How can critical thinking be recognised and developed in students that are still developing tertiary-level English language proficiency?

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Keywords:
International students, critical thinking, academic literacy, tertiary preparation, ESL

Key Contributions:

- This paper offers an exploration of the independent and interdependent nature of critical thinking and academic literacy, offering a new perspective in thinking about each construct.
- This research represents a new and significant, research-based contribution as it explores international students' critical thinking from a non-deficit perspective, challenging the belief that international students cannot think critically.
- This study provides an alternate method of teaching and assessing critical thinking, based on an emerging critical thinking theory.

Abstract

As many international students attending Western universities do not have English as their first language, they can experience difficulty sharing their wealth of ideas. As critical thinking and academic writing are often mutually dependent, this study sought to explore how international students express their ideas and how this can be further supported in the classroom. Using educational design research, 20 tertiary Foundation students were given 12 weeks instruction in critical thinking and academic writing and their output was assessed pre- and post-course. The study established that students could demonstrate critical thinking on entry to the program, and with focused instruction, were able to further enhance their skills. However, findings also illustrate that whilst the students demonstrated advanced thinking skills, they did not possess the same ability to construct advanced written representation of their ideas. This study suggests that consideration be given to alternate methods of

assessment and instruction that recognise international students' existing critical thinking skills base.

Introduction

Attending university overseas is a popular choice for many students. In Australia, international students are defined as those who study in educational institutions, are not Australian or New Zealand citizens, and do not hold permanent residency visas (Study Australia, 2022). As of December 2020, 59% of all international students originated from five countries, China, India, Nepal, Vietnam, and Brazil (Australian Government, Department of Education, Skills and Employment, 2020). International students contribute significantly to the economy, for instance during the 2019-2020 financial year it was estimated that international students generated over 37 billion dollars' worth of revenue (Australian Government, Department of Education, Skills and Employment, 2020). However, the worth of international students cannot be regarded as purely financial.

International students possess valuable perspectives and a wealth of experience that could challenge domestic students to broaden their worldview. However, as many students electing to study abroad do not have English as their first language, they may not have previously used academic English in a scholarly environment. As a result, these students often report difficulty adapting to university communication requirements (Al-Mukdad, 2019; Eldaba & Isbell, 2018), experience barriers to accessing information (Sin & Kim, 2018), and need support to become academically literate.

Critical thinking is also an area that causes consternation, with some international students reporting they do not understand what is required of them or know how to express their thoughts effectively in writing. Several researchers believe that critical thinking skills are lacking in tertiary students (Flores et al., 2012; Siefert, 2011; Willingham, 2008; Zhou, 2018), however few investigate how student needs in both areas are similar and can be addressed concurrently in the classroom. In a post-COVID environment, in which universities are keen to re-establish strong international student numbers, it would be beneficial to learn more about how we can best assist this cohort to maximize the benefits of tertiary study.

Overcoming Stereotypes

Difficulties experienced by international students in relation to academic writing and critical thinking are further compounded by commonly held stereotypes. Some educators assume that critical thinking skills are learned by osmosis (Haas & Keeley, 1998, p. 64), with one lecturer making the comment that 'it's a term which is bandied around quite a lot, and I have used it a lot without much thought. It's one of those things everyone understands don't they, it's obvious isn't it?' (Duro et al., 2013, p. 277). This is compounded by the stereotype that international students inherently lack the ability to think critically, often due to their cultural upbringing (Atkinson, 1997). Whilst empirical evidence simply does not support this assertion (Rear, 2017), there remains concern that the prevalence of this stereotype could limit students' ability to demonstrate their thinking capability and receive individualised classroom treatment (Vandermensbrugghe, 2004; Lu & Singh, 2017; Rear, 2017). These perspectives are at odds with Silva's (1997) view that to treat international students with the respect and fairness they deserve, it is necessary for educators to take steps to assess their writing equitably, with awareness of the differences that are inherent when producing work in a second language.

Studies which explore how to confront these perspectives in the classroom are not common in literature. The aim of this research was to challenge the perspective that critical thinking and academic literacy are separate constructs and to investigate how the integrated and explicit instruction of each construct impacts international students' engagement and learning. To achieve this goal, this study sought to understand the critical thinking and academic writing skills that international students possess when entering tertiary study and the level they can attain after receiving instruction. This was achieved by analysing the work produced by 20 international students who were enrolled in a 12-week academic skills course as part of an Australian tertiary Foundation program.

Understanding Academic Literacies

As academic writing skills are necessary for success at tertiary level, most institutions recognise that international students require assistance to develop proficiency. Programs are conducted to meet this need, for example 20 top host universities in the US all provide English language programs (Martirosyan et al., 2019). However, such initiatives often fail to recognise that academic literacy encompasses much more than

possessing sufficient writing skills to be able to produce a piece of work to required standards. Rather, the definition of academic literacy reflects that it is multi-dimensional and that 'there are no singular, unified practices that can be said to count always and only as academic literacy' (Henderson & Hirst, 2007, p. 26). Instead, the construct possesses three interconnected elements: a study skills model, an academic socialisation model, and an academic literacies model (Lea & Street, 1998, 2006).

This understanding of academic literacy challenges the notion that providing opportunities for students to develop adequate writing skills equates to the full picture of what it means to be truly academically literate. Lea and Street's (1998) theory allows for the acknowledgement of other influences that occur in the development of academic literacy, such as students' own cultures and cultural writing practices, whereby encouraging educators to regard the differences inherent in the international student cohort as areas of strength, rather than deficiencies requiring remediation (Maringe & Jenkins, 2015). Further, taking a multiliteracies perspective in the classroom enables students to learn to work with (rather than against) linguistic differences, a skill fundamentally necessary to enable greater societal participation (Cazden et al., 1996).

Integrating a more flexible view of academic literacy presents challenges for educators. A limited amount of research explores how teachers can capitalise on multilingualism and diversity in their classrooms and how to successfully challenge the skills-dominant view of academic literacy. Henderson and Hirst (2007) found it difficult to embed the true nature of the academic literacies approach, recognising that they 'treated the conventions of academic literacy as incontestable and did not explore other options … we did not encourage the students to critically examine and challenge the conventions, nor did we do that ourselves' (p. 32). This suggests that taking a wider view of the construct requires educators to deeply question the very nature of what it means to be 'academically literate.'

Integrating Critical Thinking

Embedding critical thinking into the communication classroom is not a new concept. There is a clear interdependent connection between academic writing and critical thinking, as thoughts must first exist before students can successfully communicate them. However, instructors often struggle with articulating what 'good' critical thinking and writing entail, leading international students to experience difficulties with both

constructs (Al-Mukdad, 2019; Egege & Kutieleh, 2004; Eldaba & Isbell, 2018; Paton, 2011; Zhang, 2011). This uncertainty is demonstrated by the provision of insufficient feedback, which students feel is often vague or unclear but often focuses on writing errors whilst also containing non-specific requests from teachers to increase the critical thinking component of their work (Cennetkusu, 2017). As explained by Maringe and Jenkins (2015), 'it appears that these students' experience of academic writing is confounded by a prevailing and apparent expectation of a standard, which no one can really pin down and which hovers over them like a mirage' (pp. 620-621).

This illustrates that whilst educators clearly value critical thinking, they often fail to sufficiently teach what it is or how students can effectively express it in writing. In part, this is a symptom of the plethora of meanings that are ascribed to critical thinking. Seminal authors Elder and Paul (1996) regarded it as 'the ability and disposition to improve one's thinking by systematically subjecting it to rigorous self-assessment' (p. 34). Ennis (2011) provided a simpler definition of the term, suggesting that it refers to 'reasonable and reflective thinking focused on deciding what to believe or do' (p. 5). Illustrating the conceptual difficulties with the construct, Vandermensbrugghe (2004) referred to critical thinking in Western education as unbearably vague and context dependent, a view supported by the experiences of many international students. Egege and Kutieleh (2004) also argued that teachers rarely share with students what critical thinking means or how it is to be correctly demonstrated in their academic work.

However, the challenge of defining critical thinking should not limit its ability to be taught successfully. Moore's (2013) study of Australian academics revealed that embedding critical thinking is perceived as fundamental to successful teaching practise, and though the academics in the study possessed disparate views of the meaning of the construct, they were nonetheless able to successfully explain its meaning to their students. Proponents such as Duro et al. (2013) and Vandermensbrugghe (2004) advocate for this explicit instruction of critical thinking, a view also supported by Forbes (2018), who learned that international students desired the explicit guidance of how critical thinking should occur within their discipline area. The approach has demonstrated success. For example, a study by Gleason et al. (2013), which tested 161 assignment samples of Doctor of Pharmacy students, showed significant improvement in critical thinking between the first and

sixth years of study. In addition, it was found that critical thinking increased as the course progressed. Further, Behar-Horenstein and Niu (2011) undertook a review of critical thinking research and found that explicit teaching of critical thinking does indeed achieve more gains than implicit instruction, however detailed explanation of how this can be demonstrated in the classroom is missing from literature.

Method

The study involved 20 international students who were enrolled in a 12-week academic skills class as part of an Australian tertiary Foundation program. Students completed two written critical thinking tasks, one in Week 2 and a second in Week 9. Ethical approval was obtained (approval GU2019/942) and each student participating in the study signed a consent form. Participants agreed to provide work samples and were assured that they could withdraw from the study at any time. Participants were also provided with verbal and written assurances that their decision whether or not to participate in the study would have no impact on the grade they received in the course.

Critical Thinking Task A (Appendix) was designed to assess the level of thinking and academic writing that students demonstrated on entry to the program. Students then attended two classes per week, for a total of five hours, and undertook lessons which combined explicit instruction in critical thinking and academic writing. A second task (Critical Thinking Task B) was completed in Week 9 to assess the development of students' skills and make a comparison with Critical Thinking Task A. As the COVID19 pandemic occurred mid-way through the course, students ceased to attend face-to-face classes and undertook the remainder of their studies online. This placed restrictions on the completion of Critical Thinking Task B, and instead of using a similar stimulus to Task A as I have planned, I was restricted to using an in-class written reflection as the second task.

Each critical thinking task was assessed using two rubrics. Rubrics were underpinned by the theoretical work of Larsson (2017), in which critical thinking is regarded as hierarchical. Larsson's theory postulates that critical thinking commences with the ability to describe the contents of source material. The sequence then progresses into the ability to relate source materials to the self, to deduce broader consequences, and to articulate an overall argument, and concludes

with the ability to detect contradiction. This conceptualisation of critical thinking allows the construct to be more clearly operationalised in the classroom, as lessons can be scaffolded in a logical sequence. It also enables greater ease of assessment and correlates with the rubric approach popular in many universities.

Larsson's sequence was used to develop Rubric A (Table 1), which assessed only critical thinking, and Rubric B (Table 2), which assessed the written demonstration of critical thought. The development of two rubrics allowed assessment to be made of students' ability to think, as distinct from their ability to express those thoughts using academic writing conventions. Each piece of writing was assessed using both rubrics and the results of each assessment were independent of one another. Rubric A ascribed basic description as the 'base line' for the recognition of a critical thinking capability. Subsequent levels were not given descriptors (such as 'good' or 'high'), as this allowed the assessor to regard that there is no level of critical thinking that is superior to another. Rather, critical thinking can be viewed as either existing (in one or multiple forms) or not existing at all. Taking this approach to assessing the work samples enabled a more objective assessment to be made of whether an element did or did not exist, rather than forcing an assessment to be made about the quality of thinking. In addition, it allowed an assessment to be made of all levels of critical thought students possessed, providing a greater ability to recognise what students were thinking without demanding they reach one level before progressing to the next.

Table 1

Rubric A: Critical Thinking

Contradiction	Argument	Implications/ Consequences	Connection	Description (Base level)	Absent
The student can locate a contradiction in the source materials/topic	The student can articulate their own overall argument in relation to the source materials/topic	The student can consider the broader implications and/or consequences of the source material/topic	The student can relate to the source materials/topic using their own personal opinions, experiences, values, and/or perspectives	The student is able to describe the general contents of the source materials/topic	No criteria are met

Rubric B followed a more conventional structure, as each level of Larsson's hierarchy was divided into quality descriptors. Again, a base level, representative of a 'passing grade' (4 on a seven-point scale) was allocated to each writing level and students were graded on how advanced their writing was, up to the level of excellent performance. The rubric also integrated an assessment of the use of appropriate written techniques, words, and phrases to enable a deep appraisal to be made of the students' skills.

Table 2

Rubric B: Critical Thinking in Writing

Writing Type A: Description				
Excellent (7)	**High (6)**	**Reasonable (5)**	**Base level (4)**	**Underperformance (3 and below)**
Comprehensive description is presented which enables someone unfamiliar with the topic to thoroughly understand it without any areas of omission	All key points are described using appropriate vocabulary Description enables someone unfamiliar with the topic to develop a workable understanding which requires only minor additions in order to be thorough	Many key points are described using appropriate vocabulary Some key points are missing; however, the description presents a reasonable picture of the topic/source	A small number of elements of the topic/source are described using a limited amount of vocabulary which is mostly suitable for purpose. A number of key points are missing, and this impedes description and reader understanding	No description is provided and/or Description is too short or lacking in descriptive detail to assess
Writing Type B: Connection				
Excellent (7)	**High (6)**	**Reasonable (5)**	**Base level (4)**	**Underperformance (3 and below)**
Students are able to use the topic to question their own opinions/experie	Students can demonstrate a connection with their own underlying	Students can demonstrate a connection with their own experience/s	One aspect of the topic is discussed in relation to the student's own opinions	No personal connection is made

nces and/or personal values	values Personal pronouns, comparative and contrastive vocabulary are used appropriately to articulate the connection	Personal pronouns and comparative vocabulary are used appropriately to articulate the connection	Personal pronouns are used appropriately to articulate the connection	

Writing Type C: Implications				
Excellent (7)	**High (6)**	**Reasonable (5)**	**Base level (4)**	**Underperformance (3 and below)**
Consequences/implications are identified and are connected to more than one context Logical connections are always made	More than one consequence/implication is identified, and an explanation is given of the logic behind the decision	Identifies the consequence and uses connectives to explain some logic behind arriving at this consequence	A brief articulation of one possible consequence (beyond self) is made One or two connectives are used to link ideas together	No implications and consequences are identified

Writing Type D: Conclusion				
Excellent (7)	**High (6)**	**Reasonable (5)**	**Base level (4)**	**Underperformance (3 and below)**
A conclusion is articulated and thoroughly explained or justified, using suitable evidence The conclusion is clearly argued, and the reader would be	A conclusion is articulated or justified using multiple pieces of suitable evidence	A conclusion is articulated and explained or justified using one piece of suitable evidence	A conclusion is articulated but no evidence is used to explain or justify the position	No conclusion is presented

convinced by the argument				

Writing Type E: Contradiction				
Excellent (7)	**High (6)**	**Reasonable (5)**	**Base level (4)**	**Underperformance (3 and below)**
The overall meaning or implication of the contradiction is explored	A contradiction is identified and more than one example from the source are explored is used to support it	A contradiction is identified and an example from the source is used to support it	A contradiction is identified but not explored	No contradiction is identified

Results: Critical Thinking

First Assessment of Critical Thinking: Course Commencement

Critical Thinking Task A (Appendix) was designed to assess students' critical thinking on entry to the course. The task allowed students to demonstrate their abilities in relation to each of Larsson's (2017) levels, by requiring responses that were targeted to the Critical Thinking model. Students were provided with two images from a cartoon and were asked one short question in relation to each critical thinking element. Total instructions comprised 108 words and students were allocated as much time as they required to complete the task. No word requirement was provided to the students.

As illustrated in Figure 1, students demonstrated solid results, with only one student failing to attain the 'base level' of critical thinking (description). Students also demonstrated the ability to think at a more advanced level, with 75% demonstrating the ability to relate source materials to their own opinions, experiences, values, or perspectives. Half of the students (50%) were able to identify broader implications and consequences and 40% were able to identify a contradiction in the source materials, thus demonstrating Larsson's highest level of critical thought. The ability to create their own argument in relation to a source was attained by the fewest students, though this level was still present in the work of more than one third (35%) of students.

Largely in keeping with the hierarchical model, the number of students attaining each additional level of thinking decreased as the thinking requirements increased. As

could be anticipated, students who attained the higher levels of the rubric (own argument and contradiction) did so after also demonstrating all lower levels. However, some students demonstrated higher levels with missing lower levels, suggesting whilst critical thinking can be assessed and taught hierarchically, higher levels of critical thinking can be demonstrated without the presence of lower levels.

Second Assessment of Critical Thinking: Course Conclusion

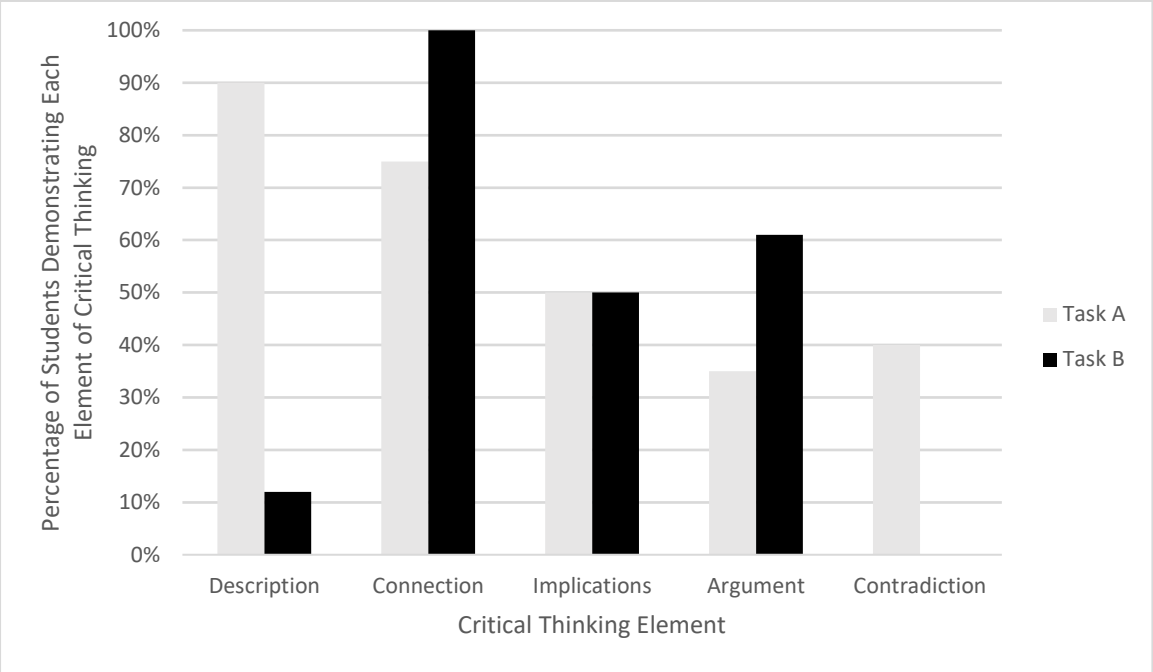
Critical Thinking Task B was a written task that required students to reflect on their experiences as a learner during the trimester. It was designed to assess transferability of instruction to a different situation and genre and used a reflective writing genre that had been taught and practised often in class. In keeping with Task A, Task B asked students a series of questions to scaffold descriptive responses and personal connection but did not directly prompt the students to address the remaining critical thinking levels. Thus, any decision to identify elements such as implications, conclusions, or contradictions were made instinctively by the students. Task B contained no images and was wordier in its instructions than Task A.

The results of Task B show that the course resulted in several important improvements in critical thinking. Students increased their ability to make a personal connection to source material and to create an argument, these criteria recording a 25% and 26% increase, respectively. The ability to consider broader implication and consequence remained stable, with 50% of the cohort able to do so. However, it was noted that students were less able to locate a contradiction in source materials and less able to describe the general contents of the source materials.

There are several possible explanations for these results. Whilst Task A specifically directed students to search for a contradiction, and provided a clearly contradictory source image, Task B did not, instead relying on students' own identification of any contradiction. As the task was a reflective piece, it could be that no contradictions were experienced by the students or that they did not feel the need to identify any in their work. This finding could also indicate that additional instruction is required to enable greater understanding of the process of identifying contradiction, or that the transferability of this skill is weak.

Figure 1

Comparison of Rubric Results for Critical Thinking Elements Present in Student Work



The results in relation to written description are interesting. As Task A demonstrated, most students entered the course with the ability to create a basic description when specifically asked to 'describe what you can see'. However, students did not demonstrate similar ability when asked to do so as part of the reflective writing piece (Task B). As is common in many university assessments, a specific written genre of writing was chosen (in this case a reflective piece) and was used for the purposes of locating and assessing critical thinking concepts such as description. However, although the descriptive requirements of the task were specifically requested (by the use of a series of structured questions such as 'describe your classroom and your teacher' and 'describe what your classes are like on campus and what they are like online'), many students failed to do so, approaching the task more holistically and responding to the overall written intent (a reflection about 'the differences between learning [this course] in the classroom and learning online'). Thus, they did not demonstrate their ability to describe and were assessed accordingly. This finding could inform approaches to providing instructions and conducting assessments.

Results: Academic Writing

First Assessment of Academic Writing: Course Commencement

Students' ability to express critical thinking in academic writing was assessed using Rubric B. Students were assessed on the way in which their ideas were articulated, in a similar fashion to how this would occur in an assessment of a standard university assignment. Each of Larsson's (2017) stages was extrapolated to how they could be demonstrated in writing, from a base level through to a highly developed manner. The rubric was subsequently divided into five writing types: Writing Type A - Writing Type E. To add additional objective assessment of each student's writing samples, Rubric B was also supplemented by textual analysis. Distinct from Rubric A, Rubric B functioned as a traditional assessment, with students able to score only one 'grade' per criteria. Figure 2 outlines the results students attained across each Writing Type and compares the results attained in Task A and Task B.

As shown in Figure 2, on course commencement, the average 'grade' attained by students was above baseline level in just two of the five critical thinking critical levels. In addition, student average grades in relation to writing an effective description and an effective personal connection were just over baseline (4.15 and 4.35 respectively). On average, students were graded at below baseline in relation to the higher-level critical thinking skills of implications/consequences, crafting a conclusion and discussing a contradiction. Further, no student was able to demonstrate an excellent level of critical thought in writing in any criteria and only one of the 20 students was able to demonstrate a high level of critical thought (in relation to the first two criteria: description and personal connection.)

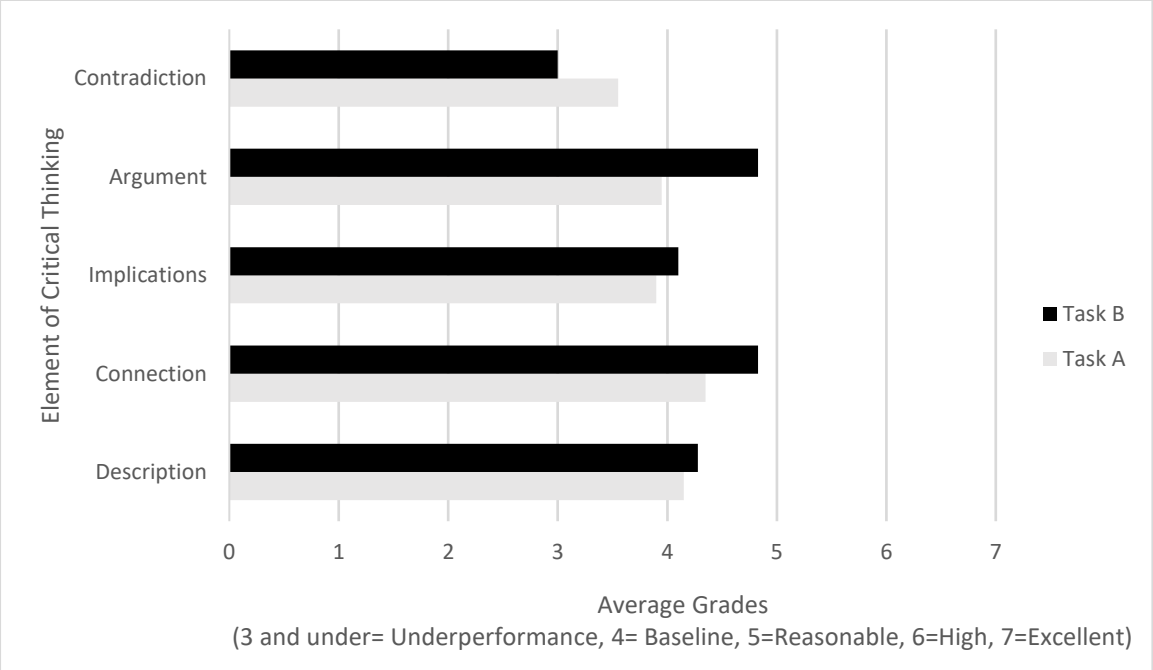
Second Assessment of Academic Writing: Course Conclusion

By the end of the course, student average grades had increased in relation to all criteria except for Writing Type E (discussing a contradiction). The most substantial improvements were made in relation to Type B (Personal Connection) and Type D (Conclusion), with a substantial number of students moving from the base level of performance into the level of reasonable performance. Advancement into the level of high performance was also seen in Writing Type C (Implications and Consequences) and D (Conclusion), with between 22% and 33% of students able to extend their writing to attain that level. As demonstrated in Figure 2, this resulted in an increase

of average grades of 0.20 for Implications and Consequences, 0.48 (half a grade level) for Personal Connection and 0.88 (almost a full grade level) for Conclusion.

Figure 2

Comparison of Rubric Results for Critical Thinking Elements Demonstrated in Academic Writing



Writing Type E (Contradiction) however demonstrated a significant decline, with no student able to identify and discuss a contraction when completing Task B. Smaller increases were also seen in relation to underperformance in Writing Type C (Implications and Consequences) and D (Conclusion), with some students electing to not provide any relevant statements in their work. The possible reasons for this appear in an earlier part of this paper in relation to the scaffolding and intent of Task A and Task B.

Discussion

This study challenged the perception that international students may lack the ability to think critically by demonstrating that this cohort of students were already

demonstrating this ability, some at the highest level of critical thought, prior to engaging in tertiary study. By transferring Larsson's (2017) model into a rubric, the study was able to establish that on entry to the program, all but one student could achieve the base level of critical thought and, even at the higher levels represented in the rubric, over a third of students could create an overall argument and locate a contradiction in the source material. This finding is in keeping with authors such as Paton (2011) and Rear (2017) who have challenged the stereotype that international students lack critical thinking ability.

By designing and applying Rubric B to the critical thinking task, the study has shown that while the students possessed quite high levels of critical thought, they did so without the same ability to construct high-level written representation of their ideas. Thus, the use of complex writing tasks as a means of assessing thinking may prejudice academic writing proficiency over critical thought and in turn, systematically disadvantage ESL students. The findings of this study represent a challenge to educators to break free from the assumption that lower writing skills are automatically indicative of poorer thinking, in keeping with the need to take an ethical and equitable approach when assessing international students, particularly in relation to the written component of their work (Silva, 1997). It is suggested that if educators wish to assess students' abilities in thinking skills such as description or evaluation, then they should specifically request this to occur instead of couching these requirements within a lengthy written piece of work.

This study explored the constructs of academic writing and critical thinking as both independent and interdependent. By treating each construct independently, this allowed for the separation of critical thinking from academic writing. In doing so, this allowed for the development of methods by which educators could assess critical thinking without relying on academic writing as a marker of cognition. Further exploration of this approach would allow international students to be assessed on their thinking separate from their writing, an important change which could create more inclusive assessment design and actively challenge the stereotypes that unfortunately encircle international students.

Concurrently viewing the constructs as interdependent recognised each as an integral aspect of academic literacy. Teaching the constructs together enabled

students to be provided with clear instruction and guidance in relation to what kind of thinking was required of them and how to successfully express those ideas in writing. The results indicate that students can achieve demonstrable success when this approach is taken. As academic literacy (Lea & Street, 1998) is recognised as multi-dimensional, continued exploration of critical thinking as an element of academic literacy may remedy some of the ambiguity of meaning that plagues critical thinking, thus enabling greater student awareness of how they can meet the thinking requirements necessary for academic success.

Limitations of this research include sample size, time, and methodological constraints. The research was able to explore the hierarchical nature and classroom utility of Larsson's (2017) critical thinking theory, and as an innovative means of understanding critical thinking, this theory deserves additional exploration involving more students over longer periods. In addition, further assessment of the rubrics as a valid measurement tool, with consideration to interrater reliability, is required. Future research could more deeply evaluate Larsson's propositions and determine whether defining critical thinking in such a way could be beneficial.

Conclusion

In summary, treating international students equitably relies on educator willingness to change how they perceive academic literacy and to actively consider how the reliance on the written word significantly disadvantages some members of this cohort. Though recognising the inherent value of cultural and linguistic diversity within the classroom has been a long held ideal (Cazden et al., 1996), it remains apparent that the actual process of doing is not yet comfortably embedded within tertiary education. In an attempt to provide possible options, the findings of this study correlate with earlier literature that argues that rather than having an innate lack of ability to think and write critically, international students instead need time to master the requirements of Western academia (Vandermensbrugge, 2004; Zhang, 2011). Thus, the author argues that if students are to be given the opportunity to demonstrate their critical thinking skills, they require an educational environment that can first acknowledge the true cognitive position from which they begin their studies. Further, if we require the demonstration of critical thinking via lengthy, complex written pieces of work, then we must also acknowledge the need to invest significant time and consideration into how these skills are taught. Universities and academic

staff are therefore encouraged to consider how they are currently meeting these needs and how they can adjust their teaching and assessment practices to allow all students to demonstrate the true range of their critical thinking ability. Taking such action would position universities to capitalise on the wealth, both financial and cognitive, that international students can provide to the tertiary sector.

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Appendix

Critical Thinking Task A

Source. Waterson, B. (1995, February 13). Calvin and Hobbes. Retrieved from GoComics. https://www.gocomics.com/calvinandhobbes/2015/02/13/

Note. In the task, students were asked to respond to **only the two middle sections**. For copyright reasons, all four sections are included here.

Instructions:

Look closely at the image and then please answer the following questions. Try to make sure that you write enough so your teacher can fully understand the ideas you have in your head.

1. Describe what you can see.
2. How do you feel about the image?
3. How does the image relate to you/ your ideas, your values, your experiences?
4. In what way could this image affect people? With would the consequences be?
5. What overall conclusion do you reach about this picture?
6. Is there anything contradictory about this picture? If so, please explain what you mean.
7. Is there anything else you would like to say about this image?

Critical Thinking Task B

Write a reflection about the differences between learning [this course] in the classroom and learning online. Your reflection needs to include the following:

- Three paragraphs with approximately 100 words per paragraph
- In the description paragraph you need to describe your classroom and your teacher. You also need to describe what your classes are like on campus and what they are like online.
- In the emotion and learning paragraph you need to explain how you feel about each method of teaching and what you have learned about yourself after experiencing both forms of teaching.
- In the future planning paragraph, you need to explain what your plans are for adapting to online study. In Trimester 2 2020, what will you do to make sure your studies are successful.