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Guidelines for EAP tutors in supporting postgraduate international students in their critical academic writing

INTRODUCTION

One key feature of higher educational institutions (HEIs) in the Anglosphere (specifically Australia, Canada, New Zealand, the UK and USA) is the expectation that students should be ‘critical’ in their thinking (Atkinson, 1997; Barnett, 1997; Davies & Barnett, 2015) and academic writing (Davies, 2011; Wallace & Wray, 2016; Wingate, 2012). A combination of the desire to develop critical thinking skills and the increasing internationalization of the postgraduate HEI sector has led to the need to examine how students who do *not* come from Anglophone educational backgrounds should be supported (Fakunle, Allison & Fordyce, 2016; Hammersley-Fletcher & Hanley, 2016).

This research first aims to fill gaps in the conceptualization of critical thinking

and academic writing at the postgraduate taught (PGT) master’s level. Second, it presents guidelines on how tutors of English for Academic Purposes (EAP) can advise students on their critical academic writing, based on generic approaches to critical thinking (CT) in the context of in-session English academic writing support classes and graduate writing support drop-in sessions at a specific HEI. In so doing, it builds on previous research in a similar area (Caulton, Northcott & Gillies, 2017).

The research was in two parts. First, it aimed to highlight how different PGT master’s students and discipline tutors compared in their understanding of CT in academic writing. The key findings from this research highlighted a contrast between the student and tutor perspectives. Second, the data from these interviews were combined with previous conceptual and empirical

research to present guidelines that focus on how EAP tutors can utilize cognitive skills and logical argumentation approaches to CT to provide feedback to students on their critical academic writing.

LITERATURE REVIEW

Previous research on the conceptualization of CT has tended to focus on undergraduate (UG) students (Phillips & Bond, 2004), UG tutors (Facione, 1990; Jones, 2015; Moore, 2013), on PGT students only (Durkin, 2008), or on international UG, PGT and PhD students together (Shaheen, 2012; 2016). In my research, I therefore aimed to focus on a comparison of the conceptualizations of CT at the PGT master's level between international students and tutors.

Critical thinking is often considered to be a vague and elusive concept where there is little agreement over its definition (Abrami, et al. 2008; Davies & Barnett, 2015; Moore, 2013; Paul, 2011). Another difficulty when studying the topic of CT is that the conceptualization of what it means to be *critical* in higher education is an ever-widening circle. Davies (2015) and Davies and Barnett (2015) outline three major 'movements' in the development of CT in higher education: the 'critical thinking', 'criticality' and 'critical pedagogy' movements. Although it is acknowledged that other movements do make a contribution to the overall debate around CT, this paper locates itself in the critical thinking movement (CTM).

Within the CTM, Lipman (2003) and Paul (2011) divide the conceptualization of CT historically between the informal logical (first) wave, which was in response to the limitations of applying formal logic

to natural language arguments (Govier, 1987), and the more eclectic (second) wave which includes the views of cognitive psychologists. An approach that equates CT to logical reasoning and argumentation is still practised today. Common topics covered in textbooks adopting this approach include the teaching of inductive and deductive reasoning, and valid and fallacious arguments (Robinson, 2011). For some writers, however, conceptualizing CT as logical argumentation is very limiting. McPeck (1981) noted that informal logic 'plays a comparatively minor role' (p. 8) in CT, and Brookfield (1987) also observed that being a critical thinker is not just limited to 'logical reasoning' (p. 13). The second wave of CT incorporated aspects of the first wave, but also focused on the cognitive skills involved in CT. Facione's (1990) seminal work highlighted six core 'cognitive critical thinking skills': 'interpretation', 'explanation', 'analysis', 'inference', 'evaluation' and 'self-regulation'. Facione's research actually embedded key features of argumentation into some of these skills (specifically in the cognitive skills of analysis and evaluation). However, Davies and Barnett (2015) note that Facione's categories are at times over descriptive and difficult to apply in real-world pedagogical contexts. To help overcome the difficulties of applying Facione's categories, I turned to the work of Anderson et al. (2014) and Toulmin (2003) which are explained in more detail in the 'Discussion and practical applications' section below.

METHODOLOGY AND RESULTS

The findings of my research were based on semi-structured interviews with 14

discipline specialist tutors of PGT students, and 18 international PGT master's students (Appendix 1 and Appendix 2). The research was conducted at an institute of education, an institute of sport and a business school at the University of Edinburgh. The findings are based on a three-stage analysis of the interview transcriptions based on 'pre-coding', 'first cycle' and 'second cycle' stages (Saldaña, 2009) in answer to one main question: How do you think students can demonstrate critical thinking in their academic writing in your discipline?

Both groups of participants agreed on the importance of reading critically and of presenting a supported argument in academic writing. However, there was a greater emphasis by the students on the importance of the extensive and in-depth reading of literature as part of the *process* of becoming a more accomplished critical writer within their discipline. The tutors, on the other hand, focused more on the clarity and quality of the written argument as embedded in a written *product*, such as in an assessed essay or master's dissertation. This appeared to reflect the differing experiences, roles and positions of the master's student and discipline tutor within the academy (in this context, the student as a 'producer' and the tutor as an 'assessor' of academic writing).

Students had more to say about reading critically, but, together with tutors, they identified four sub-themes of critical reading-to-writing skills. The first highlighted the importance of approaching literature with a critical and sceptical disposition which involved 'not taking things for granted' (Dag, Business Administration (MBA) tutor). The second sub-theme highlighted the importance of reading in order to acquire a deeper *understanding* of disciplinary

knowledge. For instance, Marco (Strength and Conditioning student) highlighted this when he stated, 'you really need to be able to, not just read[ing] ... the first point ... [and] the second point. After that you really need to be able to understand that'.

A third sub-theme emphasized how reading academic texts in specific ways could help students write more critically. This included *analytical* note-taking techniques that involved separating important from less important information (Anderson et al., 2014). For example, Ying emphasized the importance of note-taking as part of the reading-to-writing process:

Since after you scan [a text] you must ... keep some important information. And especially when you are doing the dissertation or maybe writing some essay, when the reading you've done is a lot you must take some notes after you read it ... otherwise you can't ... find out which one you ... really want when you are writing.

(Ying, Education student)

A final sub-theme involved the need to *evaluate* literature. Wei (Language Education student) highlighted this when he said, 'First, from the literature review, or literature resources, of course we've got to evaluate from the good side and short-comings'.

The clarity of the written argument was a feature of critical academic writing emphasized mostly by tutors. Tutors also expected students to support their arguments with different types of evidence and ultimately to make some kind of informed judgement. Some students also mentioned the importance of 'making judgements'. Yang highlighted the importance of argumentation when she said:

If students can demonstrate that they have presented a good argument, including a chain of

small arguments, and that all these arguments are kind of linked to a main theme, and then offering different kind[s] of/broad range of evidence, then that usually indicates that they have done really good critical thinking.

(Yang, Management tutor)

The idea of student voice was also something that tutors in the Education institute were keen on. As Gillian (Teaching English to Speaker of Other Languages (TESOL) tutor) highlighted, ‘That’s where the criticality is ... because you need to hear the voice’. On the other hand, one or two students were less sure of the importance of voice because they felt that it conflicted with the expectation that they should write ‘objectively’, or they felt that they were less qualified to present an authoritative voice. However, in general, students felt that as long as their opinions were ‘informed’, their voice should be evident in their writing.

Overall, I argue that the cognitive skills and logical argumentation approaches to critical academic writing were evident in the answers to the interview question above. First, it is suggested that the focus on a critical reading-to-writing process highlighted by students appears to align well with the cognitive process skills approach to CT, specifically in the categories of understanding, analysis and evaluation. Second, it seems that the tutors’ focus on the writer’s voice and clear and well-supported arguments are similar to a logical reasoning and argumentation approach to CT. Finally, there appears to have been a contrast between the focus of students on the process of academic writing and the focus of tutors on the academic writing product.

DISCUSSION AND PRACTICAL APPLICATIONS

The aim of this section is to briefly discuss and synthesize the findings from my research into guidelines that can be used by EAP tutors to advise students on how to write more critically in specific in-session support classes or graduate writing support sessions where EAP tutors are presented with academic written drafts or completed essays from discipline-specific course assignments. Students often expect tutors to provide feedback through the identification of strengths and limitations and to provide suggestions on how they can improve their academic writing (Dawson et al., 2019). Two ways in which this can be done are to identify whether students are demonstrating the cognitive process skills in their writing (Table 1), and to identify whether there are clear patterns of argument in their writing (Table 2).

Anderson et al. (2014), in their revision of Bloom’s taxonomy (Bloom, Engelhart, Furst, Hill & Krathwohl, 1956) highlight three broad cognitive process skills that are directly related to the type of CT skills focused on in this research. These are the skills that require students to demonstrate that they can ‘understand’, ‘analyze’ and ‘evaluate’ (Table 1); three cognitive categories that appear to align with comments by students above. Bloom’s revised taxonomy provides clear definitions and practical applications of CT skills because it was designed explicitly for the purpose of learning and teaching of various cognitive process skills.

Table 1 Three of Anderson et al.'s cognitive categories, and cognitive processes

Category	Cognitive process	Examples in reading/writing
UNDERSTAND	Interpreting	<i>Paraphrasing</i>
	Exemplifying	<i>Illustrating</i>
	Classifying	<i>Categorizing</i>
	Summarizing	<i>Summarizing</i>
	Inferring	<i>Concluding</i>
	Comparing	<i>Contrasting</i>
	Explaining	<i>Outlining a cause–effect relationship</i>
ANALYZE	Differentiating	<i>Distinguishing between relevant and less relevant information</i>
	Organizing	<i>Producing a coherent essay</i>
	Attributing	<i>Identifying a point of view or bias within a text</i>
EVALUATE	Checking	<i>Detecting inconsistencies or fallacies</i>
	Critiquing	<i>Making informed judgements</i>

Table 2 How Toulmin's Argument Pattern can be applied to an analysis of written texts

Toulmin's terminology (Toulmin, 2003)	General definition (Simon, 2008, p. 279)	Written examples
CLAIM	Assertions about what exists or values that people hold.	<p><i>a. Does the writing have clear claims? (e.g., thesis statement for an essay)</i></p> <p><i>b. Does the writing report the claims of specific research from articles/reports/dissertations, etc.?</i></p>
WARRANT	Statements that explain the relationship of the data to the claim.	<p><i>c. Does the writer give reasons for the claims (of a. or b. above)?</i></p>
BACKING	Underlying assumptions that are often not made explicit.	<p><i>d. Where appropriate, does the writer give explanations for the reasons?</i></p>
DATA	Statements that are used as evidence to support a claim.	<p><i>e. Does the writer provide evidence/illustration to support the claims, warrants and backing (e.g., through previous research, statistical data, reports, etc.)?</i></p>
QUALIFIERS	Conditions under which the claim holds true.	<p><i>f. To what extent are claims (and language) hedged?</i></p> <p><i>g. Are limitations presented?</i></p>
REBUTTALS	Statements that contradict either or all of the above.	<p><i>h. Are counterarguments presented?</i></p>

In addition, Toulmin's Argument Pattern (TAP) (Simon, 2008; Toulmin, 2003) provides clear criteria for identifying different elements of an argument based on 'claims' which are supported by 'warrants', 'backing' and 'data'. This can be used as a guideline for the analysis of argument structure in written essays (Table 2). This approach focuses more on the rhetorical structure and the product of a written argument and appears to align with the comments of the discipline tutors above.

LIMITATIONS

It is acknowledged that there are a number of limitations to this research and to the proposed guidelines. First, my research only covered two features of a broader concept of CT within academic writing, focusing on general logical argumentation and cognitive skills. Second, the findings merged the results across three different departments (Education, Business and Sports), and focused on more generic features of CT and less on the discipline-specific ones. Moreover, in theory, it is discipline specialists who are better positioned to provide feedback on academic written assignments in the areas of conceptual knowledge, criticality and reading content (Caulton, Northcott & Gillies, 2017). In contrast, EAP tutors may not have the disciplinary knowledge to fully engage in the content of a text, nor have an understanding of the expected argument structure of a specific written genre within a specific discipline where the nature of argumentation may be 'field dependent' (Toulmin, 2003). I would argue, however, that EAP tutors *can* provide constructive feedback on 'structure' as well as 'language' (see Caulton, Northcott & Gillies, 2017 for examples of where this

has been done). Moreover, these guidelines can provide EAP writing tutors with generic language and structural features which can be used in feedback based on specific cognitive skills and argument structures.

Finally, although I have had the opportunity to practise feedback based on these guidelines since doing the original research, this has not been done systematically and extensively and therefore it is not clear how effective this approach is. It is also conceded that there is some overlap between Bloom's revised taxonomy and the TAP and they may need to be adapted or merged slightly for the analysis of written texts.

CONCLUSION

This paper has combined empirical primary research data with previous conceptualizations of critical thinking to present guidelines that EAP tutors can utilize to provide feedback to postgraduate students on written assignments from discipline-specific courses. Although it is couched in general terms, it still acknowledges the importance of disciplinary differences and does concede that research is needed in the application of this approach across disciplines at a postgraduate master's level. At the same time, it presents practical ideas on how students can be guided to write more critically.

REFERENCES

- Abrami, P. C., Bernard, R. M., Borokovski, E., Wade, A., Surkes, M. A., Tamim, R., & Zhang, D. (2008). Instructional interventions affecting critical thinking skills and dispositions: A stage 1 meta-analysis. *Review of Educational Research*, 78(4), 1102–1134. <https://doi.org/10.3102/0034654308326084>
- Anderson, L. W., Krathwohl, D. R., Airasian, P. W., Cruikshank, K. A., Mayer, R. E., Pintrich, P. R., & Wittrock, M. C. (2014). *A taxonomy for learning, teaching and assessment: A revision of Bloom's taxonomy of educational objectives*. Harlow: Pearson Education Limited.
- Atkinson, D. (1997). A critical approach to critical thinking in TESOL. *TESOL Quarterly*, 31(1), 71–94. <https://doi.org/10.2307/3587975>
- Barnett, R. (1997). *Higher education: A critical business*. Buckingham: Open University Press.
- Bloom, B., Engelhart, M. D., Furst, E. J., Hill, W. H., & Krathwohl, D. R. (1956). *A taxonomy of educational objectives: The classification of educational goals handbook I cognitive domain*. New York: David McKay Company.
- Brookfield, S. D. (1987). *Developing critical thinkers: Challenging adults to explore alternative ways to thinking and acting*. San Francisco: Jossey-Bass.
- Caulton, D., Northcott, J., & Gillies, P. (2017). EAP and subject specialist academic writing feedback collaboration. In M. Gillway (Ed.), *Proceedings of the 2017 BALEAP Conference*. Reading: Garnet Education.
- Davies, M. (2011). *Study skills for international postgraduates*. Basingstoke: Palgrave Macmillan.
- Davies, M. (2015). A model of critical thinking in higher education. In M. B. Paulsen (Ed.), *Higher education: Handbook of theory and research* (Vol 30) (pp. 41–92). Switzerland: Springer International Publishing.
- Davies, M., & Barnett, R. (2015). Introduction. In M. Davies, & R. Barnett (Eds.), *The Palgrave handbook of critical thinking in higher education* (pp. 1–25). Basingstoke: Palgrave Macmillan.
- Dawson, P., Henderson, M., Mahoney, P., Phillips, M., Ryan, T., Boud, D., & Molloy, E. (2019). What makes for effective feedback: Staff and student perspectives, *Assessment & Evaluation in Higher Education*, 44(1), 25–36, <https://doi.org/10.1080/02602938.2018.1467877>
- Durkin, K. (2008). The middle way: East Asian master's students' perception of critical argumentation in UK universities. *Journal of Studies in International Education*, 12(1), 38–55. <https://doi.org/10.1177/1028315307302839>
- Facione, P. A. (1990). *Critical thinking: A statement of expert consensus for purposes of educational assessment and instruction*. Millbrae, CA: The Californian Academic Press.
- Fakunle, L., Allison, P., & Fordyce, K. (2016). Chinese postgraduate students' perspectives on developing critical thinking on an UK education masters. *Journal of Curriculum & Teaching*, 5(1), 27–38. <https://doi.org/10.5430/jct.v5n1p27>
- Govier, T. (1987). *Problems in argument analysis and evaluation*. Dordrecht: Foris.

- Hammersley-Fletcher, L., & Hanley, C. (2016). The use of critical thinking in higher education in relation to the international student: Shifting policy and practice. *British Educational Research Journal*, 42(6), 978–992. <https://doi.org/10.1002/berj.3246>
- Jones, A. (2015). A disciplined approach to critical thinking. In M. Davies, & R. Barnett (Eds.), *The Palgrave handbook of critical thinking in higher education* (pp. 169–182). Basingstoke: Palgrave Macmillan.
- Lipman, M. (2003). *Thinking in education* (2nd ed.). Cambridge: Cambridge University Press.
- McPeck, J. E. (1981). *Critical thinking and education*. Oxford: Martin Robertson.
- Moore, T. (2013). Critical thinking: Seven definitions in search of a concept. *Studies in Higher Education*, 38(4), 506–522. <https://doi.org/10.1080/03075079.2011.586995>
- Paul, R. W. (2011). *Critical thinking movement: 3 Waves*. Retrieved March 18, 2018, from <http://www.criticalthinking.org/pages/critical-thinking-movement-3-waves/856>
- Phillips, V., & Bond, C. (2004). Undergraduates' experiences of critical thinking. *Higher Education Research & Development*, 23(3), 277–294. <https://doi.org/10.1080/0729436042000235409>
- Robinson, S. R. (2011). Teaching logic and teaching critical thinking: Revisiting McPeck. *Higher Education Research & Development*, 30(3), 275–287. <https://doi.org/10.1080/07294360.2010.500656>
- Saldaña, J. (2009). *The coding manual for qualitative researchers*. Thousand Oaks, CA: Sage.
- Shaheen, N. (2012). *International students at UK universities: Critical thinking related-challenges to academic writing* [PhD thesis, University of Huddersfield, UK]. <http://eprints.hud.ac.uk/16429/>
- Shaheen, N. (2016). International students' critical thinking-related problem areas: UK university teachers' perspectives. *Journal of Research in International Education*, 15(1), 18–31. <https://doi.org/10.1177/1475240916635895>
- Simon, S. (2008). Using Toulmin's argument pattern in the evaluation of argumentation in school science. *International Journal of Research & Methods in Education*, 31(3), 277–289. <https://doi.org/10.1080/17437270802417176>
- Toulmin, S. E. (2003). *The uses of argument*. Cambridge: Cambridge University Press.
- Wallace, M., & Wray, A. (2016). *Critical reading and writing for postgraduates*. Thousand Oaks, CA: Sage.
- Wingate, U. (2012). 'Argument!' helping students understand what essay writing is about. *Journal of English for Academic Purposes*, 11(2), 145–154. <https://doi.org/10.1016/j.jeap.2011.11.001>

APPENDIX I

INTERNATIONAL STUDENTS WHO PARTICIPATED IN INTERVIEWS

Pseud.	PG study	Nationality	M/F
Ana	TESOL	Indonesian	F
Anika	TESOL	Indonesian	F
Yumi	TESOL	Japanese	F
Wei	Language Education	Chinese	M
Fang	Education	Chinese	F
Ying	Education	Chinese	F
Mara	Education	German	F
Melissa	Performance Psychology	Belgium	F
Marie	Performance Psychology	French	F
Marco	Strength and Conditioning	Italian	M
Jun	Management	Chinese	F
Min	Management	Chinese	F
Yichun	Management	Taiwanese	F
Jing	TESOL	Chinese	F
Li	Education	Chinese	F
Qiang	Education	Chinese	M
Cristina	TESOL	Chilean	F
Azeera	TESOL	Turkish	F

APPENDIX 2

TUTORS WHO PARTICIPATED IN INDIVIDUAL INTERVIEWS

Pseud.	School/Institute	Master's discipline	Nationality	M/F
Barbara	Business	Marketing	UK	F
Calina	Business	Marketing & Business Analysis	Russian	F
Dag	Business	MBA	Norwegian	M
Erika	Business	Human Resource Management	Slovenian	F
Frank	Business	Research Methods in Business	UK	M
Gillian	Education	TESOL	Irish	F
Harry	Education	TESOL	UK	M
Iain	Education	Digital Education	UK	M
John	Education	Philosophy of Education	UK	M
Karla	Education	Outdoor Education	German	F
Len	Sports	Sports, Marketing & Communication	S. Korean	M
Matt	Sports	Performance Psychology	UK	M
Neil	Sports	Conditioning Physiology	UK	M
Yang	Business	Management	Chinese	F