measure. This also makes reliable evaluation of both the student and the topic difficult. If the teaching of critical thinking is to be made explicit, this uncertainty needs to be resolved.

CRITICAL THINKING AS A CULTURAL CONCEPT

There is, however, a far more interesting issue that emerges from the conceptualisation of critical thinking, which is particularly relevant to the teaching of international students. If one examines the definitions outlined above, they appear to represent a kind of 'ideal' model of thinking. All the definitions rest on the assumption that the kinds of thinking illustrated are not only desirable, beneficial and attainable but they are universally valued. Critical thinking is seen as the epitome of good thinking. This widely-held perception is clearly illustrated by the National Council for Excellence in Critical Thinking Instruction (2003) who claim that,

In its exemplary form [critical thinking] is based on universal intellectual values that transcend subject-matter divisions; clarity accuracy, precision, consistency, relevance, sound evidence, good reasons, depth and fairness.

It is clear that critical thinking is seen as a skill that is both objectively valuable and self-evidently useful. According to Angelo and Cross (1993, pp.65-66), a critical thinking approach should be applied to “virtually all methods of inquiry practised in the academic disciplines” and is a key goal of the liberal arts and general education courses. On the other hand, how can one do good science without using reasoning and logic or without using a critical thinking, problem-solving approach? If this assumption is true, then cultures which do not adopt this approach cannot do (or cannot be doing) good science. The students from those cultures cannot be learning good academic thinking skills. As a consequence, international students who do not master this method of thinking will be at a distinct disadvantage; not just because they do not know what this university requires of them but because all good thinking relies on this method.

The problem with this position is that it assumes two things; that good reasoning is exemplified by the critical thinking skills illustrated and that it should be universally valued in that form. It fails to acknowledge that our understanding of what critical thinking entails, is heavily influenced by our academic history and traditions. A reasoning capacity may very well be something that all humans have; it may be a generic cognitive capacity. This does not entail that good reasoning is universally valued in all cultures or that it is valued in the same way. Even if good reasoning skills are considered desirable by most people, in most cultures, what counts as evidence of good reasoning is not universal. What Western academics recognise as evidence of reasoning, the tools used to reason with, the language and structure of the argument, actually represent a cultural, rather than a universal, method. This is important to acknowledge and understand.

First, the concept and practice of critical thinking comes from the discipline of Philosophy. Australian academic traditions have evolved from the British university system, where, right up to the 1950s, the study of Philosophy was a necessary component of a good quality university education. As a discipline Philosophy incorporates both formal and informal logic, epistemology, metaphysics and ethics. Critical thinking techniques are a necessary component of each of these areas, with strict criteria of what constitutes acceptable reasoning, evidence, analytic techniques
and argumentation. These standards have traditionally been incorporated as the basis for academic rigour in all disciplines.

Second, the critical thinking tradition adopted from Philosophy, exemplified by the use of analysis, logic, argument structure and the scientific method, is very much a Western cultural product (Lloyd, 1996). As stated, the methodology and resulting constraints on what counts as good reasoning are dictated by philosophic tradition. The Western philosophic tradition stems from the classical Greek tradition epitomised by Socrates, Plato and Aristotle, which was revived by the Jesuits in the Middle Ages in Europe and was successfully adopted by British scientists of the 18th century. The Greek tradition was based on competitive discourse and dialogue using a range of argumentation skills, which are still used today. Providing proof or justification was essential and depended on using linguistic analysis and a linear logic epitomised by mathematical proofs. Status was gained by destroying an opponent's argument, through detailed critical analysis, and by constructing a convincing argument of one's own as a rival point of view. This is in strong contrast to the classical Chinese tradition that relies heavily on analogy and circular reasoning (Lloyd, 1996).

This indicates that what counts as critical thinking in the West, the type of reasoning techniques used, and the style of written critiques expected within Australian universities is not something universal, even if reasoning itself is. Critical thinking, as we know it and expect it from our students, is part of a rich cultural tradition going back to the ancient Greeks. The following section illustrates how this acknowledgement and understanding can help teach critical thinking to international students in a culturally sensitive way.

IMPLEMENTATION OF CRITICAL THINKING FROM A CULTURAL PERSPECTIVE

For the last two years, critical thinking and argumentation skills have been included in the Flinders Introductory Academic Program (IAP), to address the demands of both academics and international students. The approach adopted acknowledges the cultural academic tradition, which has led to the critical thinking model practiced in the West. It incorporates aspects of the process used in the Australian Culture stream; making explicit the cultural assumptions and expectations of Western Academia.

Paris and Winograd (1990) suggest that a concept of learning that embraces socio-cultural and cognitive aspects of the students' experiences provides a more appropriate model for learning than solely behavioural or information processing models of learning. A socio-cultural and cognitive model implies a direct relationship between the students' perception of learning and the strategies used for learning specific tasks. Student learning is then mediated through the students' social, cultural and individual background characteristics and the learning situation that the students find themselves in (Gordon, Cantwell and Moore, 1998). Biggs (1997) puts forward a similar concept. He claims that teachers should be developing teaching methodologies which are adaptive in their structure and which allow students to negotiate their learning objectives, preferred learning styles and methods of assessment.

The IAP for International students at Flinders University attempts to address these problems. The approach involves making Australian cultural assumptions, attitudes and practices explicit, rather than just presenting them as desirable modes of behaviour that students should adopt. International students are expected to observe and recognise different modes of behaviour and to gain knowledge about their underlying rationale from within a very specific social/cultural context. This enables students to make their own judgements about what behaviours they need to incorporate in order to be able to operate successfully in an alien culture. Such behaviours are thus not seen as representative of a dominant culture that requires them to assimilate but instead, are
seen as coping mechanisms, which ensure their ability to move freely within the culture with the least possible anxiety or sense of alienation.

Student feedback has indicated that the students involved in the program feel better informed about the culture, feel more at ease about operating within it, and did not feel that their own values or cultural practices were compromised. The program also made it easier for international students to make their own cultural values more explicit. Not only does this process give students a choice about what parts of cultural practice they might adopt but it also leads to empowerment. If one's own cultural perspective is explicit, it can be more readily reflected upon. This facilitates recognition of where cultural differences exist between the student, the institution and the staff. Acknowledgement and reflection on academic and socio-cultural differences enables a space for possible negotiation between them.

These principles have been incorporated into the teaching of critical thinking. The first step in teaching critical thinking to international students was to make them aware of the history and to explore the cultural assumptions behind the legacy. We felt it important to acknowledge that critical thinking, as we know it in the West, is not universal. It arises from a very specific set of historical, political and social conditions. As such, it needs to be placed firmly within that context. A discussion of those conditions and its evolution to its present-day status within the Western university is a necessary step in creating an atmosphere of cultural understanding and mutual respect. Students generally have found the history interesting and have become aware that the concept represents a cultural perspective that they may not be familiar with.

The second stage was to acknowledge that there are culturally different approaches to knowledge acquisition, of which critical thinking is one. The Greek method of critical philosophical discourse was underpinned by the pursuit of knowledge. However, alternative methods of knowledge acquisition were used effectively in different cultures. The Chinese method, for instance, was driven by pragmatism (Lloyd, 1996). The method involved trying to incorporate anomalies within the tradition through accommodation rather than adversarial argument. It is useful to be aware of these differences and to point out where the differences lie. This enables the student to perceive critical thinking as just one means to a common end. It becomes one technique among many. It also legitimises their cultural tradition. At the same time, it is important to point out why and how critical thinking is useful to their university study. In this way the student can see that it's acquisition is a necessary condition for success at a Western university, without feeling academically deficient.

The third stage was to illustrate the techniques and mechanisms expected within a Western critical thinking approach. This requires a self-conscious reflection on the process of critique and the subsequent construction of knowledge claims using a specific kind of argumentation. This is the transmission of content. Students participate in workshops where they are expected to recognise, assess and construct arguments by using the analytic techniques taught. It is hoped that by presenting the material in this way, students will understand the role it plays within the university and understand the criteria needed to successfully implement a critical approach in their own work that reflects the academic expectations of the university.

**STUDENT FEEDBACK**

To date, critical thinking and argumentation workshops have been presented to four consecutive cohorts of international students, using the above method. The program introduces the concept of critical thinking to students by describing its historical roots and the very particular social and political forces and events that led to its current status. At the same time, we illustrate the rationale for its inclusion, the advantages of the approach and the outcomes that can be achieved
by adopting it. It is important to make it clear that critical thinking is beneficial to students. However, this is couched in the context of learning any new skill, like learning how to use a computer or drive a car. The point we want to emphasise is that such skills are relevant or useful in certain particular situations.

Student evaluation of critical thinking so far has been very positive. However, the standard questionnaires do not reveal to what extent the teaching of critical thinking had successfully met the challenge initially outlined, namely, to teach it in such a way that the students did not feel culturally or academically compromised. In order to evaluate this aspect, four students from the July 2003 IAP cohort were interviewed to ascertain their views of the critical thinking component. The students were from the Philippines, Papua New Guinea, Kenya and Indonesia. The interviews were open-ended with students free to talk about the sessions, as they wanted. However, each student was prompted, if necessary, to elicit how or in what ways they found the critical thinking sessions useful, whether or not they found the material difficult, whether they were familiar with the concept, and in what ways the topic could be improved.

Primarily, the feedback shows that the students had a positive response to the topic. All respondents iterated the following points.

- They were unfamiliar with the concept prior to the sessions.
- The sessions gave them a clearer understanding of what critical thinking was.
- They perceived the sessions to be useful.
- They felt it was widely applicable.
- They felt academically challenged.

Second, their comments show that they see the sessions as particularly useful within the context of Australian academia. This indicates that they recognise it as a skill they need to adopt or learn in order to succeed in the university environment.

...the professors here are not so particular about your English grammar but more about your reasoning so I think it follows that critical thinking is what this university is looking for especially in the way you critique...

...it is the way here. We need it for evaluating.

...and knowing, knowing that is what you are expected to do, with that knowledge you are able to explore further and to actually think of some criticism.

What was particularly interesting was that they also felt that critical thinking was relevant outside of study as illustrated below:

...it's very relevant. I will be able to use it in all situations, both in academics and in work situations at home.

Good to introduce to students, as it is important in everything you do, helps in making wise decisions.

...this is why I was so interested in the process because I know when I go back to my country it will be useful in my profession.

As expected, all of the students said they had received no critical thinking instruction at their own universities. However, they each said that now, on reflection, they believed they did critical thinking at home without being aware of it: “critical thinking I would suppose now, was sort of part of debate but the critical thinking was really different thing” and, “back at home we did not know you had to do critical thinking or we did critical thinking without knowing exactly that is
what we are doing”. This response is extremely encouraging. The students did not feel they were deficient in some way or that critical thinking was something they didn't do, that it was purely a Western prerogative. What affected them, and what they appreciated, was the way the concept was unpacked. As one student said, “...it's sort of a system or process. It is systematically taught that...for instance in your subject you discuss about the ways of critical thinking, the words and the techniques on how to argue...” This method they found challenging, rather than patronising or demeaning. It made them feel they were learning something new and something intellectually in line with their academic level.

Overall, the responses were very encouraging. The students interviewed felt challenged and engaged but did not appear to feel academically deficient or culturally compromised. Even though they found the critical thinking concept unfamiliar and the techniques of argument analysis and justification difficult, this was in line with their academic expectations. International students are more likely to feel patronised if they are not challenged or confronted with new skills. In addition, their comments show that they recognise critical thinking as a particular approach which they are free to embrace or not, outside of academia. On the whole, they recognised it as an explicit, systematic enunciation of implicit good thinking techniques that they all practice to a greater or lesser extent.

**CONCLUDING REMARKS**

It is often difficult to uncover and make explicit one’s own cultural assumptions, biases and values. This is even more the case within an academic environment in which we are addressing what are perceived to be generic abilities or universally valued academic skills like the capacity to think critically. However, this needs to be done if we want to be successful at teaching foreign notions to foreign students without cultural bias.

The above represents one approach to dealing with the dual challenges outlined in this paper. The main focus has been on an acknowledgement of cultural differences and similarities within academic traditions, while explicitly outlining the university’s academic expectations. It has tried to avoid either an assimilationist or deficit approach. Work on effectively incorporating critical thinking into the transition program is ongoing. However, as illustrated, the feedback is very positive and is a good indication that this kind of approach can be effective.

Critical thinking is a vital part of teaching students how to think and write at university. Increasing demand for critical thinking teaching across the university means that there will be increasing demand for teaching centres to incorporate it into their academic support programs, particularly transition programs. This presents a new challenge for educators and teachers of critical thinking. Much as the above approach may facilitate the free enculturation of ideas, it is not clear how effective it is in teaching critical thinking itself. Acquiring critical thinking skills is a process that requires more than one introductory session to be effective. It is also debatable how effectively, if at all, critical thinking can be taught abstracted from academic content or outside of the discipline, as in the IAP. At the same time, how do we know we have facilitated the acquisition of critical thinking? What measures do we use? These problems are additional to the ones addressed in this paper. Yet they are broadly relevant to all students. As such, they will need to be addressed in the near future. Critical thinking skills are in demand and support centres will be expected to play an increasingly important role in the teaching of them.
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