

Teaching Critical Thinking in an English for Academic Purposes Program using a ‘Claims and Supports’ approach

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IALF Bali provides pre-departure training to Indonesian ADS scholarship recipients en-route to postgraduate studies in Australia. Over the last 2 years, we have been involved in a curriculum restructuring process aimed at incorporating critical thinking into our EAP programs. Although this process is ongoing, our training now endeavours to develop students’ language and critical thinking skills simultaneously, from the outset, regardless of their language proficiency levels. It does so by using a simple but effective approach to deconstructing, reconstructing and constructing ‘claims and supports’ in spoken and written texts using diagramming techniques to ‘map’ logical reasoning. We argue the ‘claims and supports’ framework offers a useful set of principles for teaching critical thinking in EAP programs, and also has implications for cross-cultural teaching and learning because it recognizes that approaches to knowledge construction differ from one culture to another. Difference does not mean deficit, but it does need to be made explicit, otherwise it forms part of a ‘hidden curriculum’ which blocks students’ success.

Background

There has been considerable debate in recent years about the necessity of explicitly teaching critical thinking skills in EAP training because of the recognition that such skills are vital to academic success in university in Australia (Benesch, 1999, Davies, 2003, Egege and Kutieleh, 2004; Thomas, Kazlauskas and Davis, 2004).

The rapid internationalisation of Australian universities continues. In January 2007 there were 209,037 International students studying in Australia, including 80% from Asian countries (DEST, AEI, 2007). On many Australian university campuses, international students now comprise more than 50% of the student body. Thus, addressing the first year transition problems of this group has become an urgent priority. The first year of university study is critical for all students but even more so for international students, who have to make the transition from one academic culture and intellectual tradition to another.

It is now generally accepted that the transition problems faced by non-native speakers of English at English-speaking tertiary institutions are not primarily language-based, but come about as a result of a general mystification about how Western academic culture works (Egege and Kutieleh, 2004). In particular, students are confused about the underlying purpose of readings, lectures, tutorials and assignments and what is expected from them as university students in Australia. These expectations are often not explicitly stated (Sinclair 2000 p 2).

A key requirement for success in university study is being *critical* and *analytical* in one's approach to texts and/or experimental data (Davies, 2003 p 1). Egege and Kutieleh note that Asian international students in particular, 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 (2004 p 3). Exactly what is involved in critically evaluating and being analytical, however, is frequently not made transparent to students (Sinclair 2000).

Asian students are commonly stereotyped as lacking critical thinking skills as if they suffered from some kind of cognitive deficit acquired from their cultural background (Egege and Kutieleh, 2004). However, in practice, it is rarely explicitly spelt out to students what it actually means to *apply* critical thinking skills. One reason for this is many academic staff only become aware of critical thinking when they notice its lack in their student's written work or participation in tutorials (Davis 2001 p 1).

There has been a growing recognition in the literature that the key critical thinking skill that students need to be successful in Western university study is the ability to deal with arguments (Davies, 2001, 2003, 2006). While the subject matter will vary from one university course to another, in almost all disciplines the major purpose of study is to develop students' ability to read, understand, evaluate, and construct arguments, both written and oral.

Lecturers and supervisors of South East Asian students often comment that students' written work is "lacking in argument" or that the work "seems to lack a clear critical focus" or, worse still, "is merely descriptive—contains no arguments at all" (Davies, 2003 p 2). This is so even for students who have a good level of English proficiency. In fact, even well written work can be poorly argued, suggesting as Davies comments that, "being critical *at least in part* is less a facility with language than a facility with *logic*" (2003, p 2). What Davis is referring to, of course, is Western logic and Western conventions of logical reasoning.

According to Davies, there has been a tendency in EAP and other bridging programs to think that teaching students how to use the critical language of academic discourse such as "in conclusion", "therefore", "it follows" is the same as teaching them critical argumentation and reasoning skills (Davies, 2003 p 4). However, the reality is that Asian international students frequently misuse logical connectors. For example, "Many people smoke and cigarettes are sold widely and therefore smoking should be banned", where the supporting premises do not logically lead to the stated conclusion. As Davies notes, if there is no logical connection between statements, even if they are joined by connector words there is still no argument (2003 p 4). This leads Davis to contend that critical argumentation has more to do with the content and structure of the logical reasoning than the language in which it is expressed. Evidence for this contention can be found in the fact that not all arguments use connector words and often arguments have implied rather than explicitly stated conclusions (2003 p 4-5). Davies concludes that the principles of argument used in critical university culture need to be explicitly taught to students as all disciplines require an ability to argue critically in essays, term papers or dissertations (2003, p 2). He notes that the mastery of critical reasoning is considered to be essential for academic success. What is meant by 'critical' in an academic context is to have supporting reasons for a position, which *logically demonstrate* the point being made (Davies, 2003 p 3).

Early hurdles to incorporating critical thinking skills in our EAP program

Recognising the importance of argument in Western academic culture, a major focus of our early efforts to incorporate critical thinking skills into our EAP program at IALF was to try to include material aimed at teaching students the structure of argument and how to construct and analyse arguments. There was a wealth of critical thinking materials available on the Internet and in published materials that attempted to give students these skills. However, we soon became aware that many of these materials were unsuited to our Indonesian students because they were aimed at a Western audience who already had an intuitive understanding of what it meant to 'evaluate' something by making and supporting a 'claim' and were therefore ready to move relatively quickly into constructing and evaluating arguments. Ennis's classical definition of critical thinking as 'the correct assessing of statements' (Ennis 1962 p 81 in Moore, 2004 p 5), did not appear to be the right starting point for our students.

In the Western intellectual tradition, people are encouraged from an early age to 'evaluate' ideas, things, people, places, events and experiences by making (and supporting) personal judgements about them. In everyday life, in most societies, people are bombarded with claims about products, about how nature or social systems or devices work, about health and welfare, about what happened in the past and what will occur in the future (DfES UK 2007). The Western intellectual tradition encourages people to deal with this barrage of claims by making judgements. People brought up in a Western intellectual tradition quickly learn that to *evaluate* something means making and supporting a judgment or *claim* about it. From an early age, children in Western cultures become opinionated because the Western intellectual tradition encourages them to have an attitude towards everything they encounter in their everyday life. They also learn that people may have different opinions about the same phenomena, which they contest by debating the relative merits of the reasons and evidence supporting their different views. In the Western intellectual tradition, everyone including children has the right to take and defend an opinion and to challenge others' opinions. Everyday conversation also incorporates a distinctively evaluative aspect, and even factual claims are often coloured by attitudes or opinions that reveal the speaker or writer's personal attitude towards that which they are describing.

Egege and Kutieleh argue that Western academic culture is very much a Western cultural product and has its roots in the classical Greek philosophical tradition. In the Socratic system of teaching and learning, scholars extend the parameters of knowledge by debating competing knowledge claims (2004 p 5). Students are expected to adopt the stance of another 'expert' in their field, rigorously defending personal positions but also critically demolishing opposing positions using logical reasoning and skilful argumentation (Sinclair 2000). In Western academic culture, students are encouraged to adopt a claim-based orientation to oral and written texts. They are urged by their teachers to assume a questioning attitude towards knowledge claims, frequently referred to as "reflective scepticism". They learn "the desirability of maintaining only provisional belief in claims" (McPeck, 1981 p 7).

In contrast, many of our Indonesian students have been trained in an intellectual tradition where there is a very clear boundary between 'experts' and 'non-experts' (Soenjono, 2001). In the *guru-siswa* tradition, experts (*guru*) transmit a body of knowledge to non-expert students (*siswa*). The right to share opinions and knowledge comes with high status, age and expertise. It is the 'expert' scholars who are responsible for extending the parameters of knowledge, generally using a consensual rather than an adversarial approach (Chandra, 2004). As non-experts, *siswa* are not normally expected to 'question' or 'evaluate' the body of knowledge they receive from their *guru* (Sinclair 2000). This role is generally reserved for 'expert'

scholars and curriculum boards, who often select set texts for courses and determine which theoretical, methodological, or taxonomical approaches to a subject, students will study.

We need to concede that there is an enormous amount of educational change occurring in Indonesia currently. Many IALF students report that some lecturers are beginning to encourage their students to be more questioning in their attitudes towards the knowledge they receive. However, we believe it is still true to say that the dominant *guru-siswa* tradition encourages students to adopt a fact-based orientation to both oral and written texts. Predominantly, students are trained to read for 'information', which they summarise, memorise and later reproduce in tests and exams. Written assignments also are usually in the form of descriptive reports where students demonstrate their 'mastery' of a subject by the amount of information and 'facts' they can reproduce (Sinclair 2000). As a result, when students are confronted with the persuasive texts typical of Western academic culture, they tend to regard the 'claims' made by scholars as 'facts' rather than as debatable propositions that they are expected to challenge. They seem to have limited understanding of the underlying purpose of persuasive texts and the function of these texts in the Western intellectual tradition (Sinclair 2000).

It is clear that training students to adopt a fact-based orientation to texts is not something unique to the Indonesian *guru-siswa* intellectual tradition. Talking about Korean students' reading practice, Lasscher, notes a similar focus on accuracy based comprehension of factual information embedded in texts, which he believes may be partly a product of the national examination system (2002 p 13).

Many of our Indonesian students face reading and writing challenges that are not primarily language-based. When faced with claim-based academic texts, our students find it difficult to distinguish between debatable and non-debatable statements and also have considerable problems identifying a writer's position or 'voice' or recognising the different positions taken in different readings. They find it challenging to differentiate between a writer's claims and supports and to identify the thematic links between claims and supports. This is particularly the case in texts using objection and rebuttal. Students tend to become confused about what the writer's 'real' position is. Another very demanding area for our students is grasping the thematic link between supporting and opposing (counter) arguments.

Our students' confusion about how claim-based texts work is magnified in their writing. They find it difficult both to present a clear position in their writing and to provide relevant and sufficient support for their position, both to substantiate their own claims and to weaken opposing claims. Many have problems sequencing different 'levels' of support to 'unpack' claims. For example, providing a supporting reason before adding relevant supporting evidence or examples. This suggests a lack of familiarity with the hierarchical ordering conventions of logical Western reasoning, such as the need to develop ideas by moving from the general to the particular and from the debatable to the more factual. As a result, our students frequently misuse logical connectors because they don't appear to grasp what the logical relationship is between ideas in their writing.

Our initial attempts to locate critical thinking materials to address the problems outlined above were frustrating. We soon realised that, whereas in mainstream critical thinking programs designed for Western students, the focus of critical thinking instruction is commonly on 'evaluating' and constructing arguments, with our students, we need to 'back peddle' because most have been trained in a different intellectual tradition. Before our students can be expected to engage critically with academic texts and before they can assess

the truth or acceptability of claims and supports, they need to be trained to develop a claim-based orientation to oral and written texts and to understand the hierarchical ordering principles of Western logical reasoning.

We believe the starting point is to help students become aware that the Western intellectual tradition, through debate, has an ‘adversarial’ view of knowledge construction. Students are taught to see texts as fundamentally involving the advancing and supporting of debatable claims. The justification for this approach is that all academic writing in a sense can be reduced to ‘claims and supports’ analysis because all academic research and writing involves *evaluation* (making a judgment about something) and *analysis* (drawing a conclusion about something and supporting it). Even ‘factual’ claims require supports, for example scientific claims are supported by evidence. All research reports have a ‘conclusion’ or ‘interpretation’ section where writers present claims (draw conclusions) supported by evidence. In a critical review too, a writer presents claims about the text they are reviewing which they then support. Similarly, in a case study, the writer draws conclusions and supports these conclusions. Thus it could be argued that all academic texts consist of claims and supports and thus ‘argumentation’, though not all texts have an explicitly ‘persuasive’ tenor.

Using the claims and supports approach, students are taught to deconstruct, reconstruct and later construct claims and supports in spoken and written texts and are given multiple opportunities to practice their hierarchical ordering skills. While it may be argued that evaluation of arguments is the true work of university students, we believe that developing a claim and supports orientation to texts is an important first step for developing the ‘reflective scepticism’ that is the basis of critical thinking (McPeck, 1981 p 7). In addition, as Moore points out, the evaluative criteria for assessing arguments vary from one discipline to the next and students will need to learn these subject-specific evaluative criteria as they engage in their field-specific studies (2004 p 13-14).

There were several problems with using available materials for teaching Western logical reasoning. Firstly, they tended to use examples that were too linguistically complex for our Indonesian students’ language proficiency level. Also, much of the content was either irrelevant to our students’ interests or completely outside their conceptual understanding, for example, some of the philosophical arguments used to teach informal reasoning. We felt many of the examples were not helpful either for promoting real-world critical thinking, or encouraging a critical approach to academic reading and writing. As a result, one of our early tasks was adapting short argument essays and reading texts drawn from published EAP and IELTS materials to be used to help students to understand how arguments are structured from hierarchically ordered claims and supports and to analyse different kinds of argument structure. Our aim was to use texts that modelled good logical reasoning. Interestingly, we discovered that published IELT and EAP materials do not necessarily model good reasoning or argument structure.

Another problem we quickly identified was that most of our students were unable to see how a writer built up their case because they were unable to follow the flow of logical reasoning. Their unfamiliarity with the pyramid hierarchical structure of Western reasoning made it difficult for them to distinguish between main claims and minor claims. In addition, our students found it challenging to comprehend that arguments could be structured in different ways: some might be multi-reason whereas others might be multi-level, with a main claim supported by a minor claim which is itself supported by one or more reasons, evidence or examples.

It became clear to us that our students might benefit from some kind of graphic representation of the texts they were deconstructing so they could follow the flow of logical reasoning and learn to see the argument structure. We then came across van Gelder's research about teaching critical thinking using computer-supported diagramming techniques to 'map' reasoning in arguments (2004). The Reason project carried out at the University of Melbourne built on earlier research showing that diagramming reasoning in arguments was very effective for building critical thinking skills (Horn 1998).

Van Gelder argues that complex arguments, though usually expressed in a stream of words or prose, actually consist of 'claims and supports' which form complex pyramid hierarchical structures. These he maintains are far easier to understand if they are diagrammed. By creating an argument map as he calls it, we make the logical structure of the argument completely explicit and thus make logical reasoning more easily understandable for students. Once students can follow the flow of reasoning, they can more easily identify important issues; for example, claims that need further support, hidden assumption and so on. He claims that argument mapping gives students a framework for noticing patterns of poor reasoning in argument structure and gives them in relatively simple metalanguage to be able to talk about logical reasoning (van Gelder, 2004).

We have been using the Reasonable and the Rationale argument mapping software developed by van Gelder's Austhink team in our centre for the last year. Although teachers do regularly take students to the computer lab for either joint or individual argument mapping sessions or to convert argument maps to prose, the main usefulness of the program has been to produce materials for hands-on, classroom-based learning activities designed to teach the hierarchical ordering principles of Western logical reasoning and argument structure.

How have we incorporated the 'claims and supports' approach into our curriculum?

Our program is organized around several cores 'phases' or units which are all thematically linked to recommended topic or content areas. These core phases of our EAP training flow naturally on from each other and constantly recycle and build on critical thinking, critical literacy and language skills that are connected with deconstructing, reconstructing and constructing claims and supports in spoken and written texts. Language skills are taught 'in context' as part of the work of deconstructing, reconstructing, constructing and mapping claims and supports in oral and written texts. An unexpected advantage of using reasoning mapping is that it allows us to isolate core sentences in a text, (the claims and supports) from the connective words and phrases in which they are embedded. This offers an ideal opportunity for working on core English sentence patterns and grammar as well as the use of connector words and phrases to signal the logical relationship between claims and supports and also to show the writer's stance towards the ideas or research they are reporting. In addition, argument maps are a useful resource for teaching the summarizing and paraphrasing skills our students need to avoid plagiarism and for jointly scaffolding the writing of texts using a genre approach.

Phase 1: Evaluative Description

In the first phase of our EAP program, called 'Evaluative Description', students are introduced to the importance of evaluation in the Western intellectual tradition, both in everyday life and in academic culture. We argue that all critical reasoning starts with making

judgements so the first step in developing critical thinking is to teach students how to ask and answer evaluative questions and how to make and support value judgments. Students learn that to make a ‘claim’ means expressing a value judgment about something or in other words *evaluating* it. The goal of the evaluative description unit is to move students from *factual* to *evaluative* description. Students are encouraged to make evaluative claims about their educational, work and personal experiences, their feelings and attitudes, likes, dislikes and preferences and to support or ‘flesh out’ these claims by the selective choice of reasons, evidence and examples. They also learn to create simple reasoning maps showing the structure of their claims and supports and use these maps to structure their evaluative writing. At the same time they are introduced to classroom discussions and debates and are encouraged to take and defend personal opinions on a wide range of debatable issues related to the topics or content area connected with phase 1.

Students are introduced to evaluative writing at the beginning of the EAP program, first at the paragraph level. They learn that in evaluative writing; often the topic sentence is the claim, expressing the writer’s judgment about something, which is then supported in the rest of the paragraph. Later in the unit, students learn to write one-sided opinion texts. Our aim in this first phase is to help students move smoothly from deconstructing and reconstructing argumentation in evaluative and one-sided opinion texts to being able to construct their own coherent and logically structured opinion texts that communicate their own claims and supports clearly by creating ordered hierarchies of ideas, reasons, evidence and examples.

Phase 2: Oral Argument and Introduction to Written Debate

The ‘Oral Argument and Written Debate unit begins by making students aware that in the Western intellectual tradition, issues are often examined and resolved through rational debate and through the process of reasoning by presenting proof. During this phase of their EAP training, students further develop the language resources for expressing opinions and are encouraged to support their opinions with relevant and logically connected ideas, evidence and examples drawn from their topic-based readings. Students are given the opportunity to develop their views about a wide range of global issues thematically linked to the content areas. They are also given multiple opportunities to further deepen their understanding of the pyramid structure of argument and further develop their ability to unpack their ideas so they can be understood at greater depth. This is important, as our students need a lot of ‘support’ in learning how to ‘back-up’ or ‘flesh-out’ their claims with relevant and sufficient support. Students are also introduced to the concept of opposing and supporting arguments and the use of counterargument and refutation in oral debate. They practise these skills by engaging in structured classroom debates and seminar discussions.

During this phase of the course, students are also introduced to written debate and learn that written argument normally has a “dialectical structure”, consisting of a dialogue, within the essay itself. In this dialogue, the writer explores several sides of the issue under consideration with the readers in an attempt to demonstrate (prove) why one position is the most valid. Students learn that writers use different dialectical patterns to organize their claims and supports as they compose their argument. At this stage of the course, they are encouraged to master the ‘clustering’ pattern of argument development, where the writer collects the evidence in one place, and the objections and rebuttals in another section.

Phase 3: Written Argument and Extended Essay

The aim of this unit is to help students further develop their mastery of the dialectical rhetorical structure of written argument, particularly how writers use the alternating pattern of development to organize their claims and supports as they compose their argument. In the alternating pattern, the writer shifts between evidence, objection, and rebuttal for each separate piece of evidence before moving to the next piece of evidence. Students learn how to strengthen and weaken supporting or opposing claims and supports by using 'problematising' language and modals which signal the writer's stance towards the ideas they are reporting. In this phase of the course, students are also introduced to referencing and use more academic sources for writing an extended essay with an alternating argument structure. An important part of this phase is to support students in writing more clearly and coherently by strategic selection of the best reasons or objections to strengthen their case.

Phase 4: Discussion Essay

The rules of discourse in the Western academic community require that students position themselves in relation to the existing body of research, whether in order to use it as support for their own argument, to exemplify a point, to build on it, or to take issue with it. As Sinclair notes, positioning oneself, taking on the mantle of 'expert', in academic discourse is a significant element of successful participation in Western university study and, impacts on academic success (Sinclair 2000 p 4). In this phase of the course, students learn they are expected to do more in a postgraduate assignment than just summarise, paraphrase and quote from the research literature, they are also required to develop an argument of their own in relation to the work of other scholars. They have to show clearly where, how and why their ideas differ from the points (claims and supports) of others that they refer to in their essay. While this evaluation may be positive or negative, students learn that postgraduate assignments generally involve critique, i.e. pointing out the *limitations* of others scholar's ideas or research supported by evidence drawn from the research literature (Moodie, 2000). During this phase of the course, students develop the language resources they need to qualify and evaluate other scholar's ideas, to use concession and to project their own 'voice' in their written work. They learn these skills during the process of researching and writing a major discussion essay assignment using authentic academic sources.

Future directions

As has been mentioned, the work we are doing at IALF Bali to meld the teaching of language and critical thinking is ongoing. Currently we are working on developing more materials for teaching students how to systematically analyse weaknesses in arguments. Our students have enormous difficulties evaluating an argument as strong or weak because they have limited experience in judging or evaluating the quality, validity or weight of different types of evidence. They also often lack background conceptual knowledge about the issue under consideration. These difficulties are of course compounded by their problems with using English.

In addition, students seem to have a limited notion of what criteria should be applied when evaluating reasons. They find it difficult to judge how well reasons support or oppose a position and whether reasons are relevant, contributing and sufficient. They also need plenty of practice in identifying flawed reasoning, faulty conclusions and logical fallacies. Another area that needs further development is learning activities designed to help students critically analyse arguments by evaluating hidden assumptions or premises. Although the Rationale reasoning mapping program has an analytical argument-mapping mode, we have yet to

explore the learning possibilities for our students. We would also like to create materials for developing our students' awareness of deductive as opposed to inductive reasoning and the use of qualitative versus quantitative research. Although we are very aware that we still have a lot of development work to do, the results we have seen so far in terms of student writing has been very pleasing. Feedback from students is extremely positive. Students report that they enjoy the 'claims and supports' learning activities, finding them interactive and useful. Though they feel at times daunted by the shift in thinking they are required to make in order to be successful in their postgraduate studies in Australia, they also feel that this approach helps them understand far more clearly what is expected from them as postgraduate students in Western academic culture.

Conclusion

As Egege and Kutieleh note, the challenge for transition programs is how to incorporate critical thinking within their framework without adopting either a deficit or assimilationist approach (2004 p 1). As Bigg has commented, equating difference with deficiency stems from 'conceptual colonialism (1997 in Egege and Kutieleh, 2004 p 1). We need to appreciate that international students from the South East Asian region do not have cognitive or academic deficiencies, but instead just differences in approach to knowledge construction (Egege and Kutieleh, 2004). We believe that using the 'claims and supports' framework to teaching critical thinking offers an effective way of 'demystifying' the Western adversarial approach to knowledge construction. It allows students to develop the claims-based orientation to written and oral texts that they need to be successful in their studies at a Western university. We suggest that the "claims and supports" approach can be beneficially used to design meaningful and interactive learning experiences in EAP and academic skills programs

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