Editorial

Introduction to Special Issue on Critical Thinking and Communicating in the Disciplines

Nadya Shaznay Patel*

Singapore Institute of Technology, Singapore

Shobha Avadhani

National University of Singapore, Singapore

Rosmawati

Singapore Institute of Technology, Singapore

This special issue focuses on Critical Thinking and Communicating (CTC) in the Disciplines, an emerging subfield in writing instruction. In this introduction to the issue, we explain how CTC is a response to emerging challenges in Higher Education (HE) and suggest that it is an area that holds potential for further innovations in pedagogical research and instructional design.

Writing instruction in HE institutions has become a field that is both specialised and diverse. This development is the outcome of changes in the HE landscape in general and has presented differently in contexts around the world. In the UK, for example, the merging of universities and polytechnics, coupled with a resultant debate about the role and scope of universities, as well as a burgeoning of economic and administrative imperatives, has led to the "proliferation of rival and disarticulated agendas" (Findlow, 2012). In the case of the US, Labaree (2017) traces the separate trajectory of higher education, conceptualising it as a "perfect mess" that has become "lean, adaptable, autonomous, consumer sensitive, self-supporting, and radically decentralised" (p. 1). Asian universities have been heavily influenced by these developments, with origins in colonialism and shifts in global economic power (Altbach & Selvaratnam, 2012). The result is a complex HE landscape in which writing instruction responds to a diverse range of challenges and takes on an equally diverse range of forms and systems.

In terms of challenges, two examples are the move towards interdisciplinarity in undergraduate education and the opening up of universities to include more professional training courses. Both developments have implications for the conceptualisation of writing in and across the disciplines. With regard to writing studies more broadly, Bazerman (2011) argues that this field is fundamentally interdisciplinary, but Kaufhold and McGrath (2019) note that from the perspective of English for Academic Purposes (EAP), there have traditionally been attempts to demarcate disciplines and to teach within them. They also posit, however, that this situation is changing and that there is, in fact, a need to reconceptualise the very notion of a discipline. Simultaneously, as more vocational and professional training courses enter the ambit of the university, the traditional academic underpinning of the term dissolves, opening the way to redefine disciplinary writing instruction in terms of desired professional outcomes (Russell, 2013). Against this context, one significant development has been the foregrounding

^{*}Corresponding author. Email: nadya.patel@singaporetech.edu.sg

of critical thinking components in HE writing instruction (Çavdar & Doe, 2012). The relevance of these components is underscored by the call from numerous professional accreditation standards for evidence of students' critical thinking in the learning process (e.g. Accreditation Board for Engineering and Technology - ABET).

Scholars have stressed the importance of improved critical thinking instruction in higher education (Bays & Ralston, 2015) to prepare students for the workplace. While some academic and professional disciplines have had a longer runway to formalise this component and are in an advanced stage of debates related to integration, evaluation and diversification (e.g. Conn Welch, Hieb, & Graham, 2015; ŽivkoviL, 2016), others are still grappling with the question of how to incorporate it. As universities design interdisciplinary courses, there is an expansion of focus beyond writing to include other forms of communication. However, scholars have posited that it is important to acknowledge the integral connection between communication and the disciplines because of the unique disciplinary differences and objectives that shape the communication practices in the disciplines (Tarabochia, 2013). Thus, there is a growing need for tutors of HE to discuss the opportunities, challenges and issues when developing courses that integrate critical thinking competence across disciplines.

Institutes of higher learning have been known to establish spaces to cultivate critical thought, reflection and debate. Educators are thus aware of the importance of CTC skills as an outcome of HE. The development of students' CTC skills has long been a learning objective in academic literacy and EAP courses. For some educators, it may be referred to as a genre-based approach to writing or rhetoric studies. Scholars have discussed its features as threshold concepts (Basgier, 2016) and its integration with disciplinary writing assignments (Bean, 2011). However, despite widespread recognition of its importance, there is a notable lack of consensus on the definition of critical thinking, what it entails, how it is applied to disciplines and the adoption of pedagogical approaches to teach it. Among the many disagreements, scholars have been debating on the conceptualisation of CTC as either "specifist" (highly dependent on disciplinary nuances) (eg. Moore, 2011) or "generalist" in its approach.

At the beginning of the year, we invited contributions from authors on the area of critical thinking pedagogy in the disciplines or interdisciplinary studies involving CTC research on pedagogical practices, curricular and instructional models, and the use of technology-enhanced learning approaches, amongst others. The discussions in this special issue come from scholars who see CTC instruction as having both discipline-specific nuances and general skills that transcend disciplines (eg. Rademaekers, 2018). The five articles featured in this special issue showcase HE courses with strong components of critical thinking skills, which are integrated into the course designs and selection of course materials.

Lee and Luu present the re-designing process of a communication skills module that integrates critical thinking skills and academic literacy with disciplinary content in Computing using a unique balance of competence and capacity. This paper demonstrates a novel combination of the Critical Digital Literacy (CDL) approach, Ennis' (2015) Critical Thinking Abilities model, and Paul-Elder's (2020) Critical Thinking Framework to guide classroom activities as well as students' assessments in this re-designed communication skills module in a university in Singapore.

Tan and Azfar discuss the strategies to facilitate students' critical reflective thinking skills in both lectures and tutorials in a first-year general education course in a university in Singapore. Adopting the integrative framework of critical thinking (Dwyer et al., 2014), they assess the effectiveness of these strategies in both instructions and assessments, and conclude with several suggestions for bridging the gap between students' and faculty's expectations in the teaching and assessment of critical reflection across disciplines.

Still within the context of Singapore, **Shin** introduces several classroom activities (e.g., review evaluation) underpinned by Bloom's Taxonomy to help her undergraduate students develop their critical thinking skills during their learning of literature review writing in her eight-week course of Introduction to Research Methods. A comparison between the draft and the final version of the literature review the

students submitted to this course showed an improvement of approximately two taxonomy levels, noting the effectiveness of these activities in enhancing students' critical thinking skills.

Veng explores the use of Nearpod, a web-based tool, to teach critical thinking in an English as a Foreign Language (EFL) classroom at the university level in Cambodia, which had to be shifted online due to the pandemic. Using Nearpod's features, such as Collaborate Board, Interactive Videos, and Polls, the lecturers guided students in learning critical thinking skills based on Facione's (1990) taxonomy (such as the skill of evaluation, inference, explanation, etc.). Veng shows that the use of a digital tool, such as Nearpod, enhanced students' engagement and recommends coupling this digital tool with supportive teaching practices for better results.

Lastly, **Yang et al.** examine the use of translanguaging pedagogies in improving EFL learners' critical thinking, content comprehension, and effective communication skills. Operationalised as a 3-phase writing process, their course adopted a process-based instructional approach to involve students in pedagogical and spontaneous translanguaging. Their study shows the benefits of embracing multilingual, multimodal, multisemiotic and multisensory resources in promoting students' abilities of interpretation, analysis, evaluation, inference, and self-regulation.

We hope that with the articles in the special issue, scholars, researchers and educators will gain a more in-depth understanding of CTC. We do note that this requires the extension of the current literature by integrating discussions on the interdisciplinary context of HE, the social learning environment and the building of a culture within an institution. Perhaps this is a start towards the move for a blending of approaches to redesign CTC in HE.

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Dr Nadya Patel is an Assistant Professor at the Business, Communication and Design Cluster, Singapore Institute of Technology. She leads a faculty community of practice for critical design thinking in the disciplines and teaches transdisciplinary design innovation. She has published and consulted on integrating critical thinking, dialogic scaffolding, and technology-enhanced learning in instruction, corporate coaching and mentoring, and empathetic communication.

Dr Shobha Avadhani is a Lecturer at the Department of Communications and New Media, National University of Singapore, where she teaches public speaking, qualitative research methods, and digital media cultures. She has published research on the intersection of youth, citizenship and new media, with a focus on critical media literacy.

Dr Rosmawati is an Assistant Professor at the Centre for Communication Skills (Singapore Institute of Technology). She teaches the Critical Thinking and Communicating module – a university-wide module for first-year students. Her main research interests include Academic Writing in English and Complex Dynamic Systems Theory in Second Language Acquisition/Development.