

Potential Impacts of an Academic Writing and Publishing Module on Scholarship and Teaching: A Qualitative Study

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Introduction

This paper reports on a qualitative study exploring the extent to which an accredited Academic Writing and Publishing (AWP) module for faculty and graduate students helped them develop as scholars and how, over time, it affected their instructional beliefs and attitudes in working with their own undergraduate students. For the two module tutors, it was important to know how the participants applied what they learned from the module in their own teaching practice and to identify particularly effective aspects of the module that translated to this other context. Therefore, key themes explored in this paper are the impact of the module's critical thinking-reading-writing (CTRW) strategies on faculty writing practice and their subsequent transference to students across a range of disciplines.

The module participants include faculty from higher and further education, PhD students, and professional educators (consultants and trainers). While the module tends to draw in new faculty and PhD students, in particular, for the support it provides for increasing their academic publications, this support is balanced with the assistance it can give participants to subsequently help their own students navigate critical thinking, reading and writing in the disciplines.

Academic reading and writing, as well as research strategies and the ability to engage with ideas critically, are core expectations in most fields of study in higher education (Spiller & Ferguson, 2011). Complementing these generic competencies are the unique requirements associated with reading, writing and methods of inquiry in particular disciplines. However, Migliaccio and Carrigan (2017) reported that programs often struggle to address writing adequately because of the difficulty of fully evaluating student work and responding to any identified limitations, largely because of the impact on staff workload. Faculty may understand that teaching students to write is nevertheless a shared responsibility, not left to dedicated writing centers or foundational writing/composition courses alone. There are simple strategies that can form part of their daily teaching, such as those suggested by Angelo and Cross (1993) and Bean (2011)—strategies that can help students to deepen their intellectual grasp of a subject and develop the capacity to manage complex ideas in writing. Menary (2007) maintained that “writing is thinking in action” and “the act of writing is itself a process of thinking” (p. 622). Writing can force the clarification of ideas, attention to details and the logical assembly of reasons. However, designing writing activities that can only be completed with mind engagement takes effort on the part of the faculty member, and again, professional development has a role to play here.

Clarence (2011) argued that there is a gap between what faculty think students need to do to develop as competent writers and thinkers and what these faculty are doing to help students achieve this goal. The AWP module, which is focused on supporting faculty writing

and publishing, can, in turn, be applied pedagogically to students' holistic writing development in order to begin to close the gap.

The next section of this paper describes the context for the study (the AWP module and the participants who provided the data for the study). A literature review discussing critical thinking-reading-writing in the disciplines is then included. A subsequent section explains how this theoretical discussion informs aspects of the module. The research design of the qualitative study (with the module as its context) is then described, followed by an outline of how data were analysed using appropriate qualitative methods, including a process for coding transcripts. Given next is a presentation of the findings, which offer a basis for generalization and conclusions.

Context

The context for this study is a semester-long professional development module, offered in the Faculty Development Centre at the Dublin Institute of Technology, as a component of a suite of two-year part-time postgraduate programs in teaching, learning and professional development. Since the module commenced in 2009, with just 10 participants, enrolment numbers have grown steadily each year. In 2015–16, applications increased to 22, and it is anticipated that this demand will remain between 20 and 25 per annum; there have been over 70 graduates of the module to date. There is an increasing need for this module as the host institution is merging with two others in 2019 to form a Technological University—the first of its type in the country. In this new multi-campus higher education institution (HEI), this module can provide innovative pedagogical approaches to support technical academic writing and publishing skills for its faculty.

To date, module participants have been from a wide range of disciplines: science, engineering, business administration, electronics, English as a second language, design, accounting, human resource management, architecture, marketing, music, strategic management, computer science, communications, career development, physics, supply chain management, business studies, geomatics, law, visual merchandising and display, optometry, animation, video game programming, academic English, civil/structural engineering, and chemistry.

This module, like many in faculty professional development, is designed to introduce a range of practical online and face-to-face academic writing strategies. These strategies are equally applicable to novice academic writers new to publishing and experienced writers looking to develop skills through new technologies. A writing community is supported through blending innovative with traditional methods of delivery to facilitate critical thinking, reading and writing. These include online peer review, audio and screencasting feedback, experimenting with mobile apps on academic writing, crafting video abstracts, and having research and scholarly conversations through an online journal club and weekly webinars.

Rationale

There has been a significant volume of research on courses supporting faculty publishing and writing (e.g., Murray, 2012; Richie, Mason, & Zimmerman, 2013; Smith, Martinez, Lanigan, Wells-Moses, & Koehler, 2018) as well as on how to improve writing in the disciplines (e.g., Hunter & Tse, 2013; Hyland, 2009). This current study is situated within these ongoing discussions but also explores how participation in the AWP module may have

affected faculty members' instructional beliefs and attitudes in working with their own undergraduate students—arguably, this is a novel dimension to the study, and one that defines its exigency and potential contribution.

Although there is plentiful anecdotal evidence that programs supporting academic staff as writers are usually highly appreciated and lead to higher levels of productivity, there is little research demonstrating that the meta-level awareness of new perspectives and strategies for writing changes teachers' practices when they assign and support writing in their own courses. Data in this study are therefore gathered from participants' narratives of the module's effects on their writing as well on their pedagogy.

As there are many existing publications on writing in the disciplines (e.g., Dean & O'Neill, 2011; Hyland, 2009), the challenges of publishing for novice and experienced faculty (e.g., Badenhorst & Xu, 2016; McGrail, 2006) in the disciplines (e.g., Meadows, Dietz, & Vandermotten, 2016), the development of writing courses/workshops/interventions (e.g., Baretta, 2010), and the importance of critical thinking/reading for writing (e.g., HEA, 2014; Mason, 2008), it is not the intention of this paper to re-cover these. Instead, literature is reviewed on the most effective strategies of critical thinking, reading and writing for faculty to use in their own writing and publishing and, subsequently, how these might best facilitate their support for their students' writing.

Effective Strategies in Critical Thinking-Reading-Writing

Arguably, the term "critical thinking" has been overused. There has been no shortage of definitions of critical thinking over the years, nor of literature reviews devoted to these definitions (e.g., Lai, 2011). The AWP module does not present a "standard" definition of critical thinking but instead a variety of definitions to be explored: a set of skills and mental processes for problem-solving (De Bono, 1956); a way of formulating or critiquing arguments (Warburton, 2007); a discipline-specific practice (McPeck, 1990); a general intellectual approach or attitude (Paul & Elder, 2006); and a process involving the development of the following skills: observation, reasoning, decision-making, analysis, judgment and persuasion, along with "*categorising, selection, differentiation, comparing and contrasting*" (Cottrell, 2005, p. 4).

These definitions are offered initially in the AWP module, and participants are then encouraged to discuss, and develop their awareness of, critical thinking as it relates to their respective disciplines and their teaching. On the module, discussion-based strategies are used to pose questions about critical thinking: In your view, can thinking be taught independently of a particular subject? Is critical thinking mostly to do with cognitive skills? Does affect (emotion or psychological state) have a role in thinking? What is the role of subject-specific language in the development of critical thinking?

As participants consider the research topics they are going to write about, the module links critical thinking to participants' deep and protracted exposure to relevant subject matter through strategies of close reading. These include collecting, examining, and evaluating evidence, and then questioning assumptions, making connections, formulating hypotheses, and testing them. The intended culmination of this process is the production of clear, concise, detailed, and well-reasoned arguments. As contended by Bean (2011), the struggle of writing, linked as it is with the struggle of thinking, and to the growth of a person's intellectual powers, awakens students to the real nature of learning.

One way to see how conjoined writing and thinking are in academic work is to look at how the author's "voice" is constructed in the text. It is important to acknowledge that the literature on voice in writing is heavily contested, with a persisting dissension over whether it is personally generated or socially constructed (Elbow, 1994; Ramanathan & Atkinson, 1999). Developing a voice can be especially challenging for international students who may have culturally different ways of writing and thinking about "voice," and the complexities they face in this are clearly articulated by Correa (2010). Robbins (2016) discussed how to find your voice as an academic writer and how it takes a combination of courage and practice. Voice is placing oneself in the text through evaluative and interpretive language—using phrases which indicate that critical and interpretive thinking has taken place. The author's presence can also be seen in the way that meta-commentary is used. Strategies in the AWP module encourage participants from all disciplines to find their voice by offer an interesting angle, an innovative analysis, or a different approach to an issue they are exploring in their research and journal papers. It can be that a combination of thinking and writing which produces a particularly recognizable and distinctive author's voice is one which speaks with authority and is what a journal audience likely wants to read and consult.

Facilitating Faculty Support of Their Students' Writing

There are useful scholarly conversations taking place in the United States about the challenges undergraduates face with respect to critical thinking, reading and writing. A 2006 large-scale study by Baer, Cook, and Baldi (2006) comprehensively examined college students' reading abilities/literacy levels from a variety of different perspectives. In the study, four literacy levels were identified (below basic, basic, intermediate and proficient) across three different literacy types (prose, document and quantitative). Looking at the average literacy levels for students enrolled in two- and four-year institutions, the study reported that while college students on average score significantly higher than the general adult population in all three literacy types, the average score would be characterized as at the intermediate level. Another study, by Larsen, Britt, and Kurby (2009), raised concerns about the difficulty students have evaluating arguments on the basis of their quality. Finally, Migliaccio and Carrigan (2017) identified some key areas in academic writing with which U.S. college students struggle—argumentative thesis development, citation, and revision. Baratta (2010) wrote of how the U.S. academy has long acknowledged the importance of writing pedagogy to address these challenges, with the majority of undergraduate curricula having a required writing class ("freshman composition").

In the United Kingdom and Ireland, there is not an equivalent nationally prescribed syllabus, although HEIs are increasingly establishing writing centers and offering classes to address the challenges described above. But individual faculty members may not know how to help students develop the critical thinking, reading and writing necessary for entering the discourse communities of their respective fields (Bean, 2011). Many faculty end up confounded by their students' difficulties with, for example, reading for deep understanding. While students are completing assigned readings, they are not always able to process the information to analyse its concepts or to apply its content to new situations.

In the AWP module, a number of strategies are shared with participating faculty to support their students' writing, such as

- showing specific examples of critical thinking and writing from previous students' work on the same assessment tasks;
- showing examples from one's own work that demonstrate criticality;
- modelling one's own thinking and writing (e.g., "When I read this, the first question I ask myself is . . .");
- highlighting words and phrases that are commonly used by faculty in the field to indicate a critical stance (e.g., "can be questioned in terms of," "fails to consider the possibility that," "this may or may not demonstrate");
- discussing useful note-taking strategies for engaging and transforming ideas and knowledge in what is being read;
- and encouraging the use of "higher order" thinking skills.

Designing Pedagogical Opportunities in Academic Writing: The AWP Module

The module which forms the focus of this study is designed to nurture both innovation and critical thinking about writing practice. In each iteration, there have been two tutors delivering and facilitating the module. The author, who was part of the original module design team, has remained as the constant tutor, with different colleagues from the faculty development center joining at various junctures as a co-tutor. Table 1 gives a synopsis of the AWP module's structure and delivery:

Table 1 Module Overview	
Outcomes	<ul style="list-style-type: none"> • Outline the principles of academic writing; discuss different genres • Recognize writing as a constructive, meaningful process and analyze/evaluate one's own and others' writing • Write confidently in a variety of formats for a variety of purposes and audiences • Critically apply digital literacy skills in locating a range of relevant sources to develop an argument in writing assignments • Explore peer-reviewed journals and identify a relevant journal in the field of third-level education/professional practice for publication • Prepare and write a paper adhering to all the journal requirements (using appropriate writing strategies, constructing first drafts, rewriting, revising, editing, proofreading) • Present a paper at a postgraduate conference and develop skills as effective speakers using appropriate visual, audio, multimedia aids • Work collaboratively on peer review and reflect on performance and activities for the purpose of self-assessment
Duration	1 semester, across 15 weeks
Components	<ul style="list-style-type: none"> • Using the shared events of participants' lives to inspire their writing; participants are then supported to articulate and witness commonalities and differences across a range of writing experiences • Establishing an online dialogue between participants from different sectors who are reading the same journal articles • Supporting the novice writers by pairing them with expert reading/writing "buddies" • Helping participants analyze texts by encouraging them to imagine a dialogue between published authors in a target journal

	<ul style="list-style-type: none"> • Deepening participants' understanding about academic writing by encouraging them to observe synergies and distinctions among related module writing concepts and practices • While recognizing and appreciating disciplinary distinctions, fostering inquiry and reflection in ways that broaden knowledge about writing practices and the opportunity to establish linkages across the various disciplinary divides • Creating new opportunities for feedback with the use of audio and screencasting tools • Connecting thinking across a range of academic cultures and social media; producing high quality infographics to meet the needs of a target audience in their professional practice • Having the mix of participant working context to help bridge academic and professional identities
Delivery	<p>In-class: three-hour weekly classes for building a community of writers</p> <p>Online: fortnightly webinars/discussion fora to discuss issues around new technologies for writing and how best to support students</p>
Assessment	<p>Writing and preparing for publication and dissemination individual practice-based educational or disciplinary research in the form of a</p> <ul style="list-style-type: none"> • Paper in a peer-reviewed journal • Conference presentation

An exploratory model for supporting faculty in their development as scholars by focusing on critical thinking, reading and academic writing practice encompasses a series of such scaffolded in-class and online activities. Figure 1 shows the different dimensions of this blended module.

Peer Learning: Online Journal Club

Integration of online and face-to-face class activities includes a journal club and peer review learning sets, which are introduced in class and then moved online to the discussion board and webinars in Blackboard, the institutional virtual learning environment. The online journal club is aimed at helping participants learn how to read articles critically and closely. This close reading involves different literacy-based strategies. Provocative articles on the role of academic writing are chosen for review, and participants work in small groups to appraise a recently published research paper and present their findings to their peers online in the journal club. If possible, articles with some disciplinary relevance to participants are also assigned. Initially, participants did not feel confident in their critical appraisal skills, so checklists for critical review have been made available online. The advantage of this approach is that reviews are more consistent and alert readers to methodological flaws in the articles. Incorporating learning principles such as agreeing to goals relevant to participants aims to enhance the group learning experience. Group theory suggests that such clear boundaries contribute to a sense of security, making creative and critical thinking possible (Jaques, 2000).

Akerlind (2008) offered interesting insights into how new faculty develop as researchers and scholars, finding that such development includes a focus on feelings about oneself (identity), one's performance (collaboration, development of community, networking), and outcomes (productivity). Akerlind (2008) outlined four phases in a

researcher's development, which are relevant to this current study: becoming confident (gaining the research and writing skills to publish), becoming recognized (gaining expertise and becoming part of a research community), becoming productive (gaining the skills to access grants, conduct research and publish regularly), and becoming sophisticated (being a leading thinker in a field).

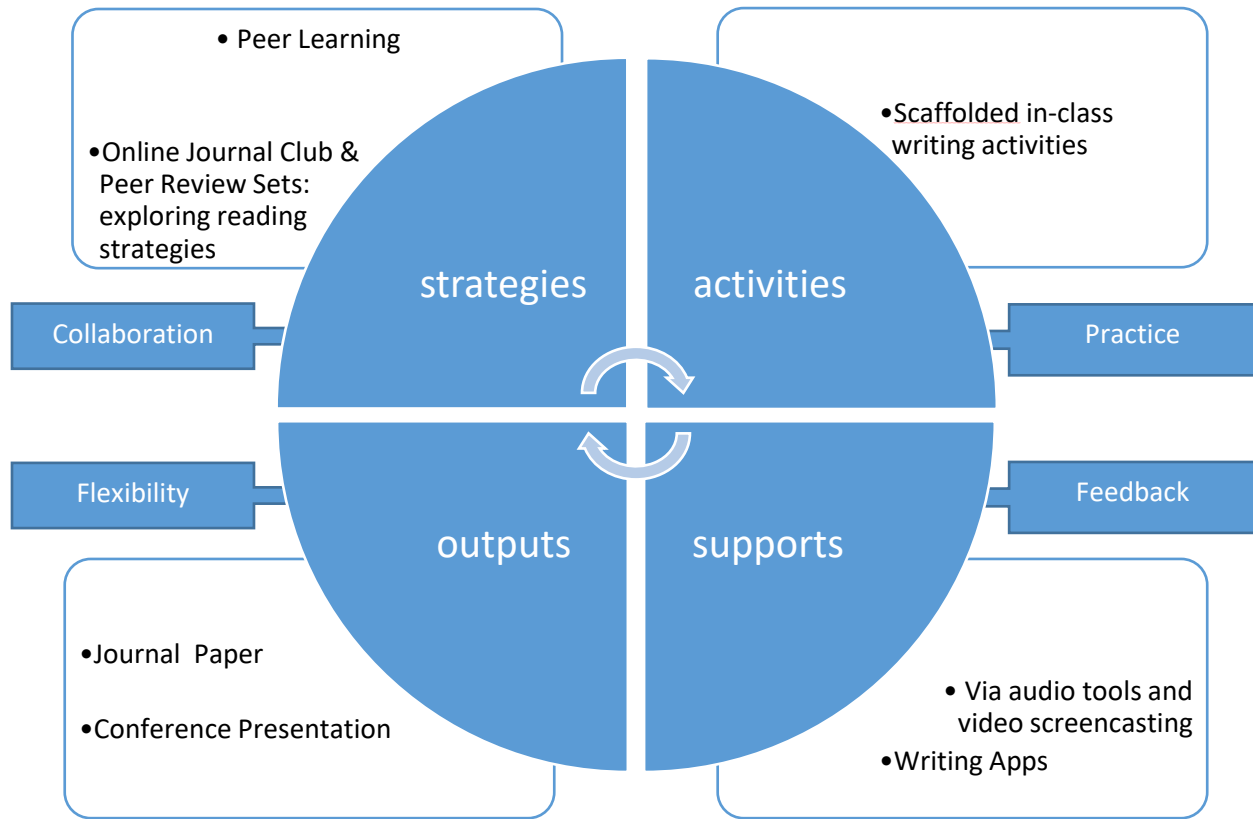


Figure 1. Model of support for academic writing and publishing practice.

Peer Review Learning Sets

The peer review learning sets are held online to allow the participants to maintain the dynamic and pace of their learning between classes. It is important to the success of these sets that investment be made in establishing mutual trust amongst the participants. The module tutors believe that creating opportunities for social and academic interaction with other participants is of vital importance for setting a positive affective climate for writing. The emotional side of writing is usually kept private and is often under-communicated, so the participants are encouraged to exchange experiences and frustrations (usually not having enough time to write). By providing personal support, the virtual peer review sets are based on openness and personal commitment to one another. This helps participants develop the ability to combine criticism with support in serving as a first filter for ideas and sharing resources about the topics of the papers being written.

Strategies and Technologies for Module Delivery

The thoughtful integration of technologies in the module is based on a recognition that for the adoption of new online tools and media across any institution or organization, strategies need to focus on achieving a critical mass of faculty that are competent online teachers. Of particular interest is how to enhance their capability to sustain the fusion of new technologies with writing practices. Participants explore some technological tools used for feedback (Voice Record Pro, Audacity, Jing, Thinglink) in order to sharpen their writing style and strategies, and scholarly webinars are used to improve interaction among participants and allow for exploration of some techno-pedagogical strategies for integrating writing and professional practice.

Professional values that underpin the module delivery are shown in Figure 1 and include the following:

- Writing can be a lonely endeavor—**collaboration** in all its forms, including team building and the nurturing of reciprocal learning and writing experiences, is key to this module delivery. The tutors encourage the notion of being “ideas blenders,” where the participants engage in and facilitate knowledge exchange about academic writing and publishing by sharing insights into pedagogies and technologies they are using.
- Writers can thrive with the benefit of **practice**—the module tutors aim to provide stimulation, a passion for exploration and a forward-looking approach to the field of academic writing and publishing.
- Faculty and educational professionals in a large organization need to feel valued—there is power in listening and responsiveness and getting **feedback** on one’s work. Helping writers to be responsible, transparent, and to invite scrutiny on their work is important. The use of audio commentary for responding to student writing is by no means new for the field, but in the context of the host institution for this study, its use is regarded as a novel learning opportunity for faculty members to decide if it would be suitable in different disciplines with their own students. There is a growing body of literature on audio commentary and screencapture commentary that will be useful for future module development (Anson, 2015; Sipple, 2007; Sommers, 2012).
- Offering the participants **flexibility** on the outputs they can have from the module contributes to the trust, respect and commitment which are the cornerstones of strong writing relationships.

Ultimately, this module delivery approach tries to offer inspiration, creativity, confidence, continual feedback, support, and connections between academic writing and publishing. However, such bottom-up practices need direction, so it has been important for the tutors to consider how they align the module with, and appropriately inform, other institutional and national writing and publishing policies.

Research Design

The qualitative study focused on two questions:

- How effective is the module in developing the writing and publishing practices of faculty, PhD students, and professional educators from a wide variety of disciplines?
- How can the module's CTRW interventions help faculty see connections between their developing practices and the ways in which they work with their own students?

Data were collected and analysed in three steps (see Figure 2).



Figure 2. Steps involved in data collection and analysis.

First, an online survey was distributed to all participants who completed the AWP module between 2009 (when the module was first offered) and 2016. The survey was developed based on an analysis of the literature and explored how faculty members' experience of engaging in the module affected the way they think about, and act on, their own and their students' writing. Table 2 gives the number of survey respondents (out of an average of 15 participants in each annual iteration of the module) and the year they completed the module. The year of completion was important to note in order to explore any potential relationship between the length of time elapsed since completion of the module and its impact on participants' academic writing and publishing practices and their work with their students. Table 3 gives the number of years of participants' teaching experience at the time of the survey.

Table 2 Number of Survey Respondents by Year of Module Completion	
2016 - 10 participants responded	2012 - 1 participant responded
2015 - 3 participants responded	2011 - 2 participants responded
2014 - 6 participants responded	2010 - 2 participants responded
2013 - 3 participants responded	2009 - 3 participants responded

Table 3 Survey Respondents' Duration of Teaching Experience	
25 years: 1 participant	10 years: 8 participants
15-20 years: 8 participants	1-5 years: 13 participants

Second, six participants were interviewed in January 2017 in a two-hour focus group about the CTRW approach to supporting their students' work. These were self-selecting participants who responded to an invitation that was sent to all those interested in CTRW. Although the interview was conducted with a script, participants' responses were allowed to influence the direction of the interview and frequently the follow-up questions. Contact was then maintained with the six participants throughout the study through occasional conversations in person and over email, allowing participants to provide updates on their

progress implementing CTRW strategies in their classrooms and to clarify the author's understanding of any emerging issues. Participants were anonymized as Faculty A–E. Recognizing the potential sensitivity of the data collected through the focus group, the interview transcripts were shared with the participants to give them an opportunity to redact any information they did not want to be made public.

Third, data was analysed following procedures informed by Creswell (2003). This included several steps: data organizing, data reading, coding, narrating description and themes, and interpreting. Analysis followed an emergent, inductive approach, focusing initially on gaining familiarity with the data set as a whole and then doing a more focused reading to narrow in on the specific research questions. An initial step was to arrange the data in chronological order, which allowed for tracking of the CTRW approach as it unfolded as an instructional strategy in the participants' practice, and to begin forming a general understanding of salient issues. The coding process was conducted by naming meaningful events that included, for example, time, topics, data source, participants, and thematic categories. A code of (Focus/LECTA/20/01/17/READ), for instance, indicates that the data were taken from the focus group with Faculty A on January 20, 2017 about perceptions on module reading strategies. Emergent categories were added when they could be used to support data to answer the research questions. Data that showed a connection with the research topic and eventually helped address the research questions were separated and categorized under headings. Commentaries and notes were compiled and collated to support analysis of the data. The thematic categories were thus empirically-based, and data were synthesized with quotations that support the specific themes.

Discussion of Findings

The findings of this study show how the module has supported participants' writing and publishing practices and how this module experience has also translated to instructional strategy.

Participants' Experience as Developing Scholars

Increased confidence in writing is one of the most common goals faculty have when they begin professional development modules such as this one. Many want to get constructive feedback on how to best structure and present their research or how to navigate peer review. However, once discussions open up, they often admit being plagued with self-doubt about their writing. Faculty C highlighted the challenges that new faculty can face in approaching academic writing:

My experience of academic reading and writing coming into this module was extremely limited. I had not really written anything since a BA in 1987 when there was . . . little (if any) formal writing instruction. I had barely ever seen a journal article, didn't know how to research, and was fairly computer illiterate. I was terrified, and very stressed. It was simply something I had to do, rather than something I wanted to do or expected to get much from in any authentic way.

Ganobcsik-Williams (2006) argued that once faculty have developed their understanding of writing, they can grow their repertoire of writing activities and grasp their

pedagogical foundations. A key component is instilling confidence and belief about whether they can write articles they value and their colleagues will respect.

The role of feedback and support strategies on writing and publishing practice was perceived very positively by participants. Faculty C went on to positively discuss how the module impacted her personal practice and how she considers her developing scholarship to have been affected by the support provided in the module:

... was a very profound experience. ... gave me the skills I so desperately needed to continue my study ... totally changed my perception and understanding of the meaning and function of Critical Thinking and how it could be of value in my teaching and in my own personal Artistic practice. I put this down to two things: the forensic design of the module, which has been constructed with great insight into the need to build on a person's own understanding and level/ability, on not making assumptions about prior knowledge, and an absolutely extraordinary level of feedback and ongoing tutor support (which I have never experienced before). This combination of factors provided a powerful scaffold which gave exactly the right level of support in exactly the right places at exactly the right time to the right students individually, and allowed confidence to build and a real sense of ownership and autonomy to develop.

Strategies that worked best were peer review, critical analysis of texts, comparison to earlier works, self-reflection and audio formative feedback.

Geller and Eodice (2013) observed that the imperative to write and to publish is a relatively new development in the history of academia, yet it is now a significant factor in the culture of higher education. Their work offers a number of insights into how faculty write and how to coach them. Approaches they recommend are faculty writing groups, retreats, residencies and centers, and a series of programs forming a scholarly writing continuum. They also stress the importance of finding a good balance between autonomy and interdependence. Of particular interest for this module is the significance of establishing a community of scholars, with an emphasis on providing flexible professional development opportunities so that faculty with different needs can succeed in a complex workplace. Faculty B related key impacts of the module to her particular professional development needs:

Currently using the critical reading and writing strategies to get to know my ontological position and epistemological commitments in a doctoral position paper. To read critically and subsequently write, it is about creating concerted head space to eventually reach clarity of thought. Allowing for the confusion and disorientation along the way is all part of the process of learning. I would like to improve competence around intertextuality, better signposting as I write and in 'telling my story' so that it matters to the reader.

Participants highlighted the benefits of the CTRW approach with respect to the literature review, building arguments, thinking laterally and looking through the lens of different perspectives:

The module has improved my critical thinking and allowed me to compile a thorough and well-represented literature review. It has made me reflect on the order of my paper and how clearly it was written.

The critical thinking approaches . . . were very instructive . . . for building my argument and helping me decide how clear I was in doing it.

Receiving feedback during the writing process developed my critical thinking as it challenged me to think laterally.

Critical thinking is something that tends to develop in a very discipline-specific way in a small discipline such as mine . . . the AWP module was of great benefit due to the diversity of backgrounds of fellow participants— getting me to see things from slightly different perspectives.

What do critical thinking and writing really mean from a faculty member's disciplinary perspective? There are those that view writing as a mechanical skill, technical in nature, and a straightforward process; however, this can be countered by the fact that putting our ideas into words can help us to think critically by learning how to formulate an argument, assemble supporting evidence in a logical order and in a convincing way, and form a conversation with the relevant literatures. Carnell, MacDonald, McCallum, and Scott (2008) agreed that *writing should not be seen as a mechanical or separate or decontextualized task or process* (pp.130–131).

Thinking about particular forms and styles of writing specific to their discipline vis-a-vis generic writing strategies, Faculty A reported: *I had to learn to use language more concisely with reference to my own discipline.* Faculty E discussed the impact of the module on herself (and how she subsequently used it to support her students' presentation skills as well as their critical reading and writing in her design-based discipline):

In design, students must learn critical thinking, and this skill develops over time. Speaking from experience, I believe learning from your mistakes, being open-minded and appreciating objective criticism is the basis for successful learning in any discipline.

I have been asked to teach a communication class as a result of my experience on this module. I teach material that is relevant, and continually encourage brainstorming, practical solutions, and different perspectives. These simple strategies drive motivation and when students are confident they will take risks, and that is the basis for a brilliant designer/writer. My students' presentation skills and self-reflection are now leading to a higher standard of work.

Perceptions of critical thinking from the module illustrate the participants' experiences from their first-person accounts and show what constitutes critical thinking for these faculty in their respective disciplines. As a qualifier, although some of these ideas are tried and tested and well recognized in the context of writing scholarship, they are novel and

meaningful to these staff. Faculty A in the focus group provided an example of what critical thinking is in the performing arts:

Performance appraisal is a big part of my discipline of opera and drama studies—this is often a very subjective area. One knows that critical thinking is ‘in operation’ when it is possible to contextualise commentary and one is able to cite some frame of reference for commentary.

Faculty E, from business, discussed how her discipline influences how critical thinking manifests itself in her writing practice:

In terms of Leadership and Strategy, a novice sees only black and white thinking, e.g. you are either a pace-setting or affiliative leader, while an expert thinker realises that you can be both (and more), but you must choose by assessing the context and deciding which will be most effective in terms of results. For me this is critical thinking, reflecting on the situation/context and deciding the best leadership style given the desired outcomes and the follower’s motivation/competence. I know if critical thinking is occurring if the individual can tolerate ambiguity, a lack of tolerance suggests to me that the individual expects one answer or one strategy. Hearing a student saying ‘it depends . . .’ suggests an awareness of critical thinking. The content of my critical writing does not have to change the world but it can contribute to a conversation which was another learning for me from AWP. I am contributing a perspective and sharing an experience with others through my critical writing and that is quite enough. So keep ‘critical’ of writing but drop being ‘critical’ of self that the writing is not ‘big enough’.

Faculty D discussed what was learned about the concept of critical thinking in graphic design and what she has brought forward from the module in terms of resources and activities for herself (and her students):

I have revisited my approach to reflective journaling, introducing the concept and discussion of Critical Thinking and what it means and can mean to students in this and other contexts . . . has had startling, illuminating results, and opened avenues for students to write in a way that they feel is not necessarily about box-ticking, but questioning even the notion of critical thinking itself for themselves, and writing and researching issues that surround that, are of concern to them as artists rather than just academics [faculty] or thinkers per se. They find this very liberating, and it has created much discourse, reflection and questioning. I am now privy to a world of books and journals and theories that I was either afraid of or unaware of. I have a fabulous resource in great notes from the module that I can return to again and again (and do, and will) . . . feel incredibly empowered by the step-by-step approach to the skills needed to approach Academic Reading and Writing and doing that with a critical facility as I approach my thesis. Above all, it was the support and encouragement at key points that made such an

almighty difference. This realisation has impacted my teaching greatly. I am very grateful to have this opportunity to bring my learning into my classroom.

Certainly, critical thinking is a strong underpinning theme in the module and is explored from a number of vantage points: as a judgment, as a sceptical and provisional view of knowledge, as a simple originality, as a careful and sensitive reading of a text, as the adoption of an ethical and activist stance, and as self-reflexivity (Moore, 2013). In discussing the features of critical writing in her discipline, Faculty A also pointed towards its negative aspects:

It can lean towards being too subjective. There are vocal pedagogues whose writing is very dense and difficult to relate to (albeit 'sound') or on the other hand—too sensationalised. The subject of vocal performance is difficult to quantify. Critical appraisal therefore tends to become over-comparative.

Taking this further, Faculty A also discussed the difference between a novice and an expert thinker in this discipline:

I think that the expert thinker can draw on a comprehensive frame of reference. This may be in terms of cultural reference—the humanities (particularly the arts) coupled with a practical knowledge of the current vocal and opera profession— Commentary, appraisal and evaluation are presented from that informed position.

A novice often needs support and encouragement to build the confidence necessary to think of an idea to self-manage, to self-adjust and then to reflect upon. An expert can provide motivation and encouragement and share knowledge and perspective to nurture and create problem-based learning. Faculty C, who teaches art, a practice-based discipline that involves little or no written work, discussed who the expert thinkers are in his discipline:

Critical thinking as an approach, a philosophy and a skill is something that is almost ubiquitous in Art and Art Colleges across disciplines; on the Programme I teach, it is covered as part of Contextual studies, where students are taught about it over four years. It underpins outcome-based learning, which has a significant impact on the intellectualisation of teaching and looking at Art, and to the focus on outcome over process. I have found this problematic at times, and have questioned the notion of the 'experts', feeling Critical Thinking has become a narrow 'catch all' term that is often misunderstood and functions as a cork in a student's 'permission' to grow, explore, and bypass a purely cognitive or intellectual process. I came to this AWP module feeling quite negative, both because of this and also because I felt my specific discipline was not academic or reading/writing based, and was in fact, a kind of antithesis to it.

Combining all strategies from the module was reported to have a positive effect on individual participant writing (and teaching) practice:

The practice of writing has been demystified—the role of structure and a systematic approach to writing and how to use digital literacy data services.

After undertaking all the strategies, my academic writing has improved considerably and since my work activities force me to write publications often, I'm noticing that my style is improving continuously.

I have used these combined strategies in my own writing practice and I have introduced the concepts to my undergraduate students.

Seeing improvement in their own writing practices has encouraged the participants to think about how to extend this learning from the module to support their own students:

My analysis of high volumes of literature has become far more efficient, synopsising concepts/content is now easier and more accurate, and, demonstrating/imparting the importance of structure has been elevated in my priorities when writing and when guiding my own students.

Critical thinking did help me tremendously in my own writing practice and I have helped students in my class in understanding the need of planning for writing and to think critically in the process.

According to Matthews (2017), it has long been claimed that critical thinking ability sets graduates apart. But he asks, are universities really preparing students for the modern workplace? Employers are asking for graduates with the ability to come up with new ideas and concepts and to create solutions to problems, and HEIs continue to focus on behavioural and cognitive attributes, such as logical thinking, the ability to understand the root cause of a problem, rapid comprehension of new concepts, self-motivation, and a confidence-inspiring and professional manner. However, a challenge remains for courses to find sufficient time needed to explicitly teach the abstract tools of critical thinking as well as writing. The CTRW strategies are offered as one approach to this challenge, and participants identified which were most helpful to them at the time (see Table 4).

Table 4 Most Helpful CTRW Strategies				
Critical thinking & development of critical argument	Online journal club activity	Close reading strategies	Peer review process	Total responses
10 (33%)	12 (40%)	6 (20%)	2 (7%)	30 (100%)

Reading, writing and reasoning skills are foundational to the success of any college student (Fairbairn & Winch, 1996). Clarence (2011) argued that writing and reading critically are core academic practices that many students struggle with throughout undergraduate study and need to be developed simultaneously and contextually. Experiencing the online journal club has enabled participants to see this for themselves, so

they are in a stronger position to translate it as an instructional strategy in their own practice.

Translating Module Experience into Instruction Strategy

One of the research questions was to explore if and how the participants took CTRW strategies from the module and used them with their own students. Participants reported deploying a range of these strategies in their teaching:

I have adopted a questioning approach to topics I teach . . . [which has] made me better at making my point in a more detailed way.

Knowing how to develop a structured argument in a paper enhances your confidence as a writer and this was subsequently transmitted to my students.

When supervising students, I discuss close reading and developing their argument.

I got the guidance I needed on how and where to present my key arguments on the paper, which I now use with my own students for their assignments.

Have incorporated a close reading assignment into students' continuous assessments.

Helped me to develop a writing strategy to construct a paper . . . something that I now encourage my students to do.

Faculty A believed that critical thinking can be fostered through verbalization as well as written assignments and through the use of mental exercises and prioritization of thoughts:

Ironically, I would recommend through verbalisation as well as through writing. Talking through simple systematic processes—practical processes—as mental exercises . . . this helps to develop a sense of structure and logic. I've seen that many students flounder when confronted with certain tasks which require strategies e.g. learning a role. It's important for students to be able to imagine or visualise themselves negotiating their way through the different stages of a plan—(I'm thinking about those singers who have to prepare and memorise an entire operatic role, which in the initial stages may be partially beyond them). I didn't understand this so acutely before the module. I took some of my own thought processes for granted. I've come to realise how important the prioritisation and organisation of thoughts and ideas are.

Identifying examples of how participants' experiences on the module affected their beliefs, attitudes, and practices as teachers (see Figures 3 and 4) was insightful. These examples show how an experience translated to an instructional strategy. However, there is no direct

evidence of whether those disclosed beliefs were actually implemented in different practices and to what effect; this is a potential route for future research in a later study.

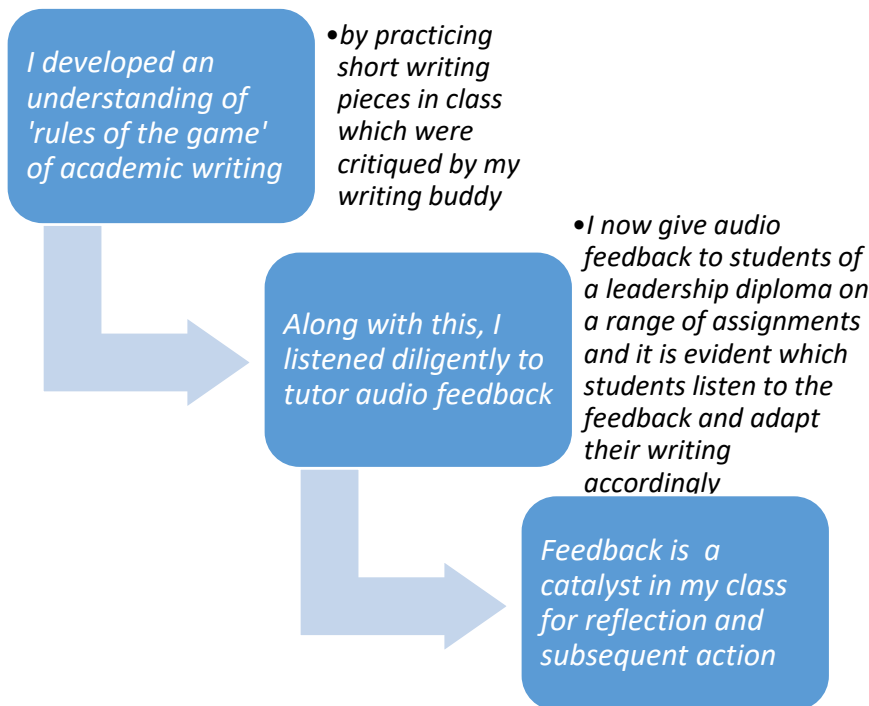


Figure 3. Faculty F's translation of module experience into instructional strategy.

Of the strategies given to students to develop their critical writing in the disciplines, those that emerged as beneficial were idea articulation, self-regulation, regular reflection, problem solving, plentiful opportunities given to practice, peer review, devil's advocate role, and commitment to a viewpoint. Faculty A considered how students' writing can be improved by teaching them how to think like a good writer:

In asking them to articulate ideas verbally (e.g. the interpretation of a song), I am much more proactive in encouraging them to explain or back up why they have chosen a particular interpretation. In my field . . . the process of asking singers to articulate the processes and experiences of singing can develop stronger analytical skills (singers depend so much on the feedback of being told what they sound like because they can't reliably hear themselves in the moment of singing. Therefore, they can easily become very passive and non-analytical).

Faculty E, who is from visual merchandising, agreed that it is important to help students identify what is meant by being critical in their writing:

. . . objectivity is very important in my field because so much of the subject matter is abstract . . . [in my discipline] thinking is a mind-set that requires many of the skills of critical and creative thinking . . . [it] occurs when students learn to self-

regulate and monitor their learning. Reflection is essential learning how to think outside the box, how can they problem solve from many different perspectives.

Students are encouraged to write daily reflective entries while on work placement. Students give regular presentations on their major project assignments, where they analyse their research, vary their approaches and conceptualise their ideas. I now do peer review after each performance class to encourage reflection, motivation and critical/creative thinking. The presentation is a core skill the students need for the real world . . . have used a lot of what was encouraged on the AWP module, the hook, clear, concise bullet points, keywords, relevant imagery, referencing images and script. My writing has changed a million-fold, I have learned so much in the module [that] has brought a much more structured professional approach to my teaching.

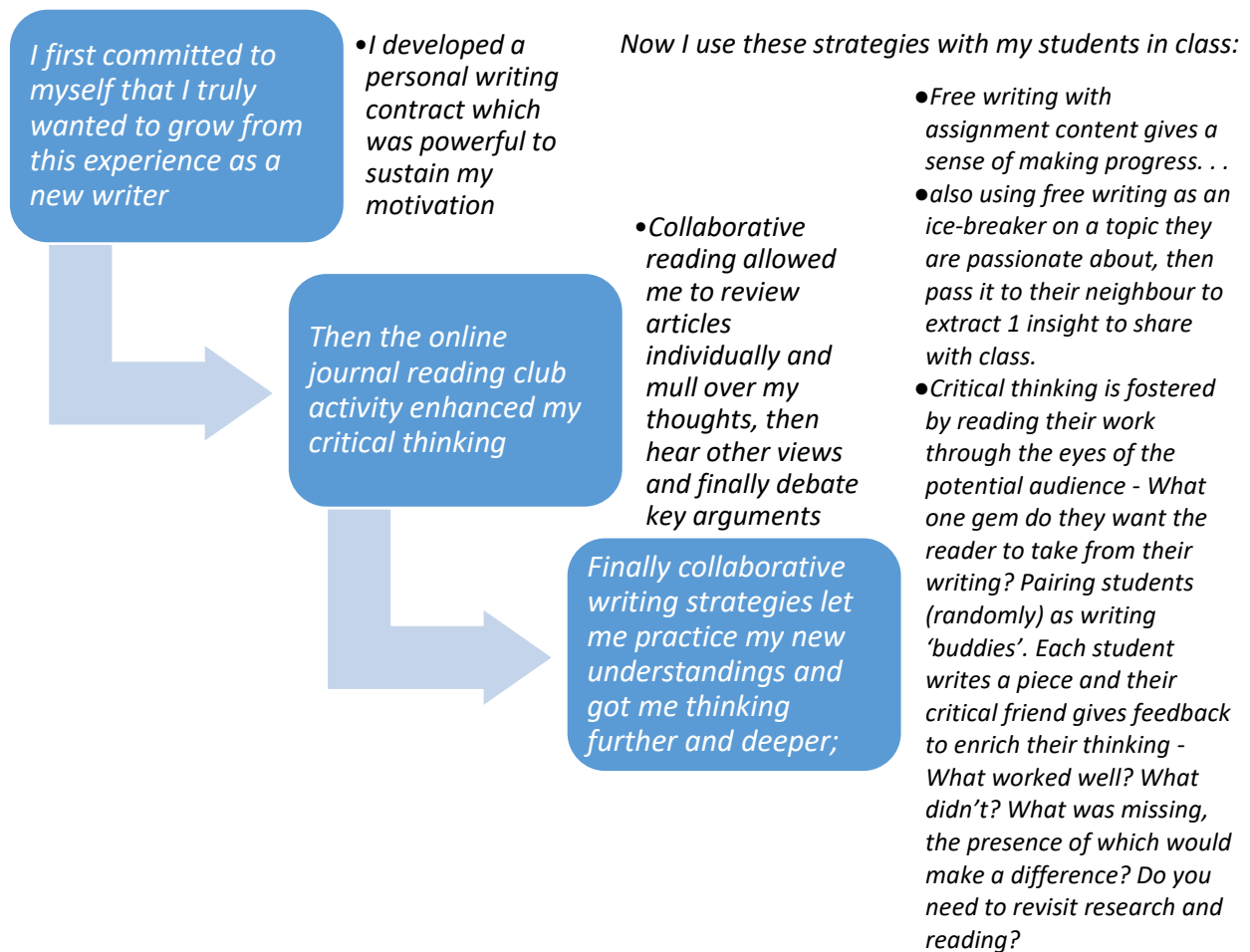


Figure 4. Faculty C's translation of module experience into instructional strategy.

Addressing the role of thinking in writing, Faculty F advocated: "Organisation! Prioritisation! Being a constant Devil's Advocate. . . . Even when making a strong assertion—being aware of a possible contrary point of view." Furthermore, when asked about the role of writing in the

development of thinking, Faculty E highlighted the following: *“Having commitment to a point of view—Writing is one of the steps in making an idea manifest . . . tangible proof of the thinking process. Writing helps one to actually think! Writing stimulates thought! Writing streamlines thinking.”*

Faculty F, who teaches in a business discipline, discussed barriers for students: *“assignment overload across subjects, lack of time, lack of experience at critical reading and writing. As the educator, I would be interested in how to teach students to assess each other on critical reading & writing (e.g. via peer review).”* Indeed, Klucevsek (2016) argued that in discipline-specific writing courses, participants develop professional skills in reading, writing, and peer review; however, they have limited opportunities to peer review professional writing outside a writing classroom or with faculty, especially if they do not perform research. Therefore, she suggested, it is unclear how students apply classroom-acquired peer review skills to a professional setting. At the outset of her study, which utilized student-faculty peer review, students indicated a struggle with confidence and content while reading and reviewing. Following the implementation of this form of peer review, the benefits to students include increased confidence in reading, writing, and peer reviewing literature, an opportunity to practice classroom skills, and a chance to collaborate with professionals during the writing process.

While it has been reinforcing to hear of these positive perceptions of the AWP module, a number of challenges remain and will continue to be addressed into the future. These include balancing activities that appeal simultaneously to faculty, professional educators and postgraduate student writers; keeping up with the continuous cycle of formative feedback, via both audio and screencast; addressing individuals’ specialist topic areas, with which tutors may not be fully familiar, in order to provide appropriate and detailed feedback; keeping a balance in terms of responding to very strong demand for the module across the new Technological University while keeping its strengths and integrity.

Conclusion

This study set out to explore how faculty who completed a professional development module in academic writing and publishing advanced their understanding of these practices and how strategies learned from the module may have informed their teaching. The findings show that the module’s critical thinking-reading-writing approach has been beneficial for a number of reasons. There have been successes for participants in using the strategies with their own students for supporting writing in the disciplines. The online journal club is effective in exploring close reading strategies. Rich in-class and online peer discussions of what critical thinking is, how it manifests itself in different disciplines and how to structure an argument in academic writing have all been useful. These discussions can also build confidence and counteract the sense of isolation writers can experience. Kress (2008) suggested that working in a writing-oriented organizational culture can be a crucial prior condition for writing. He stressed the role of others in creating the conditions necessary for gaining confidence as a writer. Setting up the conditions for a social and communally supportive writing space with an ethos of shared commitment and mutual endeavour appears to have paid dividends for the module participants.

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