EDITED BY
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AND ESZTER SZENES

DEMYSTIFYING CRITICAL REFLECTION

Improving Pedagogy and Practice with Legitimation Code Theory

Legitimation Code Theory

ROUTLEDGE

DEMYSTIFYING CRITICAL REFLECTION

Drawing on Legitimation Code Theory (LCT), this volume reveals the knowledge practices and language of critical reflection in a range of different subjects, making clear how it can be taught and learned.

Critical thinking is widely held to be a key attribute required for successfully living, learning and earning in modern societies. Universities now list critical thinking as a key graduate quality and use 'critical reflection' as a way of teaching students how to become reflective and ethical professionals. Yet, what 'critical reflection' actually involves remains vague in research, teaching practice, and assessment. Studies draw on LCT, a fast-growing framework for revealing the knowledge practices that enable educational success and the individual chapters focus on a diverse range of contexts across the disciplinary map, including education, science, arts, sociology and nursing. The book further connects research and practice by presenting in-depth analyses of critical reflection and providing practical insights into how LCT can be used to design pedagogic interventions.

The book offers a rich resource for both scholars and teachers who want to demystify critical reflection and prepare university students for the modern workplace.

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DEMYSTIFYING CRITICAL REFLECTION

Improving Pedagogy and Practice with Legitimation Code Theory

Edited by Namala Tilakaratna and Eszter Szenes

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1

SEEING KNOWLEDGE AND KNOWERS IN CRITICAL REFLECTION

Legitimation Code Theory

Namala Tilakaratna and Eszter Szenes

Introduction

In recent years there has been an exponential increase in the volume and sources of knowledge. This has been accompanied by a rise in the prominence given to students' capacity to think critically as required for successfully living, learning and earning in modern societies. A critical thinking skill particularly valued in higher education is 'reflection', 'self-reflection' or 'critical reflection'. To ready students for transition to the workplace, universities now list 'critical thinking' as a key graduate attribute and use 'critical reflection' as a way of teaching students how to become reflective and ethical professionals. In contrast to traditional education, which is viewed as 'objective', 'theoretical' and 'rational', critical reflection typically focuses on 'personal disclosure' (Fook & Askeland 2007: 527) and 'personal epistemologies' or ways of knowing and knowledge which arise from an individual's own experience (Brownlee et al. 2011 as cited in Ryan 2015: 9). They are linked to multiple areas of personal, professional and emotional growth leading to 'personal flourishing' (Ghaye 2007), including professionalism, collegiality, and an enhanced capacity for learning and problem-solving (Fook & Gardner 2012). Not only is critical reflection held to be crucial for the modern workplace, but it is also claimed to represent a form of 'emancipatory' practice that prepares students to question power relations within their communities of practice and wider society (see e.g. Brookfield 2000; Fook 2004; Crème 2008; Fook & Morley 2005). Yet, for many teachers and students, it is mystifying: what 'critical reflection' actually involves remains vague in research, teaching practice, and assessment. Critical reflection can seem ethereal, enigmatic, unclear. Moreover, 'critical reflection' assignments often disadvantage students who do not already know how to succeed at these kinds of tasks. This is partly because there is little consensus of

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how to move forward in terms of learning, teaching and assessing critical reflection, which has varied meanings in different disciplinary and geographical contexts (see e.g. Fook & Askeland 2007; Tilakaratna et al. 2019).

This book aims to make the 'rules of the game' visible, teachable and learnable by drawing on the cutting-edge sociological approach of Legitimation Code Theory (LCT) (Maton 2013, 2014). The book illustrates how LCT enables systematic, evidence-based research through sociological and linguistic analyses that uncover and demystify the process of critical reflection. It also presents pedagogic interventions that make the teaching and learning of critical reflection more accessible to lecturers and students across a range of disciplines. While critical thinking and reflection are often listed as important graduate qualities in university strategic plans, they are often described in higher education research in terms of mental processes that are primarily cognitive. It thus remains unclear what it means for students to demonstrate evidence of critical reflection in their work. Showcasing a range of examples from nursing, social work, business, sports sciences, education and English for Academic Purposes, this book illustrates how LCT can help with designing more accessible, robust, effective, and visible approaches to the researching, teaching and learning of critical reflection in higher education.

This chapter begins by reviewing existing research on critical reflection and critical reflection pedagogy. It first introduces definitions of reflection and critical reflection as they are conceptualized in critical thinking research. The chapter then explores how these definitions are operationalized in the context of higher education by reviewing the most influential pedagogical approaches to teaching and assessing critical reflection. It then introduces the multidimensional conceptual toolkit of LCT (Maton 2014), focusing primarily on concepts from Specialization and Semantics, the two most relevant dimensions to this volume. The chapter also provides a brief overview of the complementary theory of Systemic Functional Linguistics (SFL), an approach often used alongside LCT to uncover the basis of success in higher education. The chapter concludes with a preview of the book's structure and content of the chapters.

Critical reflection research and pedagogy

Critical reflection in higher education has been defined as a form of 'critical thinking in action' (Gulwadi 2009), a form of 'experiential learning' (Kolb 1984) and a 'process for learning about and developing professional practice' (Fook & Gardner 2007: 194). It is often seen in higher education as an opportunity for students to bring together theoretical knowledge in their disciplines with practical application, particularly across a range of applied disciplines such as social work and health sciences (Fook 2002; Fook & Askeland 2007), nursing (Epp 2008; Smith 2011), teacher education (Blaise et al. 2004; Hume 2009; Mills 2008; Otienoh 2009), early childhood education (Cornish & Cantor 2008), psychology (Sutton et al. 2007), and business and management education

(Carson & Fisher 2006; Fisher 2003; Swan & Bailey 2004). Critical reflection is also linked to the development of critical thinking 'dispositions', where students are asked to engage with theory in professional practice and develop a stance in relation to different and competing theories or types of knowledge they encounter in their fields of study. Dewey's definition of critical reflection captures this as 'the active, persistent and careful consideration of any belief or supposed form of knowledge in the light of the grounds that support it and the further conclusion to which it tends' (Dewey 1910: 6). This 'careful consideration' of beliefs and knowledge functions within the context of disciplinary understandings of what values are important, what theories are valorized and what kinds of actions and emotions are considered appropriate in higher education research and professional practice. This is thought to enable the 'transformation' of students from undergraduates to practitioners with specific disciplinary and professional values (Brookfield 2001; Mezirow 1990; Ryan 2015).

These desirable attributes of critical reflection are often assessed through a wide variety of assignments, such as learning and reflective journals, critical reflection essays and reports, case studies, or narratives (Carson & Fisher 2006; Fook & Gardner 2013; Fook et al. 2006; Ryan & Ryan 2013). In order to distinguish the process of critical reflection from the written assignments, this book will use the term 'critical reflection' to name the process and 'reflective' or 'critical reflection assignments' to refer to 'written documents that students create as they think about various concepts, events, or interactions over a period of time for the purposes of gaining insights into self-awareness and learning' (Thorpe 2004: 328 as cited in O'Connell & Dyment 2011: 47). Reflective assignments typically require students to focus on their subjective and personal experiences, values and attitudes. Without explicit teaching how to do so (Tilakaratna & Szenes 2020, Szenes & Tilakaratna 2021), however, students are left to decipher what constitutes successful reflection (O'Connell & Dyment 2011).

Widely cited definitions in the field of critical thinking research include descriptions of the critical thinking process, which typically draw on socio-cognitive and philosophical theories as well as researcher, lecturer and student perceptions (see e.g. Boud et al. 1985, Mezirow 1990, Schön 1983) rather than the study of knowledge practices. For instance, Kolb's (1984) influential 'experiential cycle' and Gibbs' (1988) 'reflective cycle' move through increasing degrees of complexity as students engage with a problematic incident or 'disorienting dilemma' (Mezirow 1990) during field placements, which are examined retrospectively. These models focussing on teaching critical reflection foreground its 'transformative' potential where students are expected to demonstrate a change following the act of reflecting. Indeed, the development of appropriate critical dispositions is lauded for enabling 'perspective transformation' (Mezirow 1990) as students are exposed to theoretical and disciplinary understandings that may challenge or extend their personal epistemologies. However, few pedagogical approaches demonstrate how to unlearn these and to replace personalized and subjective ways of knowing with more nuanced

understandings of theoretical concepts and disciplinary knowledges. In other words, *what* constitutes critical reflection and *how* it can be taught remains obscured, which indicates that much of what is understood about critical reflection in higher education remains at the level of educators' intuitions and that effective learning strategies often remain hidden from students. This disadvantages students who do not already know how to succeed at these kinds of tasks. Furthermore, successful pedagogical interventions and evidence of successful student engagement with critical reflection remain largely unexplored in research. This volume will address this gap using LCT to bring to light how successful students demonstrate critical reflection and to help design evidence-based pedagogical interventions.

Introducing Legitimation Code Theory

Legitimation Code Theory (LCT) is a sociological framework for analysing the organizing principles underlying social and knowledge practices, dispositions and contexts (Maton 2013, 2014; Maton et al. 2016, 2021). It aims to advance social justice by revealing the 'rules of the game' across a range of disciplinary and professional contexts so that they can be taught, learned or changed. It offers a multi-dimensional conceptual toolkit comprising different 'dimensions' or sets of concepts that explores different kinds of organizing principles. Here we draw on two concepts from two dimensions: Specialization and Semantics. Specialization is used to reveal how knowers and knowledge are valued in tertiary students' reflective writing across a range of disciplines; Semantics is used to show how students shift between context-dependent meanings and more theoretical content as they engage in successful reflective writing. We shall now introduce the concepts from these two dimensions used in this volume.

Specialization

Specialization begins from the premise that every social practice is about or oriented towards something and by someone (Maton 2000, 2004, 2014; Maton & Chen 2020). Focusing on knowledge practices, we can then analytically distinguish between *epistemic relations* (ER) with their proclaimed objects of study and *social relations* (SR) with whomever is enacting those practices. These relations help reveal *what* can be legitimately described as knowledge and *who* can claim to be a legitimate knower.

Epistemic relations and social relations can be mapped independently along continua of strengths. That is, knowledge claims may place more (+) or less (–) emphasis on epistemic relations and/or on social relations as the basis of legitimacy. As outlined in Maton (2014: 30–31), when brought together, the two strengths generate *specialization codes* (ER+/–, SR+/–) that are mapped on a Cartesian plane with four principal modalities (see Figure 1.1):

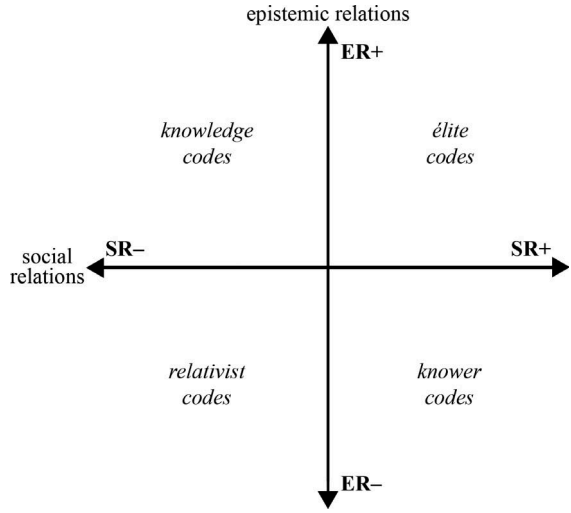

FIGURE 1.1 Specialization codes
Source: Maton (2014: 30)

- *knowledge codes* (ER+, SR–), where possession of specialized knowledge, principles or procedures concerning specific objects of study is emphasized as the basis of achievement, and the attributes of actors are downplayed;
- *knower codes* (ER–, SR+), where specialized knowledge and objects are downplayed and the attributes of actors are emphasized as measures of achievement, whether viewed as *born* (e.g. 'natural talent'), *cultivated* (e.g. 'taste') or *social* (e.g. feminist standpoint theory);
- *élite codes* (ER+, SR+), where legitimacy is based on both possessing specialist knowledge and being the right kind of knower; and
- *relativist codes* (ER–, SR–), where legitimacy is determined by neither specialist knowledge nor knower attributes – 'anything goes'.

Specialization has been used extensively in empirical research (see e.g. Maton et al. 2016; Winberg et al. 2020; Blackie et al. 2023) to explore what kinds of knowledge and knowers are valued and what counts as the basis of success in higher education across a range of disciplines such as engineering (Hindhede & Højbjerg 2022; Wolff & Hoffman 2014), sociology (Luckett 2012), jazz education (Martin, J. L. 2016; Richardson 2019), English language learning (Chen 2015), physics (Cornell & Padayachee 2021; Georgiou 2022), and health sciences (Jacobs & van Schalkwyk 2022). The contributors to this volume further demonstrate the usefulness of Specialization by showing how it has enabled them to move past existing descriptions of critical reflection as knower-oriented and reveal the role that knowledge practices play in critical reflection research, pedagogy and practice. While the models and frameworks

of critical reflection pedagogy introduced above typically focus on students as knowers and understand 'knowledge' in terms of the 'mental states', 'mental processes' or 'dispositions' of knowers (Maton 2014: 12), the chapters presented in this book highlight the knowledge practices of critical reflection evidenced in classroom discourse, written assessment and pedagogical materials. The aim is to foreground the integration of knowledge *and* knowers in critical reflection.

Semantics

The LCT dimension of Semantics explores the context-dependence and complexity of practices (Maton 2013, 2014, 2020).[1] Its key concepts are *semantic gravity* (context-dependence) and *semantic density* (complexity). *Semantic gravity* (SG) refers to the degree of context-dependence of meaning. Semantic gravity may be relatively stronger (+) or weaker (–) along a continuum of strengths. The stronger the semantic gravity (SG+), the more meaning is dependent on its context; the weaker the semantic gravity (SG–), the less meaning is dependent on its context. *Semantic density* (SD) refers to the degree of complexity of practices, whether these comprise symbols, terms, concepts, phrases, expressions, gestures, clothing, etc. Semantic density may be relatively stronger (+) or weaker (–) along a continuum of strengths. The stronger the semantic density (SD+), the more complex are the practices or, put another way, the more meanings are condensed within those practices; the weaker the semantic density (SD–), the less complex (fewer meanings are condensed).

Changes in both semantic gravity and semantic density are often explored in studies enacting these concepts to explore shifts such as moves from the concrete particulars of a case towards generalizations and abstractions, whose meanings are less dependent on their context or moving from abstractions and generalizations to the concrete specifics of a case. These movements are mapped as *semantic profiles* (Maton 2013, 2020). Figure 1.2 portrays relative strengths on the *y*-axis, and time – such as the unfolding of classroom practice, curriculum or text – on the *x*-axis. Three illustrative profiles are represented in the figure: a high *semantic flatline* (A), a low *semantic flatline* (B), and a *semantic wave* (C). The figure also shows the respective semantic ranges of these flatlines, with 'A' and 'B' having a lower semantic range than 'C'. Semantics is thus particularly powerful as a visualization tool, which reveals the movement between increasing and decreasing context-dependence and complexity across a text.

Semantics has been widely used in education research to explore the basis of achievement (see e.g. Maton 2013, 2020; Maton et al. 2016), create effective pedagogical interventions with a focus on cumulative knowledge-building (Clarence 2014) and developing scholarly inquiry and academic literacy (Brooke 2017, 2020; Clarence 2014, Kirk 2017; Monbec 2020). In critical reflection research, Semantics has been used to map the semantic profiles of

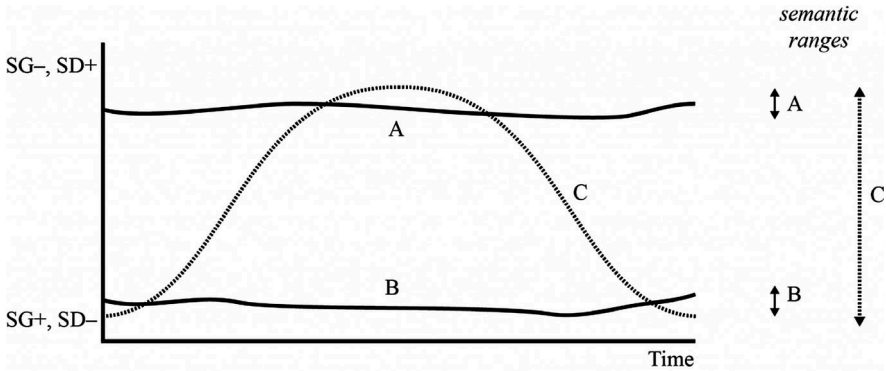

FIGURE 1.2 Three semantic profiles
Source: (Maton 2013: 13)

student assignments in a range of disciplines such as social work and business (Szenes et al. 2015), nursing (Brooke 2019), English for Academic Purposes (Ingold & O'Sullivan 2017; Kirk 2017) and teacher education (Macnaught 2020; Meidell Sigsgaard 2020; Meidell Sigsgaard & Jacobsen 2020, 2021). It has also been used to develop effective critical reflection pedagogical interventions such as creating analytical rubrics in nursing (Monbec et al. 2020, Tilakaratna et al. 2020). In this volume, chapters draw on the concept of *semantic gravity* in order to reveal how successful students engage with context-dependence in their reflective writing assignments and use these findings to create effective pedagogical interventions for demystifying critical reflection assignments.

A number of chapters in this volume also explore the concept of *semantic density* through analysing 'cosmologies' and 'constellations' in order to explore how axiological meanings (e.g. affective, aesthetic, ethical political and moral stances) are condensed in texts.

Cosmologies

Cosmologies are specific worldviews, logics or belief systems (Maton 2013: 152), underlying the social practices of actors. The organizing principles underlying a cosmology can be analysed using all the concepts of LCT, generating many different kinds of cosmology. Two kinds we shall highlight here are: *epistemological cosmologies* and *axiological cosmologies*. Put very simply, epistemological cosmologies emphasize epistemic relations and typically comprise explicit, visible structures of knowledge while axiological cosmologies emphasize social relations and typically 'show whether your heart is in the right place, your aesthetic, ethical, moral or political affiliations correct, and so whether you are one of us or one of them' (Maton 2014: 163).

For this volume, in order to understand what cosmologies students are aligning with in reflective assignments, analysing axiological cosmologies is particularly revealing when 'unpack[ing] the ideological assumptions embedded in a notion like [critical thinking] and relat[ing] them to a set of social and political discourses' (Lim 2014: 33). Cosmologies can be revealed through constellation and cluster analyses. 'Constellations' are larger patterns of meaning that consist of 'clusters' or recognisable and recurrent configurations of meaning that have a positive or negative charging (Maton 2013; Maton et al. 2016; Tilakaratna & Szenes 2020). Constellation analysis has been used to explore how powerful stances are developed in education research (Maton 2014), literary response writing (Jackson 2020), white supremacist environmentalism (Szenes 2021), and the humanities (Doran 2020). Constellation analysis has also been used in higher education research to explore how critical reflection assignments require students to recognize and reproduce powerful cultural and disciplinary values in fields such as social work and business (Tilakaratna & Szenes 2020). A number of chapters in this volume draw on the concept of axiological constellations to explore how reflective writing assignments often require students to align with and demonstrate their capacity to enact particular stances and dispositions linked to disciplinary and professional values.

Alongside the LCT dimensions and concepts introduced above, several chapters of this volume also draw on the theoretical framework of Systemic Functional Linguistics (SFL). SFL is an approach that has often been productively brought together with LCT in interdisciplinary studies across the disciplinary map to offer complementary insights into their objects of study (e.g. Martin, J. R. et al. 2020; Maton et al. 2016).

Introducing Systemic Functional Linguistics

SFL is a theory of language that treats language as a social semiotic, 'a meaning-making resource' (Halliday 1978, 1979, 1985; Martin, J. R. 1992; Halliday & Matthiessen 1999, 2004). From SFL, chapters in this volume draw on the concept of genre (Martin, J. R. 1992; Christie & Martin, J. R. 1997; Martin, J. R. & Rose 2008) and the framework of Appraisal (Martin, J. R. & White 2005). Genres are 'social practices of a given culture' (Martin, J. R. & Rose 2008: 6) defined as 'staged, goal-oriented processes' (Rose & Martin, J. R. 2012: 54). This means that texts unfold through a number of key steps or stages from the beginning to the end: they are 'goal-oriented' because texts are enacted to achieve particular goals and 'social' because genres are a means by which we engage with others in society (Dreyfus et al. 2016). Chapters that draw on the SFL concept of genre in this volume explore the social purposes, functions, structure, and staging of critical reflection assignments from a wide range of academic disciplines. They also aim to identify how linguistic features of different genre stages are expressed as knowledge practices.

While analyses of genre examine a text as a whole, Appraisal, also called 'the language of evaluation' (Martin, J. R. & White 2005), is used to analyse instances of evaluative meanings, e.g. attitudes, emotions and opinions, values and judgements that create particular value positions in texts and to align the reader with the authors' propositions (e.g, Hood 2006, 2010; Dreyfus et al. 2016; Martin, J. R. & White 2005). Attitude analyses also reveal the *targets* of the evaluation (the evaluated item) and whether evaluations are negatively or positively charged (Martin, J. R. & White 2005). The Appraisal framework is particularly useful for examining critical reflection assignments because these often require students to deal with issues that are seen as subjective and 'highly emotional' (Crème 2008; Szenes & Tilakaratna 2021). Appraisal analyses make visible how successful students deploy attitudinal resources effectively to construct particular value positions as evidence of critical reflection. Several chapters in this volume draw on Appraisal to analyse axiological constellations and uncover the dispositions and values embedded in critical reflection texts in a range of academic contexts such as nursing, business studies, teacher education, English for Academic Purposes (EAP) and in Content and Language Integrated Learning modules.

A growing number of studies are using SFL alongside LCT to analyse the same dataset from complementary perspectives (see e.g. Maton 2014; Maton et al. 2016; Martin, J. R. et al. 2020; Winberg et al. 2020). An interdisciplinary LCT-SFL approach has also been used in critical reflection research and pedagogy to explore the knowledge practices of critical reflection in social work and business (Szenes & Tilakaratna 2020; Szenes et al. 2015) and to create effective interventions, pedagogical materials and analytical rubrics in the discipline of nursing (Monbec et al. 2020; Tilakaratna et al. 2020), English for Academic Purposes (Brooke et al. 2019) and in teacher education (Macnaught 2020). In this volume, scholars using analytical tools from both LCT and SFL in an integrated approach explore how critical reflection can be demystified for students in order to design effective pedagogical interventions.

Demystifying critical reflection

This volume of cutting-edge research reveals the knowledge practices and language of critical reflection in a range of different kinds of subjects, making clear how they can be taught and learned. Studies draw on the fast-growing sociological framework of LCT for revealing the knowledge practices that enable educational success. The individual chapters focus on a diverse range of contexts across the disciplinary map, including higher and teacher education, English for Academic Purposes (EAP), social work, science, arts, sociology, sport and exercise sciences, business and nursing. This volume relates research and practice by presenting in-depth analyses of critical reflection and providing practical insights into how LCT can be used to design pedagogic interventions. The book is structured into three main parts that focus on: researching

critical reflection; designing pedagogic interventions; and supporting students to learn how to think critically.

Part I focuses on how critical reflection can be demystified by using LCT to reveal the knowledge practices valued in reflective writing in the context of higher education. In chapter 2, Namala Tilakaratna shows how successful nursing students create positive and negative clusters of meaning in their texts in order to demonstrate their capacity to align with a highly valued constellation of professional nursing competency in clinical practice in Singapore. The chapter demonstrates the positive impact of an LCT-informed pedagogy that allows literacy experts to uncover disciplinary values and collaborate with subject experts to create a theoretically informed and effective pedagogy. In chapter 3, Eszter Szenes and Namala Tilakaratna engage with and question the ethical dimensions of reflective writing assessment in the context of an Australian higher education institution. By drawing on axiological clusters and constellations, the chapter illustrates how both high- and low-scoring business reflective assignments construct alignment with western values and reject Asian values, resulting in deficit discourses by stereotyping and othering, engaging in negative self-talk and focusing on failure. In chapter 4, Sharon Aris draws on Specialization to reveal how social work knowledge is recontextualized in Australian social work textbooks, which require students to engage with complex notions of power and control. The chapter reveals that critical reflection in social work is an *élite code* as it requires knowledge of specific theories and processes (stronger epistemic relations) and the development of certain dispositions and values (stronger social relations).

Part II focuses on teaching and learning interventions, including innovative ways that critical reflection can be taught to students across a range of disciplinary and geographical contexts from Europe and Canada to New Zealand. In chapter 5, Steve Kirk draws on semantic gravity to describe successful pedagogic interventions designed to elucidate the 'rules of the game' in critical reflective writing, an unfamiliar task for undergraduate sport and exercise sciences students. The chapter demonstrates the importance of moving between three 'levels' of meaning-making: concrete experience, generalizations and theory by plotting high- and low-scoring student assignments on a diagram to offer students a more integrated understanding of reflective practice. In chapter 6, Jodie Martin reflects on a pedagogic intervention utilizing reflective writing to consolidate and improve first-year international Science students' performance of complex multimodal academic presentations. Specialization is used to tease apart, in both pedagogy and student responses, emphases on content and skills associated with presentations (epistemic relations), and emphases on confidence and interaction (social relations) related to performance. In chapter 7, Daniel O'Sullivan reports on a successful collaboration between a subject specialist and an English and academic language specialist and the recontextualization of concepts from LCT in two successive Education units of a university pathways course. He draws on the concept of semantic gravity to explore the context-dependence of practices

and make visible the connections between theory and experience to inform the design of pedagogic materials, which make reflective writing teachable and learnable. In chapter 8, Lucy Macnaught draws on semantic gravity to reveal the requirements of a reflective assessment 'blog critique' assignment within a Bachelor of Education degree, where students are expected to reflect on and critique education practices. She challenges the idea that reflection writing assignments are creative and lack structure. In chapter 9, Nóra Wünsch-Nagy reports on a semester-long scaffolded learning pathway built around museum visits to teach reflective writing in a course on multimodal literacy development. Drawing on the concept of semantic waves, the chapter reports on a genre-based approach to scaffold pre-service teacher trainees' reflective practice in writing and in classroom discussions in teacher education.

Part III focuses on cultivating students' engagement with powerful disciplinary practices and discourses within their academic disciplines in order to facilitate their capacity to become critically reflective. In chapter 10, Jodie Martin and Jennifer Walsh Marr illustrate how they incorporate reiterative reflective writing as both method and object of instruction in an Academic English class for international students within a Canadian Arts program. Drawing on Specialization and axiological constellations, the chapter provides insight into how constellations of values are framed and reframed within reflective writing, and how they shape and are shaped by cultural context and pedagogy towards a more holistic appreciation of reflective practices. In chapter 11, Mark Brooke reports on a pedagogical intervention aimed at developing students' capacity for critical reflection through evidence-based academic writing in a sociology of sport course. Enacting semantic gravity, the chapter describes classroom activities designed to demonstrate how theory can be applied to different empirical contexts and raise students' awareness about how to effectively write a theoretical framework in a model academic text. In chapter 12, Laetitia Monbec analyses undergraduate students' reflective summaries to understand their critical engagement with the literature in a colour semiotics module in Singapore. The chapter draws on axiological constellations to reveal how successful students critically engage with expert knowledge and expert knowers when developing a critically reflective stance towards an author's perspective in a journal article.

As critical thinking and critical reflection are emphasized in higher education curricula internationally, this book has significant potential for use in any higher education degree program across the globe. This book presents theoretically-informed, cutting-edge research and pedagogical approaches, which offer a substantial contribution to tertiary higher education programs. Specifically, it illustrates how LCT can contribute to evidence-based pedagogy and equip educators with tools that make visible the diverse ways in which critical reflection is valued in different academic disciplines. This facilitates the design of visible pedagogies that enable students to develop their stance as legitimate

knowers within their fields of practice as a result of successful critical reflection. This volume illustrates the potential for LCT to work across interdisciplinary boundaries and enable critical reflection to be demystified and pedagogically scaffolded: it offers a rich resource for both scholars and teachers who want to prepare university students for the modern workplace and thereby contribute to social justice in higher education.

Note

1 Not to be confused with the notion of 'discourse semantics' from Systemic Functional Linguistics.

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PART I

Uncovering critical reflection

2

DEVELOPING DISCIPLINARY VALUES

Interdisciplinary approaches to investigating critical reflection writing in undergraduate nursing

Namala Tilakaratna

Introduction

In clinical nursing, where practitioners are often faced with emotionally charged and highly unpredictable situations, the ability to reflect on practice and learn from past mistakes is considered important for the development of professional competence. In higher education contexts, professional competence is often developed through the use of assessments such as reflective writing tasks in which students retrospectively explore the "unpredictable" nature of practice situations (Nesi & Gardner 2012) and engage with the complexity that emerges in the 'semi-structured chaos' of health care practice (Levett-Jones 2007: 113). Literature that focuses on the value of reflective writing tasks argues that these allow undergraduate nurses to develop the 'emotional intelligence' that complements traditional nursing education which prepares the student as an individual fit for practice (Freshwater & Stickley 2004). Reflection is also linked to the transition of nursing students to the workplace as they develop their identity as professional nurses (Walton et al. 2018). Reflective writing tasks provide an opportunity for the nursing students to demonstrate their emerging professional identity and show how they understand what is valued in the field of nursing.

Through an analysis of reflective writing tasks, this chapter reveals the underlying values that informs nursing students' professional development and integration into the field of nursing practice. This chapter illustrates how nursing competency, as it is codified by nursing professional practice and standards, forms an underlying *cosmology* or "a logic or the belief system or vision of the world embodied by activities within a social field" (Maton 2014: 152). Competency in the context of clinical nursing practice in the Singaporean context is defined in the Singapore Nursing Board (SNB) as "the necessary knowledge, skills and attitudes

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a nurse must possess in order to perform a set of defined activities to an expected standard" (Singapore Nursing Board 2018). In the context of higher education, it has been adapted into entrustable professional activities (EPAs) or "units of professional practice that can be represented as tasks or activities that healthcare supervisors entrust trainees with once they achieve adequate levels of competency for the purposes of translating competency into clinical practice" (Lau et al. 2020: 2). EPAs inform the nursing students' perceptions of what is valued practice and forms the basis of success within the field of practice by providing students with standards against which they can judge their performance in clinical placements. This chapter shows how EPAs and the underlying SNB core competencies guidelines and standards function as a cosmology or a set of values which underpin the activities undertaken by student nurses in the context of clinical practice.

The chapter begins by outlining the development of nursing competency in relation to the higher education practices that constitute undergraduate nursing pedagogy in a Singaporean higher education institution. This is followed by an introduction to 'cosmological' concepts from the framework of Legitimation Code Theory (Maton 2014). The analysis section reveals how students in their unfolding reflective writing tasks create *clusters* of meanings which are *charged* with positive and negative evaluation as they align with the *cosmology* of nursing competence. The chapter concludes by discussing how literacy experts can use clusters to uncover disciplinary values and the implications of using critical reflection in exploring emerging professional identities in the context of higher education.

Competence in nursing pedagogy and professional practice

The competency standards required for new nurses outlined by the Alice Lee Centre for Nursing Studies at NUS include i) critical thinking, ii) communication, iii) technical skills, iv) management of care, v) safe practice, and vi) professionalism and ethical practice. These competencies reflect the Core Competencies and Generic Skills for Registered Nurses created by the Singapore Nursing Board (Singapore Nursing Board 2018), the regulatory authority for nurses and midwives in Singapore. The competencies are organized into four domains, of which the second domain 'Management of Care' outlines the competencies for professional standards in patient care. The domain consists of four competency standards as outlined below. Nursing students in their first clinical placement primarily engage with the first three domains in the reflective writing tasks examined in this chapter:

1. Demonstrate effective communication
2. Ensure consistent and continuous holistic quality of care
3. Maintain safe environment through the use of quality assurance and risk management strategies
4. Apply strategies to promote health and prevent illness.

The above competency categories are highly abstract in meaning and includes positive evaluation (e.g. '*effective* communication', '*holistic* quality of *care*', '*safe* environment', '*quality* assurance' and '*risk management* strategies', '*promote health* and *prevent illness*'). In their reflective writing tasks students need to operationalize and unpack these competency categories with reference to examples from practice. EPAs translate these into more concrete units of professional practice that are assessable by supervisors (Lau et al. 2020). The ten identified core EPAs include the following:

1. Patient engagement: Engage patients, families, or caregivers to enhance the patient's experience
2. Patient care and practice: Prioritize and provide patient care utilizing nursing practice standards
3. Care management: Perform comprehensive health assessments and deliver and evaluate care for patients
4. Common procedures: Perform procedures required of a registered nurse (e.g. verify a doctor's/nurse's order from a medical record or provide the appropriate emotional support to a patient)
5. Safety: Deliver care utilizing patient safety standards
6. Urgent care: Recognize patients requiring emergency care, initiate management, assist in resuscitation, and stabilize critically ill patients
7. Transition care: Lead health care professionals in transiting patients within and between teams
8. Patient education: Conduct education for patients, families, or caregivers to improve health through health promotion and disease prevention
9. Interprofessional collaboration: Collaborate with interprofessional teams to improve the quality of healthcare
10. Palliative care: Perform assessments and deliver and evaluate care for patients requiring palliative or end-of-life care in the hospital or community.

This chapter explores how students are required to demonstrate their understanding of competency in their field to be successful at in-depth reflective writing. In order to do so, students need to demonstrate how they operationalize the above EPAs with respect to their own individual practice and demonstrate their alignment with disciplinary values encompassed in the SNB core competencies framework. The manner in which students partially reproduce and align with the cosmology of professional nursing competency in their reflective writing tasks will be demonstrated by drawing on the concept of *axiological cosmologies* from Legitimation Code Theory.

Analytical framework: Axiological cosmology

In order to explore how undergraduate student nurses demonstrate their capacity for critical reflection by aligning with the underlying cosmology of

nursing competency, this chapter draws on the LCT concept of *cosmologies* (Maton 2014; Maton & Doran 2021). A cosmology is defined as 'a logic or the belief system or vision of the world embodied by activities within a social field' (Maton 2014: 152). Specifically, the chapter will focus on *axiological cosmology*, which emphasizes the expression of moral, political, affective, aesthetic and other stances that reflect on attributes of the knower. In this study, the competency standards outlined above function as the cosmology which the students attempt to orient themselves and their nursing practices with. Students attempt to orient to these meanings by sharing subjective feelings and responses to difficult and problematic incidents encountered during their field placements and using these feelings as the object of analysis with reference to disciplinary values and literature in their field (Szenes & Tilakaratna 2021). These feelings and responses are often realized as *axiological clusters* or recognizable and recurrent configurations or patterns of meaning with positive or negative *charging* (Tilakaratna & Szenes 2020; Szenes 2021) within the reflective writing texts. Clusters can be linked to other clusters in order to form larger units of evaluative meaning or *axiological constellations* (Maton 2014; Maton et al. 2016; Tilakaratna & Szenes 2020; Szenes 2021; Monbec this volume). This chapter draws on these LCT concepts in order to understand how student nurses position themselves in relation to professional practice and the disciplinary values and skills of a nurse as defined by the SNB nursing competences and Entrustable Professional Activities. By aligning with the underlying axiological cosmology of nursing competence, students are able to show that their 'heart is in the right place' (Maton 2014: 163) and that they rightfully belong in the nursing community of practice which appears to form the basis of success in nursing reflective writing in the context of clinical practice.

Following Tilakaratna & Szenes (2020), the chapter uses the term 'evaluation' to refer to instances of positive or negative evaluative meaning and the term 'evaluated' to refer to the targets of these evaluations. Evaluations are coded in **bold** font (e.g. **caring**) and their targets or the 'evaluated' will be underlined (e.g. student nurse) with '+' for positive and '–' for negative meanings. Generalized patterns of recurring positive or negatively charged evaluative meaning are represented as clusters as exemplified in Figure 2.1. The reflective writing task, which students are expected to produce in the *Fundamentals of Nursing* unit, is described below. This is followed by an LCT cosmology analysis of two high-scoring student texts.

Reflective writing task and rubric description

This chapter reports on a research project titled 'Reflecting on undergraduate nursing: An interdisciplinary approach to embedded critical reflection in undergraduate nursing practice', funded by the Centre for Development of Teaching and Learning Teaching at the National University of Singapore

FIGURE 2.1 An example of a positively charged cluster

(Tilakaratna et al. 2020). The purpose of this interdisciplinary project was to design a teaching intervention to improve the quality of undergraduate nurses' reflective writing in collaboration with nursing lecturers from the Alice Lee Centre for Nursing Studies (ALCNS) and academic literacy lecturers from the Centre for English Language Communication (CELC).

At the National University of Singapore, where the study this chapter reports on is based, undergraduate clinical education shifted from 'task-based assessment' to 'competency-based nursing education and assessment' in order to accommodate to the qualities, attributes and skills required by practicing nurses. The competency-based model emphasizes "continuous learning, building on and reinforcing foundations, and provides deeper learning, ultimately preparing nursing students for readiness in practice" (SNB 2018). These skills were introduced to students through the *Fundamentals of Nursing* module that allowed nurses to engage in authentic learning through clinical practice in 2018 (see https://medicine.nus.edu.sg/nursing/wp-content/uploads/sites/2/2021/02/Evidence-Based-Education.pdf).

The module required students to provide nursing care to patients in a range of healthcare settings and included four hours of clinical practice in hospital. During their field placements, students accompanied registered or enrolled nurses and provided fundamental care (such as assisted bathing, feeding of patients, and taking care of patients' hygiene needs and assessment, e.g. taking vital signs, assessing patients' skin care condition and assisting in wound care) (Tilakaratna et al. 2020).

Students were asked to write a reflective journal about what they had learnt and how they could improve in the future following eight hours of clinical experience. They were provided with Gibbs' (1988) reflective cycle model to guide their reflective practice. This model moves through six stages: description, feelings, evaluation, analysis, conclusion and action plan. Each stage is elaborated on through a series of prompt questions, for example, 'feelings: what were you thinking and feeling?'. The first stage of 'description' is simply a recounting of events while the fourth stage in the cycle is more complex as it requires students to engage in 'sense making'. This indicates that as students move through the reflective cycle, they also shift from common sense knowledge to uncommon sense knowledge increasing in complexity. In nursing clinical practice, this

means moving through the personal reactions to a particular incident during fundamentals of care to the objective analysis of this event through reference to nursing theory. Gibbs' reflective cycle was also integrated into the initial marking rubric created by the nursing lecturers who make a distinction between knowledge (nursing theory and practice) and knower (the student nurse, nurses in general) in relation to the kinds of disciplinary meanings with which students are required to engage. The rubric includes a number of steps which provide a scaffolding for the overall assignment and elaborate on Gibbs' reflective cycle:

Step 1: Description of the encounter, experience or any problem that arise during the clinical visitation

Step 2: Feelings and Reflection: Identify your assumptions, values, beliefs, emotions, motives based on your experience

Step 3: Evaluation of the performance and experience. Analysis of the deeper meanings from different perspective (including feedback from tutor/peer). Research using academic references or literatures

Step 4: Conclude and integrate how the experience informs nursing practice. Plan of action for future encounters.

The first stage of the project focused on identifying features of successful and high-quality, in-depth reflective writing tasks in undergraduate nursing by analysing 155 student assignments ranging from high-, mid- and low-scoring papers. Approval was obtained by the NUS Internal Review Board and student consent was sought before gathering the data.

Analysis and findings

Based on the axiological cluster analysis of two high-scoring student texts, this section will illustrate how student nurses attempt to align with nursing professional values in their reflective writing texts. Each text moves through three obligatory stages (Critical Incident, Excavation and Transformation) and two optional stages (Orientation and Coda) as mapped for similar reflective writing tasks (Szenes at al. 2015). Specifically, the section below will show how students produce two distinct constellations of 'student nurse' and 'emerging professional nurse' identities in their reflective writing texts as they attempt to align with professional values associated with the discipline of nursing.

Maintaining safety

The first reflective writing text (Text 1) discussed in this chapter shows how the student reinforces appropriate behaviour in performing the fundamentals of care, for example, assisted bathing. In order to do so, she refers to the core

competency of 'maintaining a safe environment' (Singapore Nursing Board 2018) and the 5th entrustable professional activity: 'deliver care utilizing patient safety standards'.

In the Critical Incident stage of the text, the student focuses on 'challenges' that s/he faced when showering a patient and how these challenges compromised patient safety:

> However, there were some challenges showering the patient **as he has a habit of standing during a shower despite the weakness on his legs – emphasizing high fall risk.**

This challenge, of a noncompliant patient whose behaviour makes him a 'high fall risk', leads the student to examine, in the Excavation stage, what practices ensure the patient's safety in the context of showering him. A number of positive evaluative meanings target the student and their actions in attempting to maintain a safe showering environment for the patient, summed up in Table 2.1.

> Although it was frustrating to have an uncompliant patient, he taught me to be more **attentive** to his safety when **caring** for him. For instance, my patient's habit of standing during the shower made me see **the importance** of locking the commode and placing the grab bars within his reach for additional support. He also **compelled** me to lay his dirty clothing on the wet floor to dry his feet and prevent him from slipping when he stood up to wear his pants. All these were done to **minimize** fall risk, so that my patient could shower in a **safe** environment.

A number of activities such as "locking the commode" and "placing grab bars within his reach" and "lay[ing] his dirty clothing on the wet floor to dry his feet" are associated with the core competency of

TABLE 2.1 A pattern of positive charging of nursing student maintaining safety

evaluated	**evaluation**	charging
me	more **attentive**	+
[student]	caring for him	+
me	**the importance** of locking the commode and placing the grab bars within his reach for additional support	+
me	**Compelled**… lay his dirty clothing on the wet floor to prevent him from slipping…	+
All these [actions that the student nurse took]	**Minimize** fall risk	+
My patient	Shower in a **safe** environment	+

"Maintain[ing] safe environment through the use of quality assurance and risk management strategies". Collectively, the positive evaluative meanings and the skills of the student nurse constitute the first positively charged cluster in the student's assignment. Along with the second positively charged cluster of 'patient outcomes', as a result of the efforts the student nurse makes to minimize fall risk, these two clusters form the first constellation of 'student nurse' in the reflective writing text as shown in Figure 2.2:

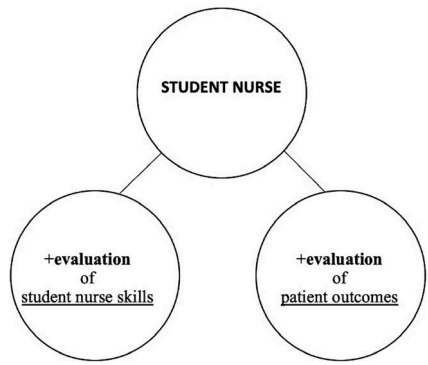

FIGURE 2.2 Two positively charged clusters constituting the constellation of 'student nurse'

After narrating the clinical incident, in Excavation stage the students identifies steps she took to minimize falls and justifies her actions in relation to nursing knowledge through reference to literature in the field. Drawing on a range of sources, the student lists the negative implications of 'falls' targeting patients in the context of nursing clinical practice.

> I learned that falls in the bathroom can have severe **complications** for the elderly patients, as they can **suffer from head injuries or fractures, confining** them to the wheelchair and **prolonging hospitalization** (Poon 2015). These often **escalate** to **higher healthcare costs** and **lower quality** of life (Khalik 2015). For example, the recovery time for hip fracture can be up to 18 months and one in four will completely **lose their independence** (Khalik 2015).

The repeated pattern of negatively evaluated implications of falls for elderly patients with reference to literature in the field of nursing creates a negatively charged cluster that constitutes valued nursing knowledge as shown in Table 2.2.

TABLE 2.2 A cluster of negative charging of implications of 'falls' for elderly patients

evaluated	**evaluation**	charging
for elderly patients	**severe complications**	–
they	**suffer from head injuries or fractures**	–
them	**confining**… to the wheelchair	–
[them]	and **prolonging hospitalization**	–
[patient]	**escalates to higher healthcare costs**	–
[patient]	**lower quality of life**	–
[patient]	**the recovery time for hip fracture** can be up to 18 months	–
One in four [patients]	**completely lose** their independence	–

Notably, the student starts this section through reference to a cognitive process (*learned*), which indicates a shift from nursing practices (as represented through a series of actions taken by the student during clinical placement) to nursing knowledge informed practice (e.g. understanding the implications for patients). The cognitive process 'learned', which is located in the topic sentence of the paragraph, functions as a form of 'dominating prosody' that colours the proceeding discourse with the same evaluative meaning (Martin & White 2005; Hood 2010). This means that while the cluster associated with nursing knowledge is negative because it refers to the effects of falls on elderly patients, this cluster is subsumed under the cognitive process of 'learned', creating a positive cluster of 'student learning', shown in Figure 2.3.

FIGURE 2.3 A positively charged cluster of 'student learning'

In the final Transformation stage of the text, the student proposes changes to her practice in order to ensure better risk management for her

patient. In doing so, she aligns with the competency indicator "reflect on practice outcomes and makes changes to practice where appropriate". The cluster constructed includes changes to future practice indicated through modal verbs which are related to capacity (*could*) and obligation (*should*) (e.g. I felt I *could* improve, I *should* perform) (see Table 2.3):

> Despite my inquisitive nature, I felt that I *could* **improve** by asking if non-slip mats are available instead of placing clothing on the floor. As clothing do not have a nonskid surface, it is less secured compared to non-slip mats (Berg 1992). Furthermore, I *should* perform a visual assessment of the patient's skin to check for signs of skin breakdown and abnormalities during the shower, **ensuring prompt treatments and interventions are provided if needed.**

TABLE 2.3 A cluster of positive charging of student's future practice in the Transformation stage of Text 1

evaluated	**evaluation**	charging
I	**could improve** [by asking if…]	+
I	**should perform** a visual assessment **ensuring prompt treatments and interventions are provided** if needed	+

FIGURE 2.4 A positively charged cluster of 'student's future practice'

While the two previous clusters of positive evaluation of 'student nursing skills' and 'patient outcomes' constructed a constellation of 'student nurse', the two positive clusters of 'student learning' and 'student future practice' constitute a second constellation of 'emerging professional nurse identity' as illustrated in Figure 2.5:

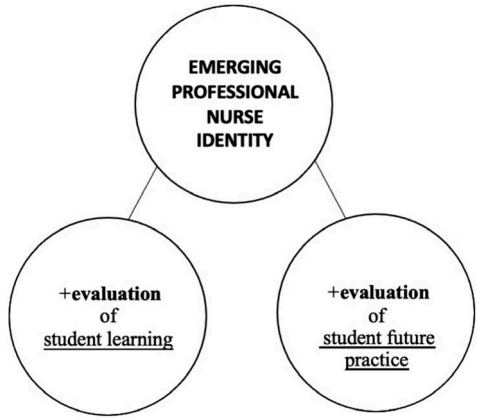

FIGURE 2.5 Two positively charged clusters constituting the constellation of 'emerging professional nurse identity'

Overall, in the unfolding assignment, the student text produces four major clusters with positive and negative charging which can be mapped out in relation to the unfolding reflective writing text. The first two positive clusters include positive evaluation of the 'student nurse's skills' (e.g. the steps taken to minimize fall risks for their patient) and the positive 'patient outcomes' in the Critical Incident stage of the text. The second cluster, which is formed in the Excavation stage, is a positively charged cluster of 'student learning' through which the student links practice and performance to nursing knowledge. Collectively these clusters show a shift from the student's personal or prior knowledge to act (cf. Moon 2004), which form a constellation of 'student nurse', to a constellation of 'emerging professional nurse identity'. This shift from personal knowledge to aligning with the competencies of a professional nurse shows how the student attempts to demonstrate their capacity to successfully reflect on and learn from past experiences, which functions as the basis of achievement in reflective writing tasks in nursing. The final cluster, which emerges in the Transformation stage of the text and also forms part of the constellation of 'emerging professional nurse identity' focuses on the student's future practice where the student shares how she wishes to transform her practice (e.g. I felt I could improve, I should perform) demonstrating the capacity to respond in ways that are valued in the discipline to a situation according to newly acquired perspectives (Mezirow 1990) that are afforded by the cosmology of nursing competence that students are exposed to in their undergraduate nursing degrees. The constellations of 'student nurse' and 'emerging professional nurse identity' which are constructed with reference to the core competency of 'maintaining safety' forms a partial reproduction of the cosmology of nursing competence in the student text as is demonstrated in Figure 2.6:

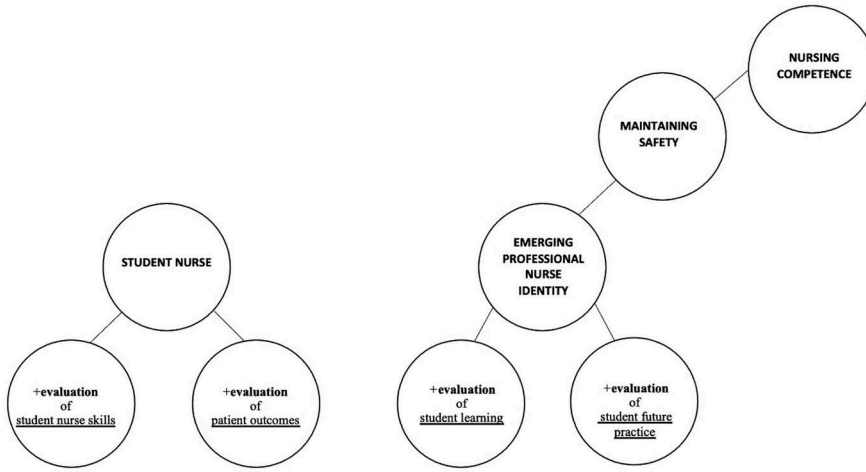

FIGURE 2.6 Clusters and constellations constituting the cosmology of nursing competence in Text 1

The section below shows how the formation of constellations of 'student nurse' and 'emerging professional nurse identity' are realized in another high scoring reflective writing text in which the student attempts to analyse the impact of the core competency of 'effective communication' on clinical practice.

Effective communication

The second reflective writing text (Text 2) discussed in this chapter engages with the competency standard of 'effective communication' under the second domain of management of care. Effective communication is defined as the ability for a nurse to "[l]isten, clarify and communicate clearly through verbal/non-verbal, written and electronic means as appropriate to ensure effective communication with clients, families and other healthcare professionals" (Singapore Nursing Board 2018). In the EPAs, communication is captured under "patient engagement" where students are expected to "engage patients, families, or caregivers to enhance the patient's experience" (Lau et al. 2020).

The student states in the Orientation stage of the text that it is the nurse's responsibility to ensure effective communication and build rapport with the patient. The proceeding Critical Incident stage explains the impact of a language-based communication barrier on establishing rapport with the patient.

> As for Patient A, language **barriers** were **significant** he **could only speak** the Hokkien Dialect and none of us **could speak this dialect competently**. As a result, whenever he requested for help, or when he was

> sharing some of his life stories with us, we **did not know what to do**. This made me **feel quite trapped** as I **really hoped to help him**, but I **did not understand what he wanted**.

The above description of the problematic incident in which the student shares their feelings as triggered by the inability to communicate with the patient results in the formation of two clusters of negative evaluative meaning. In the first cluster of negative evaluating meaning, student nurses are negatively evaluated for their inability to communicate with the patient in the specific situation described as shown in Table 2.4.

The second cluster of negative evaluative meanings targets outcomes for the patient, who the student claims may be negatively impacted because he is unable to communicate his needs to nursing staff (see Table 2.5).

> From his perspective, he **may have also felt that people around him did not understand** him, and this **may have had caused some psychological impact** on him. I think, often, it is easy to **give up communicating** with patients when there are language barriers and end up **neglecting** them.

The nurse's inability to communicate and the resulting negative outcomes for the patient form two negatively charged clusters of 'student nurse skills' and 'patient outcomes'. Similar to Text 1, these constitute a constellation of 'student nurse' illustrated in Figure 2.7.

TABLE 2.4 A pattern of negative charging of nursing student's lack of effective communication

evaluated	**evaluation**	charging
none of us [student nurses]	**could** speak **competently**	–
We [student nurses]	**did not know what to do**	–
Me [student nurses]	**feel quite trapped**	–
I [student nurses]	**did not understand** him	–

TABLE 2.5 A pattern of negative charging of effect of poor communication skills on patient

evaluated	**evaluation**	charging
he [the patient]	**could only speak Hokkien dialect**	–
he [the patient]	**may have also felt that people around him did not understand him,**	–
him [patient]	**psychological impact**	–
with patients	**easy to give up communicating**	–
them	**end up neglecting**	–

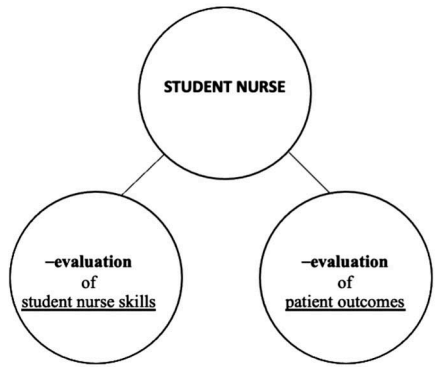

FIGURE 2.7 Two negatively charged clusters constituting the constellation of 'student nurse'

While the student in Text 1 refers to their actions to minimize negative outcomes on the patient, the student in Text 2 refers to future actions they could take when confronted with a patient who doesn't speak the same language as the nurse. This section of the reflective text uses similar language to the Transformation stage in the previous text such as the use of modal verbs related to obligation (*should*) (see Table 2.6).

> As I was reflecting on what I *should* do and how I ***should*** **improve** myself when encountering such difficulties in the future, I thought that I ***should*** **learn** at least a little of the more common languages and dialects such as Malay, Hokkien, Cantonese etc., since many of the pioneer generation are not English-educated and can only converse in a certain language or dialect.

Unlike Text 1, in which the student nurse's future actions are realized in the Transformation stage, in Text 2, 'students future practice' is still constructed as a cluster of meaning that forms part of the 'student nurse' constellation. This is because the proposed future actions the student refers to in Text 2 are not reinforced in the nursing literature which discusses how nurses can resolve situations in which language barriers hinder effective communication in clinical practice.

TABLE 2.6 A cluster of positive charging of student's future practice in the Excavation stage of Text 2

evaluated	**evaluation**	charging
I	**should improve** myself when encountering such difficulties in the future	+
I	**should learn** at least a little of the more common languages and dialects such as Malay, Hokkien, Cantonese etc.	+

The student indicates that the nursing knowledge she refers to is different from the actions that they thought that they should take (e.g. I thought that I should learn at least a little of the more common languages and dialects such as Malay, Hokkien, Cantonese etc.) and this is indicated in the language through the use of an adversative conjunction (*however*) in the extract where the student refers to nursing literature. References to literature form a positive cluster of 'nursing knowledge' as shown in Table 2.7 visualized as Figure 2.8:

> *However*, when detailed explanations are required, such as for patients' medication and treatment plan, and language skills are limited, it is wise to get the help of another health pyessional [sic] who can better communicate in the patient's language (Squires 2018). This is so that undesired consequences due to poor communication with patients would be avoided.

In addition to the nursing knowledge cluster which refers to the literature on how to effectively communicate with a patient who uses a different language from the nurse, the student nurse in this text produces three other positively charged clusters in the text which constitute 'effective communication'. The first of these is a short recount that consolidates her understanding of how nonverbal effective communication can be used to establish rapport with patients. In this recount, as shown in Table 2.8 and Table 2.9 a pair of positively charged clusters of student nurse skills are formed.

TABLE 2.7 A cluster of positive charging of nursing knowledge

evaluated	**evaluation**	charging	source
[for the nurse] to get the help of another health professional	**wise**	+	Squires (2018)
another health professional	**better communicate in the patient's language**	+	Squires (2018)
undesired consequences due to poor communication with patients	**avoided**	+	

FIGURE 2.8 A positively charged cluster of 'nursing knowledge'

TABLE 2.8 A cluster of effective nonverbal communication of student nurse with a patient

evaluated	**evaluation**	charging
Her [my friend]	**non-verbal cues showed that she was listening to the patient**	+

TABLE 2.9 A cluster of positive outcomes for the patient

evaluated	**evaluation**	charging
the patient	**was more willing to share**	+

Notably these two positively charged clusters are reproduced under the constellation of 'emerging professional nurse identity', where another student nurse's actions are seen as having positive outcomes for the patient. The observed positive practice of communicating using nonverbal cues is reinforced with reference to nursing knowledge. Similar to Text 1 above, Text 2 indicates through verbs of mental cognition (*learnt*) that the student nurse is abstracting from the specific instance of effective nonverbal communication to the principles of 'effective communication', a core competence under the cosmology of nursing competence (see Table 2.10).

> From this I *learnt* the power of non-verbal cues in communication, because it helps build trust and rapport between healthcare providers and patients even if verbal communication and comprehension is limited by language barriers (Segal et al. 2018).

Similar to Text 1, the cognitive process of 'learnt' functions as a dominating prosody that is related to the student's capacity to understand that nonverbal communication is a form of effective communication in clinical practice. This positively charged cluster of 'student learning' is similar to the cluster in Figure 2.3 that was produced in Text 1. However, in this text it is presented in the Excavation stage.

Text 2 then is a slightly more complex example of reflective writing than Text 1. In the Critical Incident stage, the student refers to her own practice in terms of her inability to communicate with her patients and proposes how this might negatively impact the patient. The nurse's actions and outcomes on the patient form two

TABLE 2.10 A cluster of positive charging of non-verbal communication

evaluated	**evaluation**	charging
non-verbal cues in communication	**The power**	+
It	**helps build trust and rapport** between healthcare providers and patients	+

negative clusters. This is followed by constructing a nursing knowledge cluster in the Excavation stage which contradicts the student's attempt to show a shift in their practice. What this implies is that student learning alone is not valued, particularly if it is linked to personal epistemologies (Ryan & Ryan 2013) that are not supported by appropriate literature.

Another difference that appears in the second text is the knowledge that the student gains through reference to observing another nurse's successful attempts to use nonverbal cues to communicate. Unlike the students own proposed future practice (e.g. to learn other languages that are spoken by elderly Singaporeans), this positively charged 'nursing knowledge' cluster also includes an observation of another nurse's competent demonstration of non-verbal communication. This is then consolidated with reference to the nursing literature and linked to a positively cluster of 'student learning'. The constellations of 'student nurse' and 'emerging professional nurse identity' which are constructed with reference to the core competency of 'effective communication' forms a partial reproduction of the cosmology of nursing competence in Text 2 as is demonstrated in Figure 2.9.

An overview of both high-scoring reflective writing texts show that the students produce similar constellations of 'student nurse' and 'emerging professional nurse identity' in their reflective texts. The first 'student nurse' constellation focuses on the student's own actions and outcomes on patients. Both the practice and outcomes can be positively or negatively evaluated, depending on how the nurse views their actions, for example, as an attempt to create positive or negative outcomes for the patient. In producing these clusters, the students begin the process of reflection from a personal standpoint of what does or does not work in the context of the particular incident they encountered in clinical practice. However, both students understand that in order to demonstrate successful critical reflection

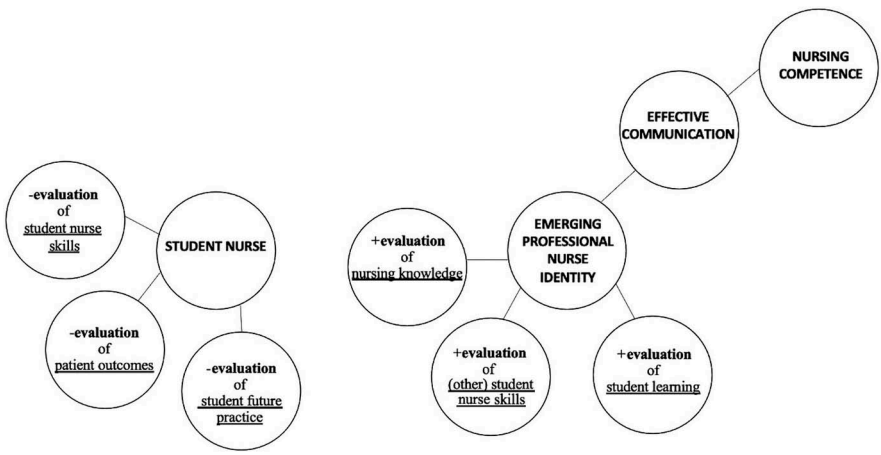

FIGURE 2.9 Clusters and constellations constituting the cosmology of nursing competence in Text 2

in nursing clinical practice, they need to show a shift in their practice from what a student would do to what a nursing professional would do. They also need to reproduce constellations of emerging nurse professional identity with reference to a set of nursing skills informed by nursing knowledge.

Implications for teaching critical reflection

Through the use of LCT constellations analysis, this study has revealed how successful students demonstrate a shift from personalized understandings of clinical practice to engaging with appropriate nursing knowledge in order to align their practice with the cosmology of nursing competence. In doing so, students also demonstrate that they can concretize and exemplify the highly complex axiological meanings in the form of nursing values that are outlined in Core Competencies and Generic Skills for Registered Nurses by the Singapore Nursing Board. Demonstrating high scoring students are able to create clusters and constellations that show alignment with the cosmology that underlies professional nursing competence reveals the basis of success in reflective writing tasks.

The above cluster analysis has shown how positive and negative meanings are formed around specific targets (the student nurse, the patient) in the first part of the assignment, as students show how they attempt to engage in professional practice. With the Excavation stage, students re-examine their actions in relation to the literature, they explore the implications of their practice such as the impact 'falls' or poor communication has on their patients forming a cluster of nursing knowledge and nursing competence which re-create parts of the underlying cosmology of nursing professional practice in the form of selected core competences such as 'maintaining safety' and 'effective communication'. Both students then move onto identifying what they have learnt in the course of their reflection process in an attempt to show 'transformation' of practice. While the first student thinks of ways in which she can reduce fall risks with reference to the literature, the second student learns through the observation of another nurse's attempts to use nonverbal communication to build rapport with a patient and consolidates this in relation to nursing knowledge with reference to literature. Both instances demonstrate the students' capacity to learn from reflecting on their actions and thus provide evidence of in-depth reflection, which has occurred in relation to identifying and embodying disciplinary values that underpin their actions as nurses and the literature that they engage with in the field of nursing.

What is significant is that while students do not explicitly refer to nursing competence or competency frameworks, the clusters and resulting constellations, which high-scoring students construct as they show they have learnt from reflecting on past experiences, reproduce the underlying cosmology of nursing competency that aligns with the standards of professional practice outlined by the Singapore Nursing Board.

In terms of broader discussions of what constitutes critical reflection in disciplinary fields, making visible the underlying cosmology of nursing competency

that students systematically reproduce in their reflective writing tasks shows that there is a set of defined meanings that counts as professional practice. Successful students are aware that reflective writing tasks need to encompass what is classified in nursing as 'knowledge' and 'professional practice' and take into consideration the values that are reproduced in the field. Aligning with these values is a first step towards becoming professionals and the capacity to demonstrate this has implications for their success as competent and ethical nurses.

In critical reflection pedagogy, making professional standards visible and explicit means demonstrating, through such means as LCT cluster analysis, the shift from personal actions in field placements to aligning with professional competencies and developing new skills (Boud et al. 1985). Successful students navigate the complexity of evolving from nursing novice to nursing professional by producing certain clusters of meanings. Making this process visible allows students to demonstrate their capacity for critical reflection and to delve deeper into how their professional identities intersect with their personal identities. Importantly, for students to master critical reflection, they also need to show how they align with disciplinary values demonstrating their capacity for in-depth critical reflection through the transformation of both their perceived future actions and their perspectives on what constitutes appropriate, professional and empathetic practice in the context of professional nursing.

At the highest level of achievement, critical reflection pedagogy refers to 'in-depth' critical reflection, which is linked to 'new' ways of doing things and moving from concrete development of skills to 'new' ways of seeing (Boud et al. 1985). While a number of studies link news ways of seeing and transformation of perspectives to challenging, questioning and deconstructing power structures, few studies have explored how students reproduce, align with and refer to underlying structures of power in order to succeed in higher education. In disciplines such as undergraduate nursing where students encounter emotionally challenging incidents with patients in practice situations from the outset of their higher education journey, understanding, unpacking and aligning with professional values is a necessary first step in creating effective and more empathetic nurses who are adequately prepared to engage with the professional challenges they encounter in clinical practice.

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3

'I COMPLY BUT DEEPLY RESENT BEING ASKED TO DO SO'

Ethical considerations of assessing students' reflective writing

Eszter Szenes and Namala Tilakaratna

Introduction

Ethical reasoning, ethical decision-making, and professional integrity are often cited among the most important graduate qualities in university strategic plans. A voluminous literature also highlights the importance of preparing tertiary students for ethical professional practice. In higher education students' capacity for ethical reasoning and ethical practice are often assessed through reflective types of assignments such as critical reflection essays, learning journals, and reflective journals that are becoming increasingly popular in applied disciplines such as education, social work, business or health sciences. These assignments are often framed as 'empowering' and 'emancipatory' as they are designed to enable students to challenge existing power structures and the status quo in institutional settings (see e.g. Fook 2004; Fook & Morley 2005). They are described as forms of 'creative' expression that do not conform to any structures and therefore allow students 'freedom' to engage with their experiences without limits (Crème 2008). However, among the issues that emerge with regard to reflective writing are ethical concerns associated with assessing an assignment that is culturally or contextually insensitive and asks students to divulge often deeply personal and ethically sensitive information (see e.g. Boud & Walker 1998; Ghaye 2007; Morley 2007; Marsh 2014). While ethical decision-making and integrity are undoubtedly crucial components of professional practice and a necessary student attribute, this chapter will critically examine the appropriateness and ethicality of the widespread academic practice of assessing students' reflective writing in higher education.

We begin by reviewing the literature on critical reflection which defines reflective writing as a form of 'emancipatory education' that involves challenging presuppositions, exploring alternative perspectives and transforming old

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ways of understanding (Mezirow 2003: 12). This 'transformation' deviates from the 'objective' and epistemologically oriented meanings that are valorized in higher education (Fook et al. 2016). We draw on the concepts of axiological *clusters* and *constellations* (Maton 2014) from Legitimation Code Theory (LCT) to analyze reflective assignments from business and evaluate whether they can be claimed to be 'empowering' and 'emancipatory' and enabling critical reflection as a process. The findings of this research suggest that reflective assignments could be seen as contributing to deficit discourses rather than challenging the status quo and allowing 'freedom of expression' as well as limiting rather than empowering students' agency. The chapter will conclude with a discussion of the need to critically reflect about the practice of assessing critical reflection in tertiary settings. We suggest that decolonizing critical reflection is necessary in order to design reflective tasks that enable rather than constrain students' learning to become self-reflective practitioners.

Literature review: The construction of critical reflection assignments

Critical reflection refers to how people make "judgements about whether professional activity is equitable, just and respectful of persons or not by drawing on personal action" examined within wider socio-historical and politico-cultural contexts (Hatton & Smith 1995: 35). As a 'soft' (Biglan 1973) or 'transferable' (Brown 1990; Halpern 1998; Kek & Huijser 2011) skill, it is often taught and assessed through the use of a wide variety of assignments, such as learning and reflective journals and reports, reflection essays, case studies, or narratives (Carson & Fisher 2006; Fook et al. 2016; Fook & Gardner 2013; Ryan & Ryan 2013). We distinguish between the process of critical reflection and written reflective assignments by using the term 'critical reflection' to name the process and 'critical reflection assignments' to refer to "written documents that students create as they think about various concepts, events, or interactions over a period of time for the purposes of gaining insights into self-awareness and learning" (Thorpe 2004: 328 as cited in O'Connell & Dyment 2011: 47). Typically, reflective assessment tasks are often designed to induce 'a state of perplexity, hesitation, doubt' (Dewey 1933), create 'inner discomforts' (Brookfield 2000), and require students to identify a personal and 'disorienting dilemma' (Mezirow 2000) or a 'critical incident' (Fook 2002) during the practical application of their disciplinary knowledge in field work, field placements and other 'real-life' scenarios students engage in during their undergraduate degrees. Critical incidents or learning events are often narrated in the form of an autobiography or life narrative (Crème 2008) that then forms the object of analysis in critical reflection assignments. Students are expected to analyze these problematic situations through applying the theoretical concepts of their discipline and/or deconstruct dominant assumptions and challenge existing power structures

and the status quo in institutional settings (see e.g. Brookfield 2000; Fook 2004; Crème 2008; Fook & Morley 2005).

Despite a rich literature that discusses critical reflection, there has been little consensus or understanding of what counts as *evidence* of effective practices of critical reflection, particularly in the context of higher education. Recent research has identified what constitutes the knowledge practices of critical reflection across a range of disciplines such as nursing (Brooke 2019), engineering and English for Academic Purposes (Brooke, Monbec & Tilakaratna 2019; Monbec et al. 2020), social work education (Boryczko 2020), teacher education (Macnaught 2020) and social work and business (Szenes et al. 2015; Tilakaratna & Szenes 2017, 2020; Szenes & Tilakaratna 2021). Drawing on linguistic and sociological approaches, these studies highlight key features of highly graded reflective writing, for example, their genre structure, i.e. staging, recurring patterns of evaluative resources and the importance of semantic waving, i.e. moving between theoretical knowledge and everyday experiences (see also Maton 2014; Kirk 2017; Macnaught 2020; Meidell Sigsgaard 2020; Meidell Sigsgaard & Jacobsen 2021).

With regards to the ethical considerations of assessing reflective assignments, previous research has pointed out a Western bias towards cultural assumptions and norms, for example, through its excessive focus on individuality (Fook & Askeland 2007; Tilakaratna et al. 2019). This focus on individuality and the 'self' is evident in claims such as providing students with the opportunity for '*self*-expression', and in concepts such as '*self*-regulation', 'critical *self*-reflection' (Facione 1990; Hettich 1990; Hiemstra 2001, emphases added), and '*self*-directed, *self*-disciplined, *self*-monitored, and *self*-corrective thinking' (Paul & Elder 2014, emphases added). Other ethical concerns include 'censorship' (Cheng & Chan 2019), coercion and intrusion into students' privacy (Ghaye 2007; Ross 2011; Smith & Trede 2013), overburdening students with 'busy work' and 'more workload' (Mills 2008; Mortari 2012), and setting assignments that are seen as 'tedious' and a 'nuisance' (Mills 2008; O'Reilly & Milner 2015) or a 'pain' (Jindal-Snape & Holmes 2009).

Previous research has claimed that critical reflection tasks are a form of 'creative' play or activity that have no specific genre or text structure and allow students "to play around with ideas in an open, unworried and exploratory way" (Crème 2008: 52) and are thus unteachable and unassessable. In contrast, Szenes, Tilakaratna & Maton (2015) show that high-scoring reflective assignments in social work and business conform to a uniform genre structure: while highlighting discipline-specific differences, high-scoring reflective assignments in both disciplines include several common genre stages. These include descriptions of personal and professional experience, critically examining previous assumptions, beliefs and behaviours, and a resolution to learn from mistakes and a pledge to apply new knowledge to inform better behaviour in the future. Further, Tilakaratna & Szenes (2020) and Szenes & Tilakaratna (2021) challenge current pedagogical practices which claim that critical reflection tasks

allow for 'creative' expression by demonstrating that students from different disciplines align themselves with privileged disciplinary values by creating value-laden constellations in their assignments.

Theoretical foundations: Axiological clusters and constellations

LCT is a sociological framework that enables the organizing principles underlying knowledge practices to be explored, across a wide range of academic disciplines as well as everyday and professional contexts (see e.g. Maton 2014; Maton et al. 2016, 2021). This chapter draws on the LCT concepts of *clusters* and *constellations* (Maton 2014; Maton & Doran 2021). Specifically, it focuses on an *axiological* form of clusters and constellations, in which practices signal the "aesthetic, ethical, moral or political affiliations" of actors (Maton 2014: 152). The aim is to examine the extent to which the reflective assignments analyzed for this study can be claimed to be 'empowering' and 'emancipatory' and enabling critical reflection as a process.

Axiological clusters can be formed by recognisable and recurring configurations or patterns of these kinds of meanings that have positive or negative *charging* (Tilakaratna & Szenes 2020; Szenes 2021; Szenes & Tilakaratna 2021). Linked to other clusters, they can form a larger unit termed an *axiological constellation* (Maton 2014; Maton et al. 2016; Tilakaratna & Szenes 2020; Szenes 2021). In Maton's words, tight association among the stances constituting a constellation (Maton 2014: 163) can enable *clusterboosting*, whereby actors can benefit from the meanings associated with other positively viewed stances that are closely connected with the stances they express, whether they engage with those stances or not. Conversely, actors can experience *clusterfucking* of their stances by association with other stances that are negatively charged, regardless of whether they enact those stances or not. This chapter aims to demonstrate the usefulness of these concepts for revealing what the academic discipline of business seems to value as successful written demonstrations of critical reflection as well as what it seems to devalue and evaluate as failures of demonstrating critical reflection.

To identify clusters of axiological meanings in reflective assignments, we draw on the APPRAISAL[1] framework, also called 'the language of evaluation' (Martin, J. R. & White 2005), from Systemic Functional Linguistics (SFL) to analyze instances of evaluative meanings, i.e. attitudes, values and judgements. Attitudinal meanings are realized by interpersonal linguistic resources[2] selected from the ATTITUDE system of APPRAISAL that is further divided into the sub-systems of AFFECT, classified as types of emotion, and JUDGEMENT and APPRECIATION, classified as forms of opinion (Martin, J. R. 1992, 2000; Bednarek 2008). Selections of attitudinal meanings from the subsystem of AFFECT involve linguistic resources which construe attitudinal meanings as evaluations of emotions and feelings; selections from JUDGEMENT signal evaluations of behaviour; selections from APPRECIATION signal evaluations of phenomena and things respectively

(Martin, J. R. & White 2005). These resources of ATTITUDE can also be graded by amplification (e.g. good: great: ***outstanding; entirely*** incorrect) or blurring (e.g. ***somewhat*** important; ***may*** have offended) in order to intensify, quantify, sharpen or soften attitudinal meanings (Hood 2010; Martin, J. R. & White 2005).

Since all evaluations are aimed at something, we will also identify *what* is being evaluated (Martin, J. R. & White 2005: 59), i.e. the *Targets* [3] of attitudes[4]. As illustrated by Example 1 below, an instance of inscribed negative [judgement: normality] (*foreign*) evaluates the Target '*my teammates' behaviour*'.

> [1] my teammates' behaviour [Target] seemed **foreign** [–judgement: normality] to me

Following the conventions of coding attitudinal meanings established in Martin, J. R. (2000) and Martin, J. R. & White (2005), in the analyses below we will term instances that evaluate 'attitudinal choices' and the evaluated entities 'Targets' in order to illustrate their role in the construction of clusters in the reflective assignments analyzed in this study. Attitudinal choices will be coded in **bold** font and their Targets will be underlined. Their charging will be indicated by the signs '+' for positive and '–' for negative evaluation. Resources of grading will be coded in ***black bold italics.*** This coding scheme is summarized in Table 3.1 below:

TABLE 3.1 Coding scheme for text analysis

Coding scheme	
Targets (i.e. the evaluated entities)	underlined
attitudinal choices	**black bold** font
type of attitude	square brackets[5] (e.g. [+judgement: propriety])
charging	'+' sign for positive evaluation '–' sign for negative evaluation
grading (amplification/blurring)	***black bold italics***

When the same Target is repeatedly evaluated by instances of positive or negative attitude, such recurring patterns can be generalized as positively or negatively charged clusters (Tilakaratna & Szenes 2020), as shown in Figure 3.1.

FIGURE 3.1 An example of a negatively charged cluster

This visual representation will be used in this chapter to capture the nature of axiological meanings clustered together in the reflective assignments analyzed for this study.

The dataset and the reflective assignment tasks

The reflective assignments analyzed in this chapter are part of a dataset collected for an ongoing international multidisciplinary research project on the knowledge practices of critical thinking in higher education, whose aim is to understand the disciplinary requirements of undergraduate reflective writing. After gaining ethics approval for the project, 64 senior undergraduate reflective journals from business studies (1,000 words) and their grades were collected from a core interdisciplinary business studies unit at a large metropolitan Australian university. All grades were ordered from highest to lowest, all identifying details of the students were removed, and the texts were then numbered as Text 1, 2, 3, and so on. Out of the 64 students who consented to having their assignments analyzed for research purposes, only six received a High Distinction grade and 11 students failed this task. To analyze the same number of texts from each of these groups, the six highest- and the six lowest-scoring assignments were then chosen for the analysis presented in this chapter.

The reflective journal task set within a core, senior and challenging interdisciplinary unit in business studies was designed to develop students' reflective practice and specifically their intercultural competence. Reflective practice is defined in the Unit of Study Outline as "a dynamic ongoing interactive self-reflective learning process that transforms attitudes, skills and knowledge for effective communication and interaction across cultures and contexts" (Freeman 2009). The reflective journal task required students to critically reflect on their experience of multinational teamwork by examining their visible and invisible values, beliefs, assumptions and behaviours drawing on Solomon & Schell's model of intercultural competency (Solomon & Schell 2009: 49–50). In particular, the students were provided with the following guiding questions:

Question 1: Choose one behaviour that you thought was a strength or weakness and identify the 'below the surface' value that underpins that behaviour.

Question 2: Having identified the cultural value that you believe underpins your particular strength or weakness, now explain how and from where that cultural value developed using the 'core elements of culture' provided on p. 50 of Solomon and Schell (2009).

Question 3: What does this teach you about the way you behave, and your expectations of others, when working in multinational teams?

Question 4: How might you integrate this awareness into future team work, either at university or in the workplace?

This chapter seeks answers to the following research questions: 1) how '*emancipatory*' and '*empowering*' are these assignments and 2) how do successful students demonstrate critical self-reflection in high- and low-scoring reflective assignments? For reasons of space, in the following sections we will only highlight textual examples from the business reflective journals to illustrate the ethical concerns we identified throughout the course of our research.

Deficit discourses in reflective writing: Stereotyping the 'Other', negative self-talk, and a focus on failure

As shown in the literature review section above, reflective assignments are often framed as 'empowering' and 'emancipatory' designed to enable students to 'challenge' existing power structures and the 'status quo' in institutional settings (e.g. Fook 2004; Fook & Morley 2005). When analysing reflective assignments in detail, we noticed that some students seemed to interpret the instructions 'critically analyze' and 'critically reflect on' as an invitation to criticize others and themselves. Specifically, this section will illustrate how student writers of high-scoring reflective journals from the field of business engage in deficit discourses by stereotyping and othering their peers while student writers of low-scoring assignments engage in negative self-talk and focus on failure.

Deficit discourses: Clusterboosting Australian values and clusterfucking 'foreign' values

For reasons of space, we first explore Text 1 to provide more detailed analyses before presenting illustrative results from other high-scoring assignments. Our first example demonstrates that in the high-scoring business reflective journals the student writer initially negatively evaluates the other participants they interact with during their multinational teamwork. They describe their personal experiences concerning their multinational team assignment and analyze the 'below the surface' values that underpin their negative experiences of teamwork and negative attitudes towards their peers.

> [Text 1] My group had three members from China where communitarianism is ***generally*** **valued** [+appreciation: valuation] and ***other cultural*** **differences** [–judgement: normality] such as communication styles made

their behaviour seem **foreign** [–judgement: normality] to me (Trompenaars & Hampden-Turner 2000: 71)

To uncover patterns of evaluation that cluster into a set of axiological values, we coded the attitudinal choices of similar targets and their charging, specifically, subsequent mentions of the student's team mates (e.g. *three members from China, their behaviour*) as well as references to communitarianism and related expressions (e.g. *Chinese style, cultural differences)*. The detailed attitudinal analysis presented in Table 3.2 reveals that both the student's team mates and their country of origin, values and characteristics are repeatedly evaluated as incapable and 'abnormal'. These resources, clustered together, function to amplify the student writer's negative judgement of the 'capacity' and 'normality' of his peers from

TABLE 3.2 A repeated pattern of coupling negative evaluation of student's peers and communitarian values [Text 1]

Target: peers	**attitudinal item**	type & charging
other group members	***less* academically gifted** than myself	[–judgement: capacity]
three members from China	**foreign**	[–judgement: normality]
their behaviour	**foreign**	[–judgement: normality]
to use direct communication	their **resistance**	[–judgement: normality]
my team mates	**fail** to understand language or grammar	[–judgement: capacity]
they	**do not understand** the concept	[–judgement: capacity]
my Chinese workmates	looked at me **blankly**	[–judgement: capacity]
the group's	**lack** of direct communication	[–judgement: capacity]
Target: communitarianism	**attitudinal item**	type & charging
commonly indirect Chinese style	**foreign**	[–judgement: normality]
China where communitarianism is generally valued	**foreign**	[–judgement: normality]
Chinese style	commonly **indirect**	[–judgement: normality]
other cultural differences such as communication styles	made their behaviour seem **foreign** to me	[–judgement: normality]
communitarianism	**foreign**	[–judgement: normality]

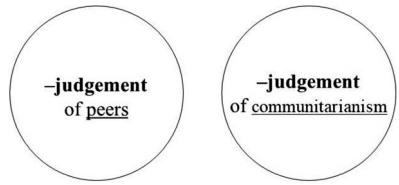

FIGURE 3.2 Negatively charged clusters of the student's peers' behaviour as incapable and communitarianism as 'abnormal'

mainland China from their cultural differences to their communication style.

We can generalize these salient linguistic resources of negative judgement, which target the student's Chinese team mates and their behaviour and values that stem from communitarianism as negatively charged clusters. Illustrated by Figure 3.2, these clusters condense the patterns of repeated evaluations, which function to dismiss the student's peers' behaviour as incapable and communitarianism as 'abnormal'.

As mentioned above, business students were required to draw on Solomon & Schell's intercultural competency framework to analyze their visible behaviours as well as hidden values, beliefs and assumptions (Solomon & Schell 2009: 49–50). This framework includes concepts such as *myth, folklore, heroes* and *history* within 'core elements of culture', which influence both 'on the surface' personal behaviour as well as 'below the surface' cultural values (e.g. egalitarianism, honesty, loyalty, etc.). Further analysis of Text 1 revealed that the business student contrasts the 'foreign' value of communitarianism to his Australian value of 'individualism', one of the core elements of culture in the theoretical framework students were required to apply in their reflective journals. The extract below demonstrates that the value of individualism is evaluated exclusively positively by piling up resources of positive capacity, which functions to construct the student's academic abilities as superior to his Chinese peers.

> [Text 1] The hidden **value** [+appreciation: valuation] that underpins my behaviour of discounting is individualism. Individualism involves **a preference to act independently** [+judgement: capacity] and **to put an individual's own interests before any group interests** [+judgement: capacity] (Parker: 194–196). The main reason I have used discounting in the past is to ensure that I **get the best** marks [+appreciation: valuation] **possible** [+judgement: capacity] at university which can be classified as my **individual** [+judgement: capacity] objective. The broader objective this links to is **success** [+judgement: capacity] in life. Doing well at university has been shown statically to **positively impact** [+judgement: capacity] upon a person's career, health and material wealth in a generalized case

(Todaro & Smith 2009: 373). I therefore used discounting behaviour in the aim of **achieving** my own **individual** objective [+judgement: capacity] which I justified to myself by claiming it was **similarly helping the group achieve** [+judgement: capacity] its objective.

This recurring salient pattern of positive capacity targeting the value of individualism is constructed in direct opposition to the pattern of negative normality targeting the value of communitarianism we showed in Table 3.2. By packaging them up into abstractions that condense attitudinal meanings, the business student constructs these as oppositional clusters illustrated by Figure 3.3.

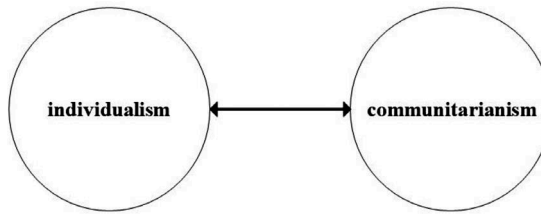

FIGURE 3.3 Oppositionally charged clusters in business: Individualism versus communitarianism

The next step in our analysis was to identify what other ideas the clusters of individualism and communitarianism were related to in the student's assignment. In other words, it is important to understand what constellation an idea is part of (cf. Maton 2014). Other Australian values are also discussed by the student writer, such as *equality, courage, excellence*, and *cooperation*. Similar to individualism, each of these values condense a range of meanings: for example, the value of excellence is exemplified through positive judgements of capacity such as efficiency, productivity and behaving competitively, and the value of courage condenses behaviours such as offering ideas during teamwork, divulging stories and experiences and the student's expectation that peers should not feel intimidated when participating in groupwork. Each cluster that actualizes an Australian value condenses a repeated pattern of *positively* charged attitudinal meanings. Together these clusters form a positively charged constellation of Australian values. On the other hand, similar to communitarianism, each cluster that actualizes a Chinese value condenses a repeated pattern of *negatively* charged attitudinal meanings. This construction of oppositional constellations enables *clusterboosting* Australian values and *clusterfucking* 'foreign' values in the business reflective journal. The clusters forming these opposing constellations are visualized by Figure 3.4.

By citing his positively charged Australian value system as the reason for his inappropriate behaviour, the student essentially redeems himself by excusing his stereotyping and othering of his Chinese peers. While space precludes the

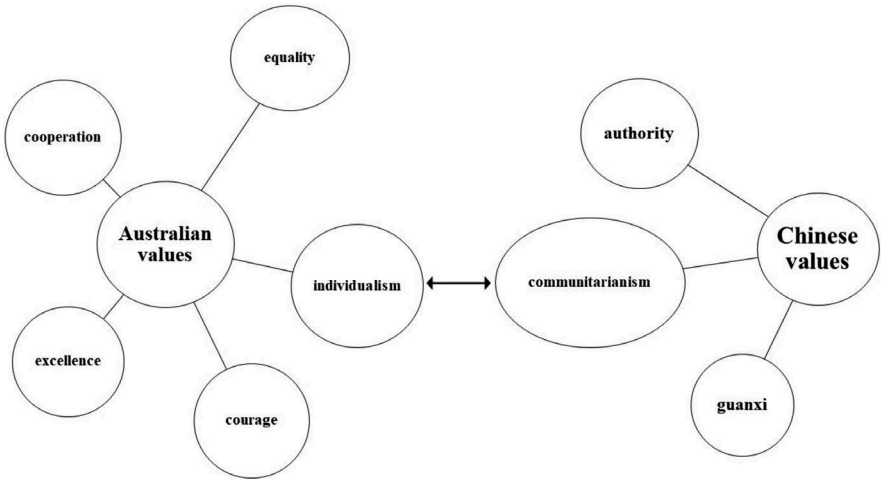

FIGURE 3.4 *Clusterboosting* Australian values and *clusterfucking* 'foreign' values in a high-scoring business reflective journal

detailed presentation of other high-scoring students' reflective assignments, it is important to mention that such oppositional constellations appear in each text. We provide examples of these oppositional constellations in Table 3.3, where students contrast their positively charged Australian values and behaviours to the negatively charged non-western values and behaviours of their peers.

TABLE 3.3 Oppositional constellations of Australian and foreign values and behaviours [Texts 2–6]

Text	Australian values and behaviours: +charging	Foreign values and behaviours: –charging
Text 2	history, heroes, mythology, folklore, mateship	face saving, silence, indirect communication
Text 3	integrity, honesty, equality, courage, cooperation, excellence	collectivism, fear of rejection
Text 4	excellence, individualism, freedom, history, landscape, low power distance	collectivism, authority, high power distance, Confucianism
Text 5	heroes, mythology, folklore, family, contempt for authority, individualism	authority, fear of losing face, indirect style
Text 6	excellence, courage, cooperation, optimism, religion, history, mateship, individualism	collectivism, indirect communication style, face, hierarchy

The clusterboosting of Australian values and the clusterfucking of 'foreign' values in the highest-scoring business reflective journals play an important role in demonstrating 'intercultural competence', where the students use the constellation of Australian values as the basis for and the justification of othering

their international team mates by engaging in deficit discourses. In the following section, we will share examples where such deficit discourses are not aimed at others but the students themselves.

Deficit discourses: Negative self-talk and a focus on failure

We will now look at the low-scoring assignments analyzed in study. The following extracts from Texts 8 and 9 illustrate how the student writers evaluate Chinese and Australian values and behaviours as weaknesses and strengths. As both these extracts show, certain linguistic choices of evaluation can dominate longer stretches of text by occupying a dominant position at the beginnings or endings of texts (Hood 2010; Martin, J. R. & White 2005). In the extract from Text 8, examples of such dominating evaluations appear at the beginning of the paragraph, where 'weakness', an instance of [–judgement: capacity], repeated twice, spreads negative axiological charging over meanings associated with the student's Chinese values and behaviour, e.g. talking less and indirect and implicit Chinese team communication. On the other hand, Australian values and behaviours are evaluated as a 'strength' by the student, which is an instance of [+judgement: capacity] and is associated with working hard, performing well, being more direct and explicit, and talking more. The extract from Text 9 draws on similar oppositions where 'strength' is associated with western students through examples such as talking more, contributing more, and doing more for the team. In contrast, 'weakness' condenses examples such as talking less and humility. The quotes "[t]he cultural difference between China and Australia made a 'virtue' became a 'weakness'" [Text 8] and "our traditional attitude [humility] becomes a weakness" [Text 9] from these two extracts are particularly telling of how these students feel about the cultural expectations placed on them at an Australian university.

> [Text 8] The cultural difference between China and Australia made a '**virtue**' [+judgement: propriety] became a '**weakness**' [–judgement: capacity]. However, to perform **well** [+judgement: capacity] in a team, I have to try to convert **this weakness** [–judgement: capacity] into **strength** [+judgement: capacity]. … I can **work very hard** [+judgement: capacity] in a team although I **do not talk a lot** [–judgement: capacity]. **This** [+judgement: capacity] is a kind of integration of Chinese culture into Western culture. Team communications in Western cultures are usually **very direct** [+judgement: capacity] and **explicit** [+judgement: capacity] (Brett et al. 2006), and [team communications] in Chinese culture, they are **indirect** [–judgement: capacity] and **implicit** [–judgement: capacity]. To integrate **this** [+judgement: capacity], I would have to try to express myself **as direct as** I can.

> [Text 9] Sometimes, western countries students consider talking more as **contributing more** [+judgement: capacity] (which I **really cannot agree**

> [–judgement: capacity], with). They usually like to show how **better** [+judgement: capacity] their ideas are and **explain what** they **have done for the team** [+judgement: capacity]. As a result of less talking in the team, my contribution **will be devaluated** [–judgement: capacity] by others. Therefore, our traditional attitude [humility] [+judgement: propriety] **becomes a weakness** [–judgement: capacity] when working with a team. … Therefore, we **need to adjust our behavior to match with the whole team** [+judgement: capacity].

As illustrated by Table 3.4, identifying what the students construct as positive and negative attitudes in their reflective journals enables us to retrieve the negative axiological charging within the idea that Chinese values are weaknesses

TABLE 3.4 Reinforcing the negative evaluation of the students' Chinese values and the positive evaluation of Australian values [Texts 8 and 9]

Text 8	
recasting item	evaluated Target
weakness [–judgement: capacity]	Chinese value **+ virtue**
	I + do not talk a lot
	Team communications in Chinese culture + **indirect**
	Team communications in Chinese culture + **implicit**
	this virtue **+ weakness**
strength [+judgement: capacity]	I perform **+ well**
	work very hard
	integration of Chinese culture into Western culture + **this = work very hard**
	Team communications in Western cultures + **very direct**
	Team communications in Western cultures + **explicit**
	to integrate **+ this = direct and explicit team communications in Western cultures**
Text 9	
recasting item	evaluated Target
weakness [–judgement: capacity]	less talking in the team **+ will be devalued**
	my contribution **+ will be devalued**
	our traditional attitude [**humility**] + **becomes a weakness**
strength [+judgement: capacity]	talking more **+ contributing more**
	their = western students' ideas + **better**
	they = western students + **explain what they have done**
	we + **need to adjust our behaviour to match with the whole team**

in the students' Australian educational contexts. On the other hand, Australian values and behaviours are axiologically positively charged as they are constructed as the ideal values Chinese students feel they are expected to conform to in order to be successful students.

Similar to the positively charged constellation of Australian and negatively charged constellation of Asian values constructed in high-scoring reflective journals, we identified similar ideas in the low-scoring assignments. Low-scoring student writers also draw on Solomon & Schell's (2009: 49–50) intercultural competency framework to analyze their visible behaviours as well as their invisible values and beliefs. For example, the writer of Text 9, whose extract we show above, explains that the value of *humility*, one of their 'below-the-surface' values, influenced their behaviour during the team work discussed in their assignment. In their reflective journal, the student links the value of humility to other values such as *silence, Confucianism, conflict avoidance, harmony*, and *trust*. The extracts from Texts 8 and 9 above are particularly telling as they illustrate how cultural values that differ from Western values are evaluated as weaknesses not only by the local Australian students but also by the Asian students themselves. We illustrate the negatively charged axiological constellation of Chinese values constructed in Text 9 in Figure 3.5. By concluding that they need to adapt their behaviours and abandon their own cultural values, low-scoring student writers are clusterfucking Asian values similar to their high-scoring peers.

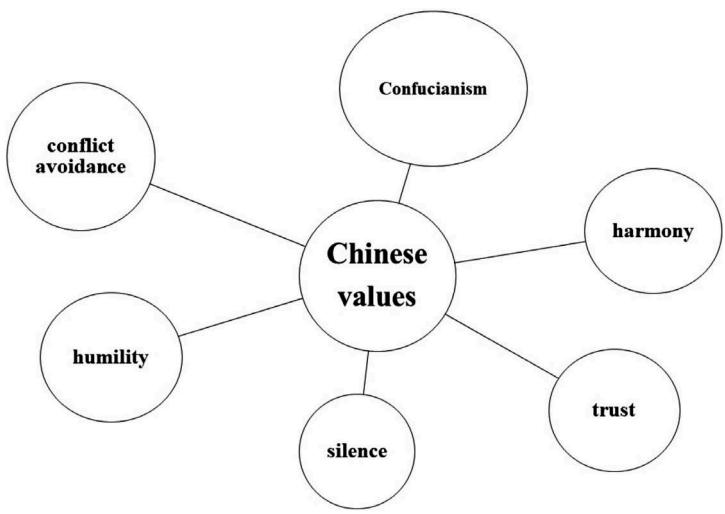

FIGURE 3.5 *Clusterfucking* Chinese values in a business reflective journal

Similar clusters of meaning were found in the other low-scoring assignments analyzed for this study. Looking at the instances of Asian values and behaviours listed in Table 3.5, we can see that most of these qualities would

TABLE 3.5 Constellations of Chinese values and behaviours in low-scoring assignments [Texts 7–13]

Text	Chinese values and behaviours: –charging
Text 7	face saving, politeness, Confucianism, Taoism, conflict avoidance, respect, dignity
Text 8	introversion, silence, compromise, listening, history, Confucianism, benevolence, wisdom, propriety, diligence
Text 9	silence, humility, Confucianism, conflict avoidance, harmony, trust
Text 10	listening, respect, face, dignity, history, Confucianism, propriety
Text 11	respect, patience, harmony, conflict avoidance, modesty, Taoism, Confucianism, trust
Text 12	respect, listening, cooperation, peace, heroes, folklore, history, guanxi

be typically considered positive characteristics irrespective of culture. Some of these can be unpacked, for example, ***respect*** can be unpacked as *someone is* ***respectful*** to make explicit the positive judgement it encodes. This reveals the positive evaluation encoded in these kinds of nominalized abstractions. By identifying these axiologically charged values, we can thus retrieve what the students construct as Chinese values in the business reflective journal. However, these students also find themselves and their cultural backgrounds and the values they grew up with devalued in Australian higher business education. As a result, by negatively evaluating these values and their behaviours in their reflective assignments, they construct negatively charged constellations of Chinese values and culture.

While the student writers of the high-scoring reflective journals were found to engage in deficit discourses by stereotyping and othering their peers, the writers of the low-scoring assignments engage in deficit discourses related to the 'self': they were found to engage in negative self-talk and focused on their failure in not being able to behave in a way that is expected in an Australian context of educational culture. From both the high-scoring assignments as well as the low-scoring and failed assignments it seems that when expecting students to acquire 'intercultural competence', the expectation is for the Asian students to conform to western culture. Perhaps then this begs the question whether it was really these students who failed their critical reflection assignments or did the University fail them? We discuss the implications of our findings and problematize the practice of assessing critical reflection in the following section.

It's critical: Problematizing the assessment of critical reflection

When we first commenced this research into reflective writing in 2012, we were concerned about the small number of students being awarded a high grade and we became interested in uncovering the expectations of 'success', in

other words, the 'basis of achievement' (Maton 2014). We collected and analyzed high-scoring assignments from the fields of social work and business and conducted interdisciplinary LCT-SFL analyses in order to understand what knowledge practices and linguistic resources are at stake in successful demonstrations of critical thinking. From a theoretical perspective, we advanced research on the knowledge practices of critical thinking: high-scoring assignments demonstrate the capacity to create *semantic waves* (Maton 2013) that weave together context-dependent and context-independent forms of knowledge, such as empirical cases and abstract concepts, transforming them into generalizable practices for future contexts (Szenes et al. 2015). Our detailed linguistic analyses (see e.g. Tilakaratna & Szenes 2017; Szenes & Tilakaratna 2021) have shown that, instead of engaging in 'creative play' (Crème 2008), successful students across disciplines deploy structured and formulaic use of linguistics resources: high-scoring texts conform to a uniform genre structure and draw on similar recurring linguistic resources for demonstrating critical reflection. We also found that high-scoring reflective assignments demonstrate mastery of constructing axiologically charged clusters of meaning that align with rather than 'challenge' or 'question' the disciplinary values of their academic disciplines (Tilakaratna & Szenes 2020).

From a pedagogical perspective, our research could contribute to the explicit teaching of the highly complex resources that empower students to produce successful critical reflection assignments. This means deconstructing the genre structure of successful exemplar texts, modelling how to skilfully use the 'right' kind of linguistic resources for linking subjective experiences to theoretical frameworks, and exposing students to the 'cultivated gaze' of their academic disciplines, i.e. the 'prolonged exposure' (Maton, 2014: 95) to professional practice. Previously we (Tilakaratna & Szenes 2020: 587) argued that tertiary "students need to learn, through the use of clusters of axiological meanings, the axiological cosmologies underlying their disciplines to be able to demonstrate their capacity for critical self-reflection". However, after identifying some ethical concerns of the practice of assessing critical reflection assignments, we need to ask some critical questions ourselves. Did we simply identify the parameters of 'success' or did we also contribute to reinforcing the status quo, the dominant approach, the dominant hegemony?

After focusing on the generic structure and linguistic resources of high-achieving reflective texts, we started paying attention to language and meaning we considered problematic in both high- and low-scoring assignments. In line with previous research discussing ethical concerns, in this chapter we highlighted some examples we consider problematic examples of demonstrating 'successful' critical reflection. By drawing on the concepts of clusters and constellations from LCT, we unpacked the axiological clusters that form positively charged constellations of Australian values and negatively charged constellations of Chinese values in both high- and low-achieving students' reflective writing assignments in Business Studies. Specifically, the high-scoring students explore

the elements of Australian core culture that influenced their upbringing in general, and conclude that their negative attitude and behaviour towards their Asian peers in a multinational teamwork exercise stem from those values. By producing such axiological constellations in their reflective writing, the high-achieving business students demonstrated their alignment with western values and a rejection of Asian values.

Our analyses of the low-scoring business reflective journals show some similarities. The low-scoring students also aligned themselves with the theoretical framework of 'intercultural competency', which is considered a skill highly valued in the context of business higher education, and crucial for becoming a business practitioner capable of working in a multinational environment. By comparing themselves to their Australian peers, the Chinese students focus almost exclusively on negative self-judgement and their 'failure' of being capable partners in a multinational team exercise. They also feel devalued in the Australian business higher education system because of their cultural heritage, which they construct as a hindrance to their success. Rather than 'challenging the status quo' as claimed in the literature, these students aim to conform to the Australian educational system and the values of their peers and align themselves with the framework of 'intercultural competence' as taught in their course. This could also be seen as contributing to deficit discourses, an ethical concern associated with assessing reflective assignments (see e.g. Boud & Walker 1998; Ghaye 2007; Morley 2007; Marsh 2014), and limiting students' agency rather than enabling transformative learning. In sum, our analyses of both the high- and the low-scoring business reflective journals show that demonstrations of success of critical reflection involve *clusterboosting* Australian values as opposed to *clusterfucking* Chinese values, which results in the construction of deficit discourses of stereotyping and othering as well as negative self-talk and a focus on 'failure' in the student assignments. This is consistent with the results of previous research that identified a high level of negativity in western reflective writing (see e.g. Ghaye 2007; O'Connell & Dyment 2011).

Based on these results, an important question needs to be raised. If these students justify their prejudices and negative attitudes by citing their internalized Australian values as the reason, does this count as 'evidence' of acquiring the skills of intercultural competence and is there 'criticality' evident in such 'reflection'? Research on critical reflection assignments states that these tasks allow students to 'transform' their understandings of disciplinarity and practice, 'challenge' the status quo and 'emancipate' themselves from institutionalized power. How should we as academics critically reflect on the requirements of reflective assignments so that these tasks enable rather than constrain students' learning to become self-reflective practitioners? How should we construct these assignments so that they achieve more than stereotyping, negative self-judgement and a focus on failure? How can we match our pedagogy to our best intentions to improve our students' capacity for ethical reasoning? What if we have uncovered that

the 'rules of the game' – instead of deconstructing existing hierarchies of power – only serve to reinforce taken for granted 'regimes of truth' (e.g. Foucault 1980), i.e. in the context of this Australian business unit, historic assimilationist expectations? What if – instead of being empowered – students from non-mainstream backgrounds feel disempowered by the reflection process?

It is also worth pointing out that the lower-scoring assignments received mostly Fails and Passes, with a small number of Credits. It is concerning that each of these texts were framed around Chinese values, with Confucianism cited in five out of the six lowest-scoring texts we analyzed. The disconnect between intentions and university mission statements and the experience recounted in the business reflective journals is apparent. Ghaye (2007: 159) points out that "an important 'intention' of reflective practice is to improve what we do". How does devaluing students' cultural background and their feeling disempowered improve student learning and post-graduation professional behaviour?

Previous research also asked whether journal writing should even be assessed and suggests that such writing should not be forced upon students (Brooman & Darwent 2012). Indeed, several studies have highlighted students' negative attitude towards reflective assignments in general. These were often evaluated as 'tedious and unnecessary', 'busy work' and 'just a nuisance', 'superficial' and not suited to an education setting (see e.g. Cisero 2006; Mills 2008; McGarr & Moody 2010). Among other reasons students cited unclear assessment criteria and instructions, the lack of explicit pedagogy, and their perception that reflective tasks have little to no relevance to the kind of 'traditional' learning they expected to take place at university (O'Connell and Dyment 2011). In their evaluation of critical reflection assignments, students also shared their resentment about the requirement to disclose personal and private matters, which some interpreted as being forced to write reflective tasks. The extract by Sinclair Penwarden (2006: 12) is particularly telling of such perceived coercion:

> I remember becoming nauseated when entering the room of a dying patient and being transported back to the age of 11 when I had experienced the same smell in my father's room at the hospice.... My husband and best friend are the only two people I wish to confide in. My feelings are private – yet I am expected to frame them in prose and submit them to my university. I don't know my lecturers or personal tutor intimately. What right has anyone to ask for such personal information, let alone ask that it be graded by a faceless lecturer? As nurses we respect patient's rights not to disclose their personal feelings. Yet no such right is afforded to students. I have had reflections returned with requests for more details about my feelings. I comply but deeply resent being asked to do so.

Concluding remarks

In this chapter we set out to critically examine the appropriateness of assessing critical reflection assignments which often ask students to divulge deeply personal and ethically sensitive information. Drawing on the LCT concepts of clusters and constellations, which explore how certain kinds of meanings are grouped together and reveal belief systems and ideologies, we identified positively charged constellations of Australian values and negatively charged constellations of Chinese values in both high- and low-scoring business reflective journals. Limitations of our study include the small size of our dataset from a single unit of study in a single academic discipline. Although our findings cannot be generalized, our findings resonate with previous research on the ethical dimension of assessing critical reflection. This includes a western bias, i.e. the application of taken-for-granted western understandings of teaching and learning to Asian students, which results in deficit models of assessing Asian students' critical thinking skills (e.g. Fook & Askeland 2007; Tilakaratna et al. 2019). To date, however, very little research exists on decolonializing critical reflection from western assumptions and biases.

Existing research focuses on, for example, decolonizing critical social work from neoliberalism (Morley & Macfarlane 2014), decolonizing Eurocentric critical reflection research methodology by including Indigenous perspectives (Baikie 2020), and empowering students to produce reflective writing that 'does not fit typical patterns' by intentionally enacting an inclusive pedagogy (Martin, J. L. & Walsh-Marr, this volume). Our research has shown that deficit discourses around stereotypes and othering as well as negative self-talk and individualistic ideologies were constructed in the reflective journals. The framework of LCT was valuable for revealing that both Australian and Asian students engage in critical reflection through individualistic rather than cooperative ways, which has enabled us to shed light on the ethical concerns associated with assessing reflective writing in the context of Australian business higher education. We conclude with the recommendation that tertiary institutions need to move beyond simply uncovering the rules of the game, making expectations visible, and soliciting confessions through critical reflection (cf. Atkinson 2012; Fejes & Nicoll 2015), and work towards intentionally decolonizing the practices of critical reflection and its assessment in order to ensure that it becomes an ethical, equitable and empowering activity for all students.

Notes

1 Following the labelling conventions presented in Martin, J. R. (2013), the names of language systems are written as small caps.
2 Attitudinal meanings can be realized through a wide range of grammatical structures, vocabulary choices and lexical metaphors.
3 The capitalized label 'Target' indicates its use as a function label. This should not be confused with the LCT concept of *target* from the Autonomy dimension (Maton 2018).

4 Since in the high-scoring reflective assignments analyzed for this study the Appraiser is always the student writer, a separate column demonstrating the *source* of attitudinal meanings will not be added to the tables illustrating the attitudinal analyses.
5 In SFL the linguistic choices available in a language system that users make selections from are indicated by square brackets (see Martin, J. R. 2013 for a full description).

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4

CRITICAL REFLECTION AND CRITICAL SOCIAL WORK

Describing disciplinary values and knowledge

Sharon Aris

Introduction

Critical reflection is a much-championed academic practice across higher education that is often presented as a university-wide graduate capability (Bosanquet 2011). It is also widely recognized as a professional skill, including in social work where it is included within the practice standards of the profession (c.f. Coulshed & Orme 2012; Australian Association of Social Workers 2013). Empirical studies, focussed on how students learn to be critically reflective thinkers, have demonstrated that comprehending the complex processes involved in critical reflection, is a challenge for most (Ross 2014; Newcomb et al. 2018), including social work students (Whitaker & Reimer 2017). In addition, research into its professional and pedagogic application has critiqued this as piecemeal and lacking integration even within disciplines (Fook et al. 2016), including social work (Fook et al. 2006).

This chapter aims to make explicit the principles underlying the theory and practice of critical reflection as outlined in social work textbooks, including how these vary according to the social work tradition being drawn upon. It begins with an outline of the academic fields that intersect in critical reflection in social work, including two competing paradigms within this – a conventional 'individual-liberalist' paradigm and a 'critical social work' paradigm. It then outlines the key theories, stances, processes and practices emphasized as constituting critical reflection. The recontextualization of this knowledge for students in social work textbooks is then described and analyzed through a close examination of how critical reflection is described in nine social work textbooks used in Australian social work courses. This analysis is facilitated using concepts from the Specialization dimension of Legitimation Code Theory (LCT). This enables an explicit description and analysis of the textbook principles that underlie

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critical reflection, including key theories to be applied, dispositions to be fostered, practice knowledge to be developed, and particularly in critical social work, actions to be aimed for. It reveals that critical reflection as outlined to students requires them to develop both insight into particular social and practice theories, and also an 'unsettled' disposition towards social structures, which is ultimately purposed toward shifting social workers' perceptions of their capacity to act.

Reviewing the literature: Critical reflection in social work

While there is no official definition of critical reflection in social work, the most widely cited theorist is Jan Fook, who with her colleagues has defined critical reflection as "the process by which adults identify the assumptions governing their actions, locate the historical and cultural origins of the assumptions, question the meaning of the assumptions, and develop alternative ways of acting" (Fook et al. 2006: 12). In social work education critical reflection is central to students' preparation for practice, providing a bridge between theories learned in the classroom and actions of practitioners in the field (Argyis & Schön 1974; Fook & Gardner 2006; Noble et al. 2016). For social workers working within the critical tradition, this also includes working towards a social justice agenda (Briskman et al. 2009; Noble et al. 2016; Hicks & Costello 2023). Discipline-oriented scholarship on critical reflection in social work outlines this as a professional practice that is both a theory and a process (Fook & Gardner 2007; Pockett et al. 2011). But it has also been critiqued as being notionally imprecise (Brookfield 2009; Gardner 2019) and lacking a theoretical (Ixer 1999) and empirical basis for practice (Fook et al. 2006).

Scholarship on teaching and learning critical reflection in social work has focussed on the challenges of teaching this practice and students' readiness for learning. Teaching challenges include selecting between differing models for critical reflection (Carroll 2010; Hickson 2011; Noble et al. 2016), and a lack of clarity about how to effectively integrate its practice into social work education (Gardner 2019). Integrating 'criticality' into critical reflection (Theobald et al. 2017) has been complicated by differing interpretations of what the 'critical' in 'critical reflection' encompasses, with meanings variously including 'analytic, openness, critique or using critical social theory' (Theobald et al. 2017). The latter also intersects with other criticalities and critical practices in social work including critical theory, reflexivity, and critical social work (Noble et al. 2016; Webb 2019). Scholarship on student's 'readiness' or 'preparedness' to learn critical reflection has focused on the effects of students' differing degrees of personal or emotional maturity (Mezirow & Associates 2000: 11); emotional intelligence, personality, or unresolved past traumatic experiences (Gardner 2019; Yip 2006); personal histories (Fook & Gardner 2007); gender or cultural background (Sung & Leung 2006); capacity to see beyond the specifics of a situation (Giles & Pockett 2012); and degree of professional experience from

which to draw from in order to engage in the process (Redmond 2006). Such conceptions situate the learning challenges in learners themselves.

Learning materials aimed at supporting students' development of critical reflection skills often generalize both core steps in the process and the support of students from broad disciplinary areas. For instance, Aveyard, Sharp & Woolliams (2011) outline six questions for critical thinking in a book aimed at students in health and social care. But such breadth can obscure discipline-specific knowledge practices and concerns (Ryan 2013; Morley et al. 2020). As Tilakaratna & Szenes (2020) have demonstrated, there are discipline-specific clusters of meanings students are expected to demonstrate in critically reflective assessment in social work. This suggests generalized approaches to critical reflection may not be effective for students who lack the cultivated gaze of their discipline. Greater attention needs to be paid to the 'basis of selection' that defines critical reflection within disciplines, as it is presented to students. To support the academic success of social work students, therefore, a key project is to make the knowledge structures and practices of critical reflection in social work visible.

The context of critical reflection and critical traditions in social work

Social work is replete with criticality. In addition to critical reflection there is critical theory, critical practice, critical thinking, critical analysis and critical social work. These intersect with other critical practices such as reflexivity and anti-oppressive practice (Fook et al. 2006; Askeland & Fook 2009: 289; Brooksfield 2009). To unpick these threads, this section outlines a context for critical reflection in social work including as it is practiced in the tradition of critical social work.

Social work is both a discipline and a practice with localized interpretations (Askeland & Fook 2009). This is illustrated in how it is defined by the International Federation of Social Workers (2014):

> Social work is a practice-based profession and an academic discipline that promotes social change and development, social cohesion, and the empowerment and liberation of people. Principles of social justice, human rights, collective responsibility and respect for diversities are central to social work. Underpinned by theories of social work, social sciences, humanities and indigenous knowledge, social work engages people and structures to address life challenges and enhance wellbeing. The above definition may be amplified at national and/or regional levels.

That is, as a profession and an academic discipline social work draws from a varied multi-disciplinary theoretical base to inform a broad range of individual and collective practices that also has distinct regional variation.

Mapping has demonstrated social work has more than 250 theories in use (Fox & Horder 2017: 180), drawing from philosophy, the biological sciences, sociology, cultural studies, psychological sciences, life sciences, political science and economics (Chenoweth & McAuliffe 2017; Fox & Horder 2017; Watts & Hodgson 2019). In social work textbooks these are frequently expressed via long lists of theories that inform differing practice elements. A key effect is that a compromise is invariably created between engagement with the breadth of practice, versus depth of theory, with most texts directing students toward direct application of specific aspects of known theories and practices (Fox & Horder 2017: 178) rather than the underlying principles for selection.

Historically and contemporarily, social work is also a contested project with two key approaches broadly characterized as 'conventional social work' and 'critical social work' (Webb 2019). As Table 4.1 illustrates, conventional social work draws from liberal-individualism, placing greatest emphasis on individual client support and favouring what has been characterized as a 'techno-rationalist' approach to practice. Critical social work, emerging particularly from Canada and Australia (Ablett & Morley 2016), draws from intellectual movements focused on critiquing economic power and political domination, feminism, race theory, postmodernism and Marxist criticism (Allan 2009; Webb 2019: xxxi). It places a structural focus on the social and political context in people's lives (Briskman et al. 2009: 4), emphasizing a commitment to personal and structural change (Pease & Nipperess 2016). Central to critical social work are notions that social work practice should be unsettled, questioning and conducted both 'outside and against' and 'within and against' the dominant system (Mullaly 2010), and committed to the progressive values of justice, equality and emancipation (Webb 2019). In this context, critical reflection is characterized as "a central and defining concept for critical social work" (Webb 2019: xxxvii) and a key practice for maintaining this perpetual questioning and critique.

TABLE 4.1 Conventional and critical social work

Knowledge bases & practices in conventional social work	**Knowledge bases & practices in critical social work**
Positivist	Modernist theories – human rights,
Scientific approach	Marxism, feminism
Techno-rational	Postmodern, post structural, decon-
liberal-individualism	structive theories
Individual-oriented practices:	Critical theories of the Frankfurt school
Case management	Intersectional theories – feminisms,
Psychological, psychoanalytic	race-theory, ability & ableism
Strengths-based practice	Socialist-collectivist practices:
Evidence-based practice	Anti-oppressive practice
	Anti-discriminatory practice
	Social & institutional change

(compiled from Allan 2009; Brookfield 2009; Briskmann et al. 2009; Ablett & Morley 2016; Pease & Nipperess 2016; Morley et al. 2019; Webb 2019)

Critically reflective practice in social work is commonly presented as tracing from Dewey's (1933) "active, persistent and careful consideration" of belief in the face of knowledge (in Fook et al. 2006: 9) in order to gain new understandings (Boud et al. 1985), with the purpose of shifting social workers' self-perception of their own positionality and role (Boyd & Fales 1983: 100; Webb 2019: xxxvii). Other frequent referents include Socrates, Schön (Argyris & Schön 1974; Schön 1983, 1987); Foucault, Habermas, Freire, Brookfield, Kely, Polanyi and Boud (in Redmond 2004; Fook et al. 2006). In critical social work, criticality becomes imbued in practice through analysis (Tripp 1993: 24–25), with a particular focus on uncovering and challenging the "power dynamics that frame both hegemonic assumptions and practice" (Brookfield 2009: 293). There is an accompanying expectation this will result in social action towards social justice (Brookfield 2005; Payne 2009).

These factors – social work tradition, the multiplicity of theoretical referents and implied analytic practices – have significance for the successful enactment of the practice of critical reflection in social work education. To successfully enact critical reflection students are expected to draw upon the 'correct' range of theories and stances, and cite the 'correct' critical traditions which then can be applied in a reflexive and evaluative process to their own reactions to specific instances they have experienced in field practice (Noble et al. 2016). However, social work textbooks have been critiqued for either generating long-lists of theories without explaining these in depth or providing theoretical detail without explaining the basis of selection (Fox & Horder 2017; Watts 2018). This chapter analyzes critical reflection as it is presented in social work textbooks in order to uncover the basis of selection of theories and stances in critical reflection that students are expected to enact.

Object and method of analysis

To understand the knowledge practices of critical reflection that social work students are expected to demonstrate, nine social work textbooks and instructional texts were analyzed to describe the key content and themes outlined as important for critical reflection (see Table 4.2). Textbooks represent one of the main opportunities for articulating the cumulative knowledge in a field and are understood as a place the specific knowledges practices of social work are selected, interpreted and produced as specific pedagogic discourses (Ephross & Reisch 1982; Bernstein 1990; Tompkins et al. 2006). They are generally regarded by students as representing authoritative sources of expert knowledge (Baretti 2016) and are frequently foundational sources for educators in critical course planning (Kramer et al. 2003).

Analysing a group of textbooks presents an opportunity to describe and analyze what is most settled in the social work educational field as to the key principles and practices of critical reflection students must learn. As critical reflection is enacted across social work curricula and tested through

TABLE 4.2 Textbooks and instructional texts analyzed

Chenoweth, Lesley & Donna McAuliffe. 2017. *The road to social work and human services practice*, 5th edn. Melbourne: Cengage.
Fook, Jan & Fiona Gardner. 2007. *Practicing critical reflection: A resource handbook*. Maidenhead, UK & New York: Open University Press.
Gardner, Fiona. 2019. Embedding critical reflection across the curriculum. In Morley, Christine, Phillip Ablett & Selma Macfarlane (eds.), *Engaging with social work: A critical introduction*, 2nd edn. 462–472. Cambridge: Cambridge University Press.
Ingram, Richard, Jane Fenton, Ann Hodson & Divya Jindal-Snape. 2014. *Reflective social work practice*. Houndmills, UK: Palgrave Macmillan.
Morley, Christine. 2009. Using critical reflection to improve feminist practice. In June Allan, Linda Briskman & Bob Peace (eds.), *Critical social work: Theories and practices for a socially just world*, 2nd edn. 145–159. Sydney: Allen & Unwin.
Morley, Christine. 2016. Critical reflection and critical social work. In Bob Pease, Sophie Goldingay, Norah Hosken & Sharlene Nipperess (eds.), *Doing critical social work: Transformative practices for social justice*, 25–38. London: Routledge.
Noble, Carolyn, Mel Gray & Lou Johnston. 2016. *Critical supervision for the human services: A social model to promote learning and value-based practice*. London: Jessica Kingsley Publishers.
Pockett, Roselie, Linsey Napier & Roslyn Giles. 2011. Critical reflection for practice. In Agi O'Hara, & Rosalie Pockett (eds.), *Skills for human service practice: Working with individuals, groups and communities*, 2nd edn. 9–19. South Melbourne: Oxford University Press.
Redmond, B. Bairbre. 2006. Starting as we mean to go on: Introducing beginning social work students to reflective practice. In Sue White, Jan Fook & Fiona Gardner (eds.), *Critical reflection in health and social care*, 213–227. Maidenhead, UK: Open University Press.

assessment tools including reflective essays, role plays, field diaries, and field work reports and portfolios, texts were selected to reflect this practice range. These include textbooks focused on instructing students in reflective practice, general introductory social work textbooks, and textbooks aimed at educators with passages on reflective practice.

In textbooks critical reflection is typically outlined in a delineated section or chapter which introduces it as a practice skill which is then exemplified through case studies and/or explicated process models for reflection. It may also be referenced through later chapters which exemplify it through further case studies or by drawing students' attention to occasions it would be appropriate to use. This study analyzes this at a meso level where clusters of related skills and understandings are described (Frey 2018). This was undertaken using a content analysis of key knowledges, dispositions and processes of critical reflection in the selected texts. This was coded through an inductive open coding method, with thematic groups clustered together and described. This was then deductively coded using the LCT relations of *epistemic relations* and *social relations* (see below). The selected themes, passages, and quotes outlined in Findings are derived directly from social work textbooks, with the

textbooks in which a particular element is emphasized listed as references. The quotations reported are referenced according to their original sources.

Analytic forms: Specialization

This chapter uses concepts from the Specialization dimension of LCT to describe and analyze the principles that underlie critical reflection in social work textbooks. LCT is a sociological framework for researching forms of social practice, including academic and professional practices (Maton 2014, 2016; Maton & Chen 2020). The framework presents several sets of concepts or 'dimensions'. The Specialization dimension explores how knowledge and knowers are articulated within practices. It is centred on the concepts of epistemic relations and social relations.

Specialization begins from the simple notion that practices are about or oriented towards something and by someone. This points to an analytical distinction between: *epistemic relations* between practices and that part of the world towards which they are oriented; and *social relations* between practices and whomever is enacting those practices. In terms of knowledge claims, these relations are realized as: *epistemic relations* between knowledge and its proclaimed objects of study; and *social relations* between knowledge and its authors or subjects. These relations highlight questions of *what* can be legitimately described as knowledge and *who* can claim to be a legitimate knower. Knowledge claims may place more (+) or less (–) emphasis on epistemic relations and on social relations as the basis of legitimacy. In this study epistemic relations are recognized as the citation of theories, theoretical constructions, and descriptions of models and processes. Social relations are recognized as work aimed at shaping dispositions, judgments, values and a creative imagination.

As Figure 4.1 illustrates, when brought together the strengths of epistemic relations and social relations generate *specialization codes* (ER+/–, SR+/–) that are mapped on a Cartesian plane. This generates four principal codes: *knowledge codes* (ER+, SR–), where emphasis is placed on knowledge practices, but dispositions are relatively unimportant; *knower codes* (ER–, SR+), where knowledges are relatively unimportant but knower practices including dispositions and values are important; *élite codes* (ER+, SR+), where both knowledge practices and knower practices are important; and *relativist codes* (ER–, SR–), where neither is important (Maton 2016: 243).

Critically reflective elements in the social work textbooks analyzed include theoretical references and stances, process models and examples, attitudes and values. The findings below outline and analyze these depictions, first in relation to forms of critical knowledge including critical theories and processes. The degree of emphasis on this knowledge is conceptualized as strengths of epistemic relations. Then, the degree of emphasis on reflective forms of knowing, embodied as reflective dispositions and values, are conceptualized as strengths of social relations. These are brought together to describe the

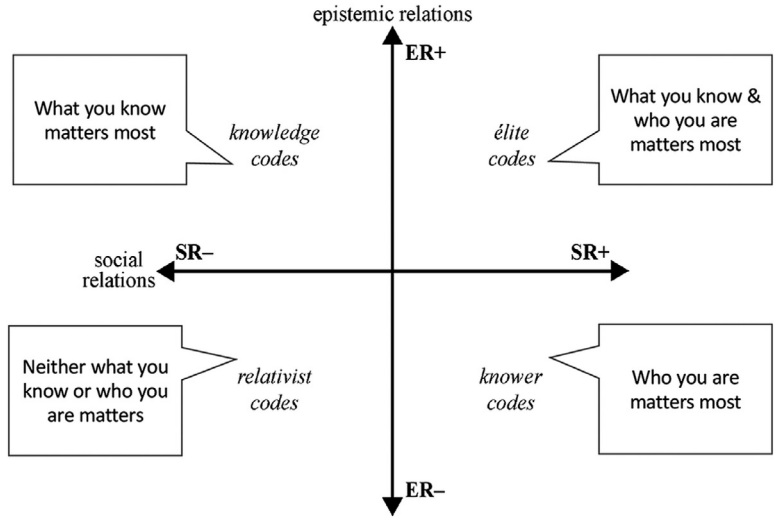

FIGURE 4.1 Specialization codes
Source: Adapted from Maton (2014: 30)

specialization code revealed. Then the relationship between these forms is described and analyzed by examining how knowledge practices are put to work in the critical incident model operationalizing embodied practices in the specialization code.

Findings

Critical knowledges: Theories and processes in critical reflection

Theory and theorizations of critical reflection is highly visible in social work textbooks. This section describes the different forms these knowledges take, conceptualizing these as stronger epistemic relations (ER+). Four knowledge forms are described: theories to establish an intellectual basis for critical reflection; process methods for describing and reflecting on events; critical reflection as applied theory; the outcome of critical reflection as new knowledge.

Social work textbooks mostly introduced critical reflection via an outline of its theoretical foundations, citing lists of historic and contemporary theories or theorists who have contributed to the development of this as a practice. Illustrative examples of these theories can be found in the section 'The Context of Critical Reflection' earlier in this chapter, where the key theories and theorists listed are all derived from the textbooks analyzed in this study. As well as individuals, theorists and/or theories may also be condensed into groups and presented as paradigms such as 'reflection-in-action' and 'reflection-on-action' (from Mead, Dewey, Schön) and 'reflection as social process' (from Kant & Kemmis);

'reflection as dialogue' (from Habermas and Freire). Listing such forms in textbooks emphasizes the intellectual tradition of critical reflection and its legitimacy as a practice as well as signposting its key purpose as generating new understandings. These can be recognized as having stronger epistemic relations (ER+).

In order for students to generate new understandings through critical reflection, textbooks provide process models to guide the enactment of this. The most widely cited is the reflective framework developed by Jan Fook, known as the critical incident method or critical incident analysis (Fook et al. 2006; Fook & Gardner 2007; Ingram et al. 2014; Gardner 2019). Most texts outline step by step instructions and examples of this process whereby a professional incident provides a case study which is then described and elaborated through a thick description of the historic, social and institutional contexts that surround it such as socioeconomic status, ethnicity and culture, sexuality, religion, ability or disability of both service user and social worker (Fook & Gardner 2007). In textbooks emphasizing a critical social work approach, emphasis is also placed on describing the power relations between worker and service user (Morley 2016; Gardner 2019). This highly structured process method of description and systematic analysis for critical reflection can also be recognized as demonstrating stronger epistemic relations (ER+).

To distinguish 'critical reflection' from 'reflection', texts direct students to apply theory to interrogate cases (Morley 2016: 27). Two clusters of theories are most commonly referenced – 'modernist', and 'post structuralist' or 'postmodernist' theories – with each selected for a particular analytic lens (Fook & Gardner 2007; Pockett et al. 2012). As outlined in Table 4.1, modernist theories include 'grand narratives' like human rights, class exploitation and feminism which can be applied to understand individual and social/structural power relations and oppressions within a case. Postmodern and/or post structural theories are applied to deconstruct and challenge assumptions of the situation made by the social worker and to emphasize the partiality of truth claims, different individual standpoints, constructions, discourses and assumptions (Fook & Gardner 2007; Fook 2012; Morley 2016; Noble et al. 2016; Gardner 2019).

Selecting the correct theoretical stances is particularly important in textbooks focussed on critical social work. For instance, Morley (2016: 27–30) describes how reflection without the right critical theory is "inadequate for critical social work because if our stated theory is conservative, reflection will only serve to reinforce establishment practice". Attention is drawn as much toward rejecting the 'wrong knowledges' as to selecting the right theories of power and social transformation (Fook & Gardner 2007; Ingram et al. 2014; Morley 2016; Gardner 2019). Theories focussed on individual deficit or 'blaming the victim', 'positivistic, scientific or techno-rational' knowledges, atomized or highly specialized knowledges are rejected (Fook & Gardner 2007: 25), as are descriptions decontextualized from actual practice (Morley 2016: 28). Thus, a key basis for selection for students practicing critical reflection in critical social work is knowledge of the legitimate theories to be

applied to case examples. This can be recognized as demonstrating stronger epistemic relations (ER+).

Finally, textbooks emphasize that a key outcome of the process of critical reflection is the creation of new possibilities for practice through a process of deconstruction and then reconstruction of a case where new practitioner actions are imagined (Morley 2016; Noble et al. 2016). For instance, in an extended case study Morley (2016: 147–158) deconstructs the feminist thinking she brought to a critical case involving a young victim of sexual assault she was supporting in making a police report. In this she critiques her own binary reasoning that led her to oppositional thinking when faced with a demanding detective, and through a deconstructive and reconstructive process imagines other responses she could have enacted, including creating alliances with other professionals she had previously constructed as antagonists.

In summary, critical reflection in social work textbooks can be recognized as including a series of elements that have stronger epistemic relations. These include categories of theoretical and process knowledges which serve to legitimize the practice of critical reflection, process models for undertaking critical reflection, critical lenses to analyze critical incidents and the development of new practice knowledges and social action. These knowledges are particularly important for establishing the 'criticality' in critical reflection. However, understanding the 'reflective' aspect of critical reflection requires an examination of embodied dispositions and values of this practice, and this is best examined using social relations.

Reflective embodiments: Dispositions and values in critical reflection

When outlining the reflective aspects of critical reflection, social work textbooks place great emphasis on an examination of the self in order to change one's own perspectives of a situation and, through this, create new understandings that lead to new actions and practices. To this end, texts promote certain stances towards self-examination including: a critical unsettling of self and one's assumptions about power and practice; a willingness to apply a critical deconstructive and reconstructive approach to a critical case; and reinforcement of a stance towards action for emancipatory social change. This section describes these forms, analysing them as SR+.

A key aspect of critical reflection emphasized in the social work textbooks is 'unsettling', a process whereby the social worker's hidden assumptions of both the client's and their own work contexts are surfaced and challenged in order to imagine new possibilities (Schön 1987; Fook & Gardner 2007: 25; Pockett et al. 2011; Noble et al. 2016). This is acknowledged as an emotional process (Pockett et al. 2011; Noble et al. 2016; Gardner 2019) that is discomforting (Amsler 2011 in Gardner 2019) whereby the social worker must be willing to forgo certainty (Noble et al. 2016). Texts thus emphasize the necessity of developing the 'emotional maturity' to be able to engage in critical reflection (Mezirow 2000).

Associated with this is reflexivity, the interrogative practice in which social workers engage in a ongoing process of self-reflection. This includes reflection on how one has been shaped by one's social history and context (Ingram et al. 2021) and one's effects on others particularly in the context of a work role (Gardner 2019). In a critical social work context, analysing and challenging dominant paradigms and the effect of these on one's own world views (Morley 2016). In this, self-questioning is encouraged including through the provision of question prompts. For instance, Ingram et al. (2019: 30) provide a list of questions for reflexivity that include:

> How did I influence what happened?
> Why did I behave in that way?
> Why might I have felt the way I did during the situation, and now, when reflecting on it?
> How has who I am affected my view of what happened, my values, opportunities and life choices, and subsequently my reflection?
> What beliefs or ways of challenging my assumptions will allow me to look at this from others' perspectives?

These key elements of reflection – unsettling, surfacing hidden assumptions, and reflexivity – reveal both a value-set and disposition towards practice that can be recognized in Specialization (Maton 2014, 2016) as demonstrating stronger social relations (SR+). That is, critical reflection in social work includes the development of particular crucial values and dispositions.

Bringing these together, descriptions of critical reflection in social work textbooks can thus be described as demonstrating both stronger epistemic relations (ER+) and stronger social relations (SR+), establishing critical reflection as having an *élite code* (ER+, SR+) (see Figure 4.2). That is, what is legitimized in textbooks as important in critical reflection is both possessing the right specialist theoretical and technique-based knowledges and developing the right reflective dispositions and values.

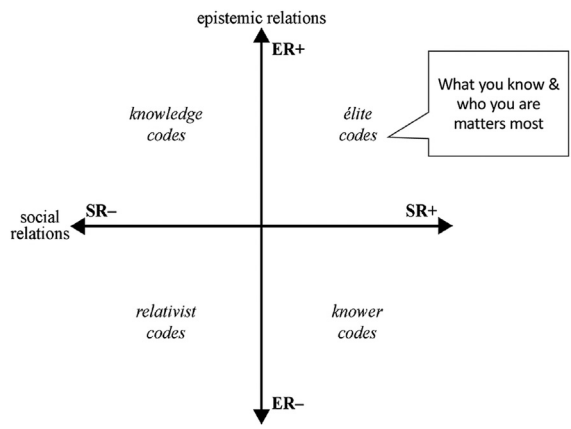

FIGURE 4.2 Critical reflection in social work as an élite code

But while this *élite* code indicates the importance of knowing key theories as well as demonstrating particular values and dispositions, with over 250 social work theories in use (Fox & Horder 2017), students still require insight as to the basis for selection of specific theories for use in critical reflection. This raises the question as to how students are directed to understand how these knowledge forms work together to enact critical reflection in practice, what is the basis for selecting which element, and what form of knowledge is to be used when?

Critical reflection in critical social work: Theory in service of practice

Examining how the critical incident model is outlined in textbooks exemplifies how elements with ER+ and SR+ are brought together in critical reflection, as illustrated in Figure 4.3. The critical incident model is promoted as bridging the gap between assumptions social workers may make about a situation, including of their own possibilities for action and the actual range of possibilities available to them (Fook & Gardner 2007: 24). Ingram et al. (2014: 20–21) elaborate this process as requiring:

> not only the ability to be critically analytical of an incident and the emotions of the main actors; the social worker also needs to be able to draw upon an ability to understand different perspectives and value them, alongside a readiness to deconstruct and challenge dominant views and inherent power dynamics.

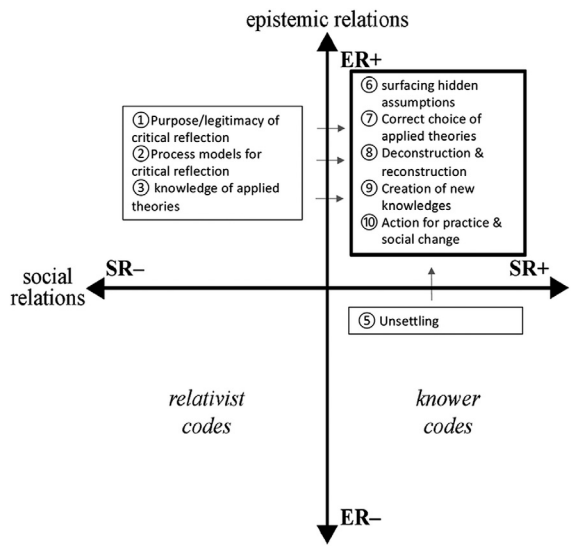

FIGURE 4.3 Theory in service of practice

Here, the in processes of the critical incident model (2) in Figure 4.3 (recognized earlier as ER+) are both knowledge applications of theories to a situation (3) including critical analysis (1) but also knower elements like changing worker perceptions of the situation (5) (SR+) to promote reconceptualized worker thinking (8). In this way some practices with ER+ can be observed being put to purposes that build qualities that have SR+.

Likewise in order to perceive the differing perspectives of those involved and imagine new possibilities of practice, textbooks emphasize the importance of using theory to aid reflection. For instance, Fook (2002) outlines how applying post-structuralist critiques of modernism (7) to a critical incident is useful for forewarning the social worker to not erroneously assume life experience can be fully attributed to social structure (6). That is, theoretical critique is applied to unsettle (5) and shape the social worker's interpretation of their and their client's own positionality and the possible range of actions within this (9). Thus, while textbooks may foreground techniques with lists of theories (ER+), the purpose is not to invite students into theoretical knowledge-building, which would see the practice remain ER+. Rather, students are being invited to apply theory in order to develop their reflective and critical dispositions (SR+). In this way, critical reflection in critical social work textbooks can be understood as offering theory in service of reflective practice.

Likewise, practices recognisable as SR+ are also informed by elements with ER+ particularly in texts that emphasize critical social work. For instance, some textbooks caution that self-reflecting on power relations only in an individualized manner can lead students astray into denying their own power in order to appear to work as equals alongside their clients (Hicks & Costello, 2023) rather than focussing on the end goal of changing one's practice. "The identification of *responsibility* within a critical framework is never about individualizing structural problems or blaming the victim, but aims to highlight one's *ability to respond*" (10) (Morley 2016: 30 emphasis in original). Even dominant practice models may be challenged on this basis. For instance, Morley (2016: 29) presents Taylor's (2013) critique of Fook & Gardner's (2007) approach, emphasizing an alternative approach which focuses on "analysing and changing the social relations of practice rather than the thoughts and feelings of the individual practitioner" (10). That is, emphasizing a process model that keeps the goal of future action to change professional practices and social structures to the fore. It can thus be understood that critical reflection, as exemplified through its application in the critical incident model in textbooks, never settles in the space of theory or reflection alone. Rather, as Figure 4.3 illustrates, with the destination the creation of new ways of thinking of practice, in it is created a dynamic space with ongoing dialogue between critical theory and reflective disposition.

Conclusion

Critical reflection as presented in social work textbooks is a complex theory, process, and embodied practice that resists easy analysis. This study has shown how social work textbooks, in seeking to develop critically reflective practice in students and give them access to the discourses of the field, foreground extensively the theories, processes and dispositions that have led to the development of this practice. This complexity requires students to develop a familiarity with a range of theories and the judgement to know which ones to select to put to the purpose of critical reflection and which to put to use in application. When applying this practice to critical case studies, students are expected to undertake a stepped deconstruction and reconstruction of the case, select and apply the correct theories to come to a contextual understanding of the situation, and then unsettle their assumptions about this. In this their analysis is directed both inward to understand their own reactions and how these are shaped by their own positionality, and outwards to consider how they are perceived by others. If working from the perspective of critical social work, this analysis also considers workers' own positional power and power to effect social change without oppressing others.

Using specialization codes to describe and analyze the key principles that guide the practice of critical reflection in social work textbooks reveals critical reflection in social work as having an *élite* code. This makes visible that critical reflection in social work requires both knowledge of specific theories and processes and also the development of dispositions and values. Elements recognized as having stronger epistemic relations (ER+) include theories that define the purpose and legitimacy of critical reflection; model processes for reflection; and specific theories for application including modernist and post structuralist theories. Elements with stronger social relations (SR+) exemplify how critical reflection requires the development of a disposition that is questioning, unsettled and attuned to change.

Diving deeper, the close examination of the critical incident method illustrates how elements with stronger epistemic relations work with elements with stronger social relations and vice versa. This demonstrates students must be familiar with a specific range of theories and have a knowledge of which to apply when, and also have the dispositional development to move beyond their own perspective by using these applied theories and processes to conceptualize new possibilities for practice and in critical social work, social change. It also illustrates that the successful enactment of critical reflection requires an ongoing dialogue between elements with stronger epistemic relations, such as critical theoretical and process methods, and elements with stronger social relations, such as self-reflection on one's own power and positionality.

Detailing this complexity from textbooks illustrates how easy it is for students to mistake the code by focussing on the extensive theorization, mistaking critical reflection for a knowledge code; or concentrating on self-reflection without applying the necessary criticality and missing the end goal of changed professional practice. By surfacing and describing these knowledges and reflective dispositions and analysing the underlying principles that inform these, this analysis aims to contribute to the literature of critical pedagogies for social work and the wider field of literature on critical reflection.

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PART II

Supporting critical reflection in pedagogy

5

ENACTING REFLECTIVE PRACTICE IN SPORT AND EXERCISE SCIENCES

Pedagogic and integrative perspectives

Steve Kirk

Introduction

Navigating the requirements of disciplinary writing tasks may be challenging, particularly in degree programmes comprising multiple sub-disciplines drawn originally from different fields. These include education, law and, the focus for this chapter, sport and exercise sciences. Characterized by Bernstein (2000) as 'regions', these disciplines recontextualize knowledge from *singulars*, more inwardly facing and more strongly bounded disciplines, and turn it outwards, beyond the university, to address the challenges of professional practice – e.g. psychology and sociology in the case of sport and exercise sciences. Component sub-disciplines may differ in their underpinning epistemologies and thus may also differ in what constitutes legitimate knowledge, research methods, and forms of representation. Without explicitly addressing how valued practices shift as students move between modules and assessments, success criteria may be obscured and students left unnecessarily confused.

This chapter focuses on reflective practice and its enactment in reflective writing on the final-year, placement-based module Sport in the Community. Reflective practice here is understood as 'paying critical attention to the practical values and theories which inform everyday actions, by examining practice reflectively and reflexively. This leads to developmental insight' (Bolton 2010: xix). To facilitate this process of learning from experience, students on the module keep a personal log during their sports-oriented placement in the local area. They are then assessed on a 'reflective statement' that draws on the log to highlight key areas of personal development and understanding gained over the course of the placement. This chapter describes the development of a tailored academic literacy intervention that was designed to demystify, in particular, the reflective statement, an

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unfamiliar form of academic writing for these students. It begins with a brief overview of the educational context and the research literature. It then describes how the concept of *semantic gravity* from Legitimation Code Theory (Maton 2013, 2014a, 2014b, 2020) was enacted to create pedagogic tools and shared metalanguage to facilitate student learning. Semantic gravity relates to the relative context-dependence of meaning-making and underpinned both task design and classroom conversations. The approach enables a critical and integrative perspective on reflective writing and this is demonstrated via five key 'messages' underpinning explorations with students. The chapter provides a theoretically grounded and pedagogically practical illustration of enacting Legitimation Code Theory to enhance teaching and learning.

Educational context and pedagogic research perspectives

The educational work described here took place at Durham University, a research-intensive institution in the north of the UK. Academic writing specialists at Durham's Centre for Academic Development (DCAD) were contacted in 2015 by staff in Sport and Exercise Sciences for assistance on their final-year undergraduate module *Sport in the Community*. This began a collaboration and pedagogic project to scaffold students' drafting of a reflective statement task, one that continues today.

Sport and Exercise Science students typically follow a varied programme in areas such as sports physiology, applied psychology, sociological perspectives on sport and research methods. Given the combination of both science and social science-oriented modules, assessments on the degree programme are diverse. Assessment types involve, primarily, lab reports and discursive essays. Reflective assignments, requiring students to identify personal and/ or professional development on a given module, are less common and thus the reflective statement task raised questions around expectations of content, form and style. Students were familiar with, e.g., the prescribed structure of lab reports (a standard *IMRD* empirical report structure: introduction > method > results > discussion > conclusion; see Swales 1990), where no such expectations had been made explicit for reflective writing. A module handbook offers placement guidance and preparatory advice but leaves open how students approach the assessment task.

Students undertake around 32 hours of placement experience during the module, involving, e.g., working with school children, underprivileged communities or disabled adults. Students identify personal learning objectives (LOs) and keep a weekly placement log. They submit a 2,000-word reflective statement at the end of the module, worth 75% of the module mark, with a placement related presentation forming the remaining 25%. For their reflective statements, students draw selectively on their placement logs to identify personally and/or professionally significant learning. They are encouraged to consult relevant literature

to inform their thinking, to identify the value of their learning for future practice, and to suggest possible areas for further personal development.

The chapter here and the classroom practice it illustrates make an important distinction between students' reflective practice as a cognitive process and the realization of this in writing. Reflective *writing* can enable extending reflection by offering a space to revisit and reframe experiences, as the basis for growth and change. Something of this perspective is reflected in linguistically oriented research on reflective writing, such as Ryan (2011), who draws on Systemic Functional Linguistics (SFL) to examine the linguistic realization of students' 'academic reflection'. Szenes & Tilakaratna (2021) are more explicit, distinguishing 'critical reflection' from 'critical reflection assignments' in order to focus on the latter in social work and business. Drawing also on SFL, they demonstrate that high-scoring assignments may require quite sophisticated coupling of, e.g., a critical incident experienced by the writer and the writer's assessment of this. Given such requirements, it is unsurprising that there is a broad consensus in the literature around the need for time and explicit instruction in the development of reflective practice and reflective writing skills (Bain et al. 2002; Rodgers 2002).

The perceived value of reflective practice and writing in Sport and Exercise Sciences is reflected across disciplines in higher education (Ryan & Ryan 2013), particularly in other professionally facing degrees, such as education, business and nursing. "The social purpose of academic reflection is to transform practice in some way, whether it is the practice of learning or the practice of the discipline or the profession" (Ryan 2011: 103) and realizing this purpose tends to be theorized as involving a progression through different 'levels' (Bain et al. 2002; Ryan & Ryan 2013). Bain et al.'s (2002) 5Rs framework of *Reporting, Responding, Relating, Reasoning* and *Reconstructing* offers a seminal example, with levels moving from description through interpretation to transformation of practice. The assessed nature of reflective practice in academic contexts has led some to argue that *requiring* reflective practice on a course may actually hinder "genuine reflection" (Hobbs 2007: 406). Nevertheless, these models offer a basis for pedagogic work with students and, in principle, a means of scaffolding development.

Pedagogic research highlights the variation that exists in forms of reflection writing, such as reflection essays, case studies and learning journals and reports (Carson & Fischer 2006; Fook et al. 2006; Fook & F. Gardner 2013). Important focuses also include the role of theory in reflective assignments and students' understanding of this (e.g. Stevenson et al. 2018). Studies enacting the concept of *semantic gravity* from Legitimation Code Theory (LCT), as the current chapter does, are demonstrating the value of LCT for reflective writing pedagogy and activity design (Kirk 2017; Macnaught 2021). What is lacking, however, are insights into how more informal reflective journaling may need to be recontextualized for the purposes of formal assessment. Little pedagogic advice is available to demystify different forms of reflective task, how what is

valued may change or how shifting expectations can be made visible in ways that impact on student learning. In early conversations with *Sport in the Community* students, such concerns emerged with respect to their placement log and reflective statement, and thus the intervention reported here sought to address this gap.

Building a pedagogic toolkit with Legitimation Code Theory

The concept of *semantic gravity* from LCT (Maton 2013, 2014a, 2014b, 2020) underpinned both the intervention design and pedagogy. Semantic gravity refers to how far practices are related to particular social or symbolic contexts and is conceived as a continuum of strengths, from stronger to weaker. Practices exhibiting relatively stronger semantic gravity are more strongly tied to particular contexts, such as sport students attending university classes or sports trials. Practices exhibiting relatively weaker semantic gravity are more weakly tied to particular contexts, such as coaches developing a new game strategy for a range of different contexts. Sitting at a high level of abstraction, LCT concepts like semantic gravity must be translated into the specificities of particular objects of research or educational practice. This is achieved by means of a *translation device* (Maton & Chen 2016), a particularized enactment of the concept for a given problem context. The approach described here draws on the translation device first set out in Kirk (2017) and drawn on by others for, e.g., LCT-informed work in doctoral writing (Muir & Solli 2019) and teacher education (Meidell-Sigsgaard 2021). This will be briefly reviewed in the following section.

Semantic gravity is enacted here as relating to the different kinds of knowledge that students must integrate within their reflective assignment. Relatively stronger semantic gravity is seen when students refer to everyday *experiences* on their placements, such as teaching opportunities and interactions with placement mentors. Relatively weaker semantic gravity is exhibited when students *generalize* in their writing. This is seen when students articulate generic learning objectives, such as 'leadership skills' or 'teamwork', and when students identify personal learning, insights or patterns of behaviour over placement time, such as 'greater confidence' or 'the struggle to maintain authority' in coaching. The third and relatively weakest strength of semantic gravity is seen when students incorporate reference to *theory* or higher-order principles drawn from academic reading or policy documents. These three forms of meaning-making in writing – experiences, generalizations/ insights and theory, – thus realize the semantic gravity continuum as three heuristic 'levels', represented visually in Figure 5.1.

Other educationally facing work using LCT has also used semantic gravity to inform the teaching of reflective writing (Szenes et al. 2015; Macnaught 2021). What differs here is the identification of a 'mid-level' form of meaning-making. This has emerged as significant to articulating valued practices in

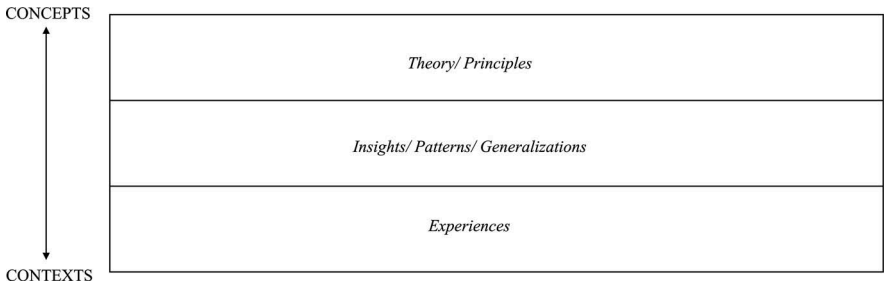

FIGURE 5.1 Heuristic 'levels' of the semantic gravity continuum

written assignments at Durham. In reflective writing the mid-level is associated especially with module learning outcomes and personal learning objectives, which can be seen to sit between 'the concrete' and 'the abstract', "…meanings which generalize over specific episodes or illustrations, but which are not entirely abstracted from a contextual base" (Kirk 2017: 112). The three-level enactment of semantic gravity emerged to address particular forms of academic literacy teaching and illustrates the way the same LCT concept may be differentially enacted for specific problems and contexts (Maton 2014a; Maton, Hood & Shay 2016). This highlights also the flexibility and creative potential of LCT as a framework to inform educational practice.

Making the concepts practical for teaching

The 'stave diagram' in Figure 5.1 recontextualizes LCT concepts for pedagogic practice and was one key component of worksheet tasks, slides and whiteboard illustrations. It formed part of a *language of enactment* (Maton, Carvalho & Dong 2016), a pedagogic metalanguage and means of representation derived from LCT but simplified to avoid unnecessary technicalization. Thus, the notion of a continuum from stronger to weaker strengths of semantic gravity was replaced with a continuum from 'contexts' to 'concepts'. Strengthening of semantic gravity was expressed in terms of 'providing a concrete example'. Weakening of semantic gravity from specific instances of experience became 'recognizing a pattern of experience' or 'identifying a personal insight'. Weakening semantic gravity further became 'conceptualizing the incident' or 'theorizing from the insight'. Finally, *semantic gravity waves* (Maton 2013), or movements between different strengths of semantic gravity, were discussed with students in terms of, e.g., 'waving up to theory', 'waving down to your experience' and 'waving back up/ down to a generalized summary insight'.

This practice echoes the work of practitioners in other educational contexts also enacting Semantics from LCT for the classroom (e.g. Ingold & O'Sullivan 2017; Clarence 2021; Meidell-Sigsgaard 2021). Recontextualizing LCT terminology in this way enables creating an accessible pedagogic metalanguage that

balances conceptual clarity with pedagogic practicality. This shared language became valuable for both students and staff beyond the intervention, informing how both talked about reflective practice and its realization in writing. What follows now is a discussion of classroom enactments of this conceptual toolkit, conceived to enhance Sport students' understanding of reflective practice and how this might be evidenced in their reflective statements.

The unfolding of pedagogic practice: Messages for students

Materials for the session comprised a worksheet and accompanying slides. The worksheet formed the basis of the session, with slides serving as summaries of key learning points and for follow-up self-access advice. Interactive materials were designed using extracts from several Sport students' reflective statements. Given that the placement journal was more personal and not formally assessed, no journal extracts were used in teaching.

Both stronger and weaker exemplars of reflective statements were drawn upon in worksheet design. This resembles the approach advocated by Tribble & Wingate (2013) and is central to the pedagogy in a number of important ways. Firstly, text-based approach provides students with access to instantiations of valued forms of writing (Swales 1990; Hyland 2004) and, here, to attainable models of undergraduate essays (Nesi & S. Gardner 2012). Secondly, working with stronger and weaker exemplars enables both the exemplifying of valued practice and the critical discussion of more problematic forms of writing. This helps to avoid potential concerns among disciplinary staff that a single 'right answer' (or model that could be copied) is being presented, particularly given that staff were flexible around how students structured the Sport in the Community reflective statement.

Finally, working with student writing can bring the benefits of collaboration with subject specialists (cf. Dudley-Evans 2001; Tribble & Wingate 2013). Cooperative buy-in is needed minimally for access to exemplars but can also lead to disciplinary staff participating in the writing classes themselves. This was the case here and enabled "… not only clarify[ing] discipline-specific questions, but more importantly, […] signal[ling] to students that literacy is an essential part of the discipline" (Tribble & Wingate 2013: 310). It is particularly this live interaction with both subject staff and Sport students that has enabled the evolution of session content and design over several years.

What follows below, therefore, represents current practice on the Sport in the Community module. Session design and pedagogy theorized through the lens of semantic gravity enabled key insights for students that would not have otherwise been clear. Some of these emerged through my own practitioner dialogue between design and theory and were incorporated over time as the session evolved through iterations of practice, feedback, professional reflection and session updating. Insights are presented as five key student-facing 'messages' below. These messages, serving to inform critical awareness and class

discussion, are explored via extracts from three of seven exemplar assignments (numbered below as Student texts 1–3). These submissions, ranging from strong pass to distinction scoring, were chosen by module staff as the basis for analysis/ session design and for exemplification with students.

Message 1: Critical reflection involves mindful shifts between experience, generalizations, and theory

Discussion with module staff made it clear that incorporation of higher order principles, policy and/ or theoretical lenses into the community placement reflective statement was an expectation of final year undergraduates. Seen also in analysis of higher scoring student writing, this confirmed the need for summative work to move between all three 'levels' of the semantic gravity continuum – experience, insights/generalizations and theory. Student text 1 below illustrates how these three forms of meaning-making are typically woven together in student writing.

Student text 1

> The ability to adapt to changes in behaviour presented another challenge. I had not appreciated the challenge of striking a balance between letting children have an enjoyable lesson and getting them to obey instructions. In week 7 when [the main teacher] was absent we had a cover teacher which led to behavioural issues becoming apparent, highlighting the importance of a respect for authority being instilled in the pupils. Although I already employed effective methods to manage behaviour, e.g. in week 5, giving a child a less appealing option discouraged misbehaviour (identified as a behaviour reduction strategy to improve on-task behaviour (Fabiano and Pelham, 2003)) my experience was insufficient to control this chaotic situation in week 7. Approaches which might have kept the class in order are: a teacher-centred approach (a highly-structured method in which instructions, demonstrations and feedback are provided by the teacher (Byra 2006); positive reinforcement (e.g. rewarding the pupil immediately by verbal encouragement or a sticker for good behaviour); and reprimanding and re-directing (Davis and Florian 2004). In week 14 I combined these approaches, improving pupils' on-task behaviour; I will build on this success in future situations.

In class, opening discussions revolve around student understandings of the summative task and, in particular, the questions they currently have about the assignment (see *Educational context*, above). Students then quickly engage with the extract, which is flagged as illustrating a number of features of reflective writing worthy of note and discussion but also as not being

without issue. Students are asked to discuss what they notice about the content, progression and structuring of the extract. Based on their understanding of task requirements and what an assessor might like to see in a reflective statement they are also asked to identify aspects that they think could be improved. The usefully illustrative but nevertheless slightly problematic text thus enables a richer, more critical and discursive exploration of reflective writing for this context.

Between them, students tend to note a number of important features in the ensuing open class discussion. These include the focus on a personal challenge; the orientation of the writing strongly towards "I" and "my experience"; the chronological progression from past understandings through new insights to signalling future action; the personally critical and emotive language choices (e.g. "my experience was insufficient" and "this chaotic situation"); the integration of academic citation; and the inclusion of more technicalized terms (e.g. "a teacher-centred approach"). Each of these is elaborated upon, highlighting for instance how students themselves are the 'objects of inquiry' in reflective writing, rather than the theories or experimental data of their other assignments, thereby explaining and legitimating the personalized orientation of the passage. This early discussion thus begins to address some of the students' questions around the content and style of reflective statements but does so in ways that are also *explanatory*, helping students to see not just 'the what' but also 'the why' of valued practices.

Before moving to critique, the different forms of meaning-making in the extract are elicited. Relevant keywords are then plotted onto a blank three-line stave diagram (pre-sketched during the student discussion above), introducing the three levels of experience, insights and theory. A line is then drawn left to right, curving to join the keywords, profiling the movements in meaning enacted over the course of a piece of writing. This live building up of the semantic gravity profile interactively with students enables introducing the visual metaphor of 'the wave' and the recontextualized metalanguage for the rest of the session. Figure 5.2 shows the board diagram that results.[1]

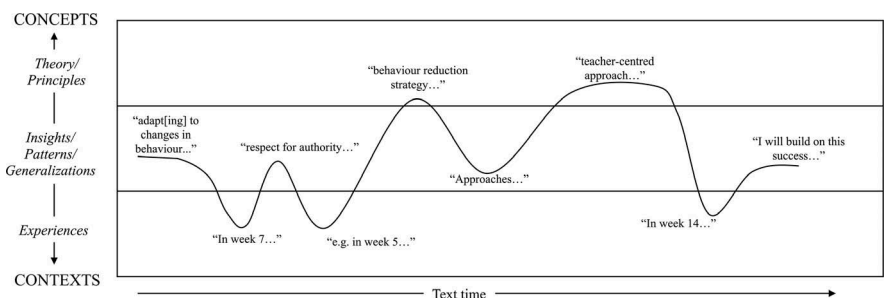

FIGURE 5.2 Heuristic semantic gravity profile for student text 1

The particular value of this representation is visually demonstrating for students some of the valued and less valued practices of reflective writing. For this particular assessment, students note that their placement learning objectives sit at the mid-level and need elaboration through, minimally, a 'wave down' to concrete illustration from their placement journals (see also Messages 3 and 4 below). We note more critically, however, that the exemplifying wave down towards the end of the extract ("In week 14 I combined these approaches, improving pupils' on-task behaviour") lacks detail and clarity (i.e. *how* were these approaches combined?). We note similarly that the pulses up to theory (here: teaching approaches) demonstrate reading and engagement with higher-order principles that then usefully inform subsequent action, but that they are rather brief and would benefit from some elaboration to demonstrate greater understanding. Finally, we observe that the nod to future action in the final line ("I will build on this success in future situations") is a potential strength, in that it points to change as a result of personal learning, but that the articulation of this lacks substance. Students offer ideas for expansion via concrete suggestions for actual action in the future. The short extract, intentionally chosen for critical exploration rather than simply modelling of 'best practice', thus serves as a rich means of excavating many key issues in reflective writing and raising more critical awareness of valued practices.

Message 2: Theory can inform reflective action and transform understanding

As noted above and also in the literature (e.g. McGuire et al. 2009), valued critical reflection on the Sport in the Community module is oriented particularly towards personal insights and understandings that will inform future professional practice. The pedagogic intervention thus highlighted the value of writing practices that demonstrate personal change, including through engagement with conceptual knowledge. This change appears to take two forms when enacted in student writing: 'internal', in the shape of refined personal understandings, where theory acts as an interpretive lens to generate new understandings, and 'external', in the shape of new or modified action as a result of theoretical insights. Both are valued by staff, especially where the former also serves as the basis for future planning and practice.

In LCT terms, these two forms of theory-informed change represent different semantic gravity profiles. The first strategy begins with experience, weakening semantic gravity through the lens of relevant theory to derive new or refined insights, ideally as the basis for future action. Something of this practice is suggested by the extract above in Student text 1. While the precise origin and role of the "[a]pproaches which might have kept the class in order…" are left unelaborated, the impression here is that these have been reflected upon after the "chaotic situation in week 7" and result in modified action seven weeks later. This arc from 'problematic practice' through *conceptual insights* to

transformed behaviour is highlighted in the session and students are invited to provide their own examples of how practice or personal understandings have been reshaped in some way by engagement with higher-level principles. The wave profile diagram helps to make visible the shifts involved in this process.

The second strategy begins with theory, e.g., from academic readings encountered before or during the work placement, with then a strengthening of semantic gravity occurring through critically mindful enactment in practice. An example of this practice appears in Student text 2:

Student text 2

> I also developed an understanding of several teaching approaches. During weeks 1–4 I struggled to apply any theory-based approaches. Throughout the literature there was reference to active learners, a student-centred style of learning (Byra 2006) supported by the constructivist model. This model emphasizes intrinsic motivation, explorative learning, understanding experiences and problem solving (Davis and Florian 2004) and is said to be effective in creating opportunities for further social and cognitive development (Gallehue & Cleland-Donnelly 2003). I endeavoured to adopt this approach, evidenced in the opportunity I gave to pupils to make independent decisions on movements during gymnastic sessions (week 4–14) e.g. wide shapes. Despite the given advantages, this technique was not always easy to implement, Davis and Florian (2004) expressed that it may be more of a challenge with SEN[2] children, citing difficulties in communication, motivation and interaction with others as potential disruptions to the approach. I found it necessary therefore to use other approaches e.g. responsive teaching (Watson 2001).
>
> […]
>
> My improved understanding of these approaches made me more versatile in lessons; Davis and Florian (2004) suggest that teachers should adapt their methods with informed knowledge, to provide continuous improvement within a workplace (Overtoom 2000). This understanding is excellent preparation for me to work in a teaching environment, building upon LO2.[3]

Drawing an important distinction between the reflective *practice* (the experimental enactment of theory-informed understandings during the placement) and the representation of this practice in reflective *writing*, this extract can be profiled heuristically for students as given in Figure 5.3.

There is some acknowledgement in the literature of the transformative role that engagement with higher order disciplinary knowledge can have on individual learners in higher education (e.g. Ashwin 2020) and LCT-informed work in reflective writing has made similar arguments (Szenes et al. 2015; Kirk 2017; Macnaught 2021). Movements between stronger and weaker

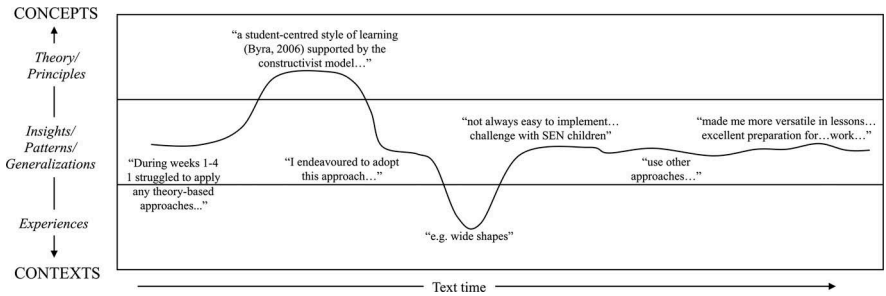

FIGURE 5.3 Heuristic semantic gravity profile for student text 2

strengths of semantic gravity in student writing have been shown to be widely valued in pedagogy and assessment (Maton 2013, 2014b, 2020; Macnaught et al. 2013). It is the context-unbounded nature of conceptual knowledge that potentially offers students new lenses through which to revisit their placement practices and existing understandings, enabling transformed understandings of experience in ways that may not have been otherwise possible. While not prevalent in the student work analyzed, theorizing of experience was confirmed as valued by assessors and thus became an important feature of what is brought to discussions in this session. The visual representation of the semantic gravity profile of student texts enables a relatively simple, yet clear and powerful means of exploring with students how theory can be mobilized for personal change in different ways: both for enacting critical reflective practice in writing and for the enhancement of personal understanding and professional action.

Message 3: Avoid 'mid-level flatlines'

Highlighting the value and transformative potential of *waves* between practice, insights and theory enables also then exploring why the absence of such movements may be detrimental to demonstrating reflective practice in writing. The literature on semantic gravity enacted for educational practice has highlighted two forms of problematic practice in this regard: *high semantic flatlines*, where writing remains conceptual and fails to provide more concrete illustrations, and *low semantic flatlines*, where writing remains anecdotal/descriptive and fails to provide summary insights and/or theoretical interpretations (see Maton 2013, 2020). These notions, reframed as 'theoretical flatlines' and 'experience flatlines', are referred to in the session, drawn and exemplified on the stave diagram (see Figure 5.4), and highlighted as failing to enact valued writing practices in a reflective statement.

Interestingly, however, high and low semantic flatlines appear to be highly uncommon in Sport in the Community student writing. Instead, the translation device developed for this context (Kirk 2017) led to revealing greater

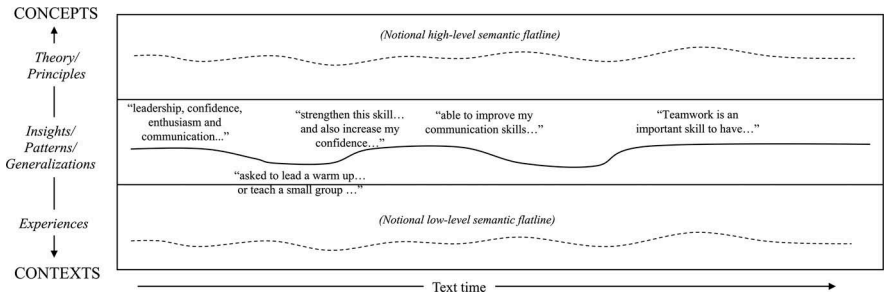

FIGURE 5.4 Semantic gravity profiles for low-, mid-, and high-level flatlines

prevalence of *mid-level flatlines* in weaker extracts. This profile describes writing that does not move beyond generalizations, offering neither examples nor conceptual lenses. Student text 3 provides an example:

Student text 3

> As outlined in my skills audit, the skills I have considered to be a strength are leadership, confidence, enthusiasm and communication. During my placement I was able to continue improving these skills and adapt them to be relevant and specific to [the] Sports College. An example of using leadership is evidenced in the logs for sessions 3, 5, 7, 8, 9, 10 and 11, and 12. This is because I was either asked to lead a warm up, part/full session or teach a small group of students during those sessions. By doing this I was able to strengthen this skill even more and also increase my confidence as a result of leading sessions independently.
>
> Furthermore, I was able to improve my communication skills with both the students and staff. This is evidenced in the log for session 2, as well as the emails between [my placement mentor] and I. I believe I worked well with the staff and was made to feel part of the team as a result of my communication skills. Teamwork is an important skill to have, especially as a PE teacher as you may be teaching a lesson with a fellow colleague within your department. Additionally, as a PE teacher you are encouraging teamwork within your lessons as teamwork is an important skill to have in sport (Erhardt, Martin-Rios & Harkins 2014). Therefore, teamwork is an important skill for me to have improved whilst on placement as it is a vital skill for my career.

Students were encouraged to note a number of issues with extracts of this kind. Firstly, the absence of concrete examples *and* the absence of drawing insights from such experience means no real sense of challenge, change or resulting planned action is demonstrated, despite the improvements claimed in, e.g., leadership, communication and teamwork skills. Secondly, the student

makes the mistake of pointing to their placement journal for 'evidence' (paragraphs one and two), rather than providing concrete examples in the text. This is insufficient, given the onus it places on markers to locate and interpret the examples within what may be a very long accompanying placement journal and, unfortunately, serves only to maintain the mid-level flatline of generalizations and the lack of clarifying detail or critical interpretation.

Finally, the citation in the penultimate sentence ("…as teamwork is an important skill to have in sport (Erhardt, Martin-Rios & Harkins 2014)") enables highlighting that reference to academic reading is not necessarily the same as theorizing: the mid-level flatline remains unaltered by the point made. While the citation is not without value, it can be compared with those in the extracts further above to raise awareness of how reading can function quite differently in writing. Here, the learning takeaway is that this form of 'symbolic citation' (Macfarlane 2021) may appear tokenistic if overused because, crucially, it does nothing to demonstrate new or refined insights gained through engaging with the cited text. The mid-level flatline for the student extract above is represented together with the other flatline variants in Figure 5.4.

With the focus on 'learning objectives' and skills development, it is perhaps the nature of the summative task itself that may lead to mid-level flatlining. This underscores the way in which particular enactments of semantic gravity (and other LCT concepts) via a translation device make visible aspects of practice that may not have been visible before. This can in turn enable, as here, new conversations and concrete advice that can positively influence student and staff awareness, practice and development.

Message 4: Move from chronological to thematic organization

The Sport in the Community placement journal and reflective statement both constitute 'reflective writing' but need to be structured differently. Sport student cohorts are consistently unclear as to what this means in practice. A key insight emerging from the iterative dialogue between exemplar writing, classroom conversations, and the enacted conceptual toolkit is that students should move from isolated, chronological reflections to theme-based organization of personal learning. Wave profile diagrams are used to explore why this is the case.

Placement journal entries may take various forms. Some may be simple descriptions of what happened on the placement in a given week. Others may include feelings, reactions or comments on learning objectives.[4] Documented episodes are thus separate and sequential, meaning that critical connections may not be made *between* experiences over time. This risks important patterns going unnoticed, thereby also obscuring the potential for deeper self-knowledge (represented visually in Figure 5.5).

In contrast, a thematic structure requires students to engage more deeply and more critically with their recorded experience, identifying key areas of personal insight and growth over the length of their placement. These might

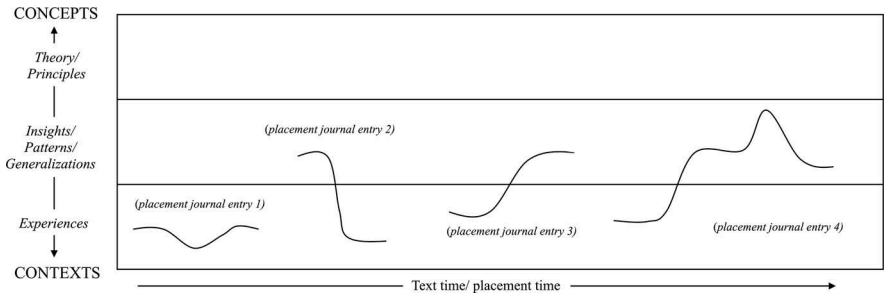

FIGURE 5.5 Isolated placement journal entries as semantic gravity profiles

include particular critical incidents but will also include slower, cumulative developments. Themes may overlap with their original learning objectives but may also end up being sources of personal change they had not anticipated. The class conversation thus underlines the importance of making regular journal entries during the placement, providing the rich evidence base for later revisiting and reflecting. Students are also encouraged to take the time to look over their journals with a real or virtual highlighter (or similar), to identify patterns, insights and change over time.

Importantly for the substantive illustration of experience, theme-based organization enables students to bring together several examples from across their placement. This can again be depicted and discussed with different wave profile diagrams, one illustration of which is given in Figure 5.6.

The alliterative sequence of '*insight* > *illustration(s)* > *interpretation(s)* > *into practice*' is offered as a possible mnemonic and provides a functionally oriented means for students to plan the staging of sections in their writing. Given a ceiling of 2,000 words, final reflective statements might contain three to four themed 'vignettes', each broadly resembling a profile such as the one exemplified in Figure 5.6. The flexibility and simple clarity of the semantic gravity wave-based explanations and diagrams enable this articulation of the sequence to capture both individual critical incidents and reflections over

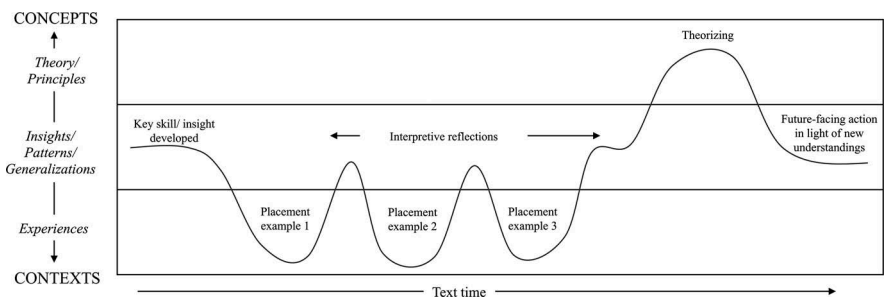

FIGURE 5.6 Illustrative semantic gravity profile for a reflective statement section

patterns of experience. Focusing on critical shifts between different forms of knowledge, this offers students a stable, repeating text structure of sorts, at least for this form of placement-based reflective writing.

The visual representation with a semantic gravity wave enables seeing that reflective vignettes for this particular assessment might usefully both begin and end 'in the middle'. This is, of course, not a prescriptive 'rule' and indeed great variation in writing structure appears to be accepted by module markers. However, the particular requirements and expectations of the task do encourage a structure of this form. Critical discussion of these expectations with students, such as the need to identify insights and to theorize over patterns of experience, enables raising awareness of how the organization of writing is not arbitrary and that there are important interactions between task purpose and structure.

Message 5: See the waves in other academic and employability practices

A further possibility afforded by the pedagogic recontextualization of LCT concepts is forging more integrative understandings of reflective writing in the wider context of other student practices. The heuristic three-level sectioning of the semantic gravity continuum enables drawing attention to analogous but different movements in meaning-making required in other assignments that students undertake, both written and spoken. It also enables making links out to employability-oriented activities, such as answering interview questions. While these are not the focus of the academic literacy intervention, brief discussion is incorporated as a summary feature of the session. The aim is to avoid a segmented mode of learning (Maton 2009), whereby students develop understandings of reflective writing that are isolated from other valued practices, and instead to build more integrated awareness. There is not the space here to explore these in detail but I provide a glimpse in what follows below.

In the case of other types of writing, the stave diagram can be used to overlay notional semantic gravity profiles for discursive essays and experimental research reports. Essays on sociological issues in sport, for instance, can be profiled as beginning 'in the middle' with the generalized theme of the writing, such as participation in sport or the representation of women in sport in the media. Depending on writer purpose, this might then wave down to case studies or examples of media images students have located themselves (analogous to waving down to 'experiences' in reflective statements), and/or wave up to conceptual interpretation, e.g., through a critical theory or feminist lens. For research reports, an analogy can be drawn between the 'experiential data' recorded in placement journals and experimental lab data. Students can see how drawing inductive interpretations from lab work is not unlike drawing reflective insights from the experience-as-data recorded in their placement journals. Initial literature reviews (if required), theorizing of findings and/or connections back to an experimental hypothesis can be seen to operate at weaker strengths of semantic gravity and thus within the top 'level' of the stave diagram.

Shifting considerations to speaking practices, profiles can also be created with or by students for assessed presentations, where reflective practice must be enacted verbally instead of in writing and, looking outwards to the world of work, for reflective responses to interview questions. In the case of the former, students can be encouraged to consider how far the wave profile of their summative presentation, worth 25% of the module assessment, should match that of their written submission. Students present at a public event to attendees from placement organizations, and the visual means of mapping their reflective summaries can quickly enable critical review of content in light of their new audience. This is likely to include, for instance, the mindful removal of higher-order theorizing of their placement challenges and/or learning.

Finally, opening out to wider considerations of 'employability skills', an important parallel can be drawn between the semantic gravity profile valued in students' reflective statements (insight > illustration(s) > interpretation(s) > into practice) and effective ways of addressing interview questions. A typical question, such as 'tell us how your sports degree programme has prepared you to work in this company and what skills you think you bring', can be effectively addressed through a similar profile. Answering the question requires identifying key learning outcomes, exemplifying these, recontextualizing skills in terms of the target organization and then concretely suggesting how these might be deployed. A crucial link can thus be established between reflective practice as assessed on a degree programme, through writing tasks such as reflective statements and logs, and the value of both the process and the insights gained for important aspects of life beyond the university.

Summary thoughts and conclusion

This case study example of recontextualizing LCT concepts in reflective writing pedagogy demonstrates the value of semantic gravity in making visible different knowledge practices in the exercise of reflective writing. Visual depiction of semantic gravity waves enables critical discussion with students around their placement learning and reflective meaning-making that begins to generalize and abstract personal understandings from this experience. This can in turn facilitate explicit articulation, clearer personal awareness, and critical revisiting of both successes and failures, in order to reach new and refined understandings as the basis for future planning and revised action.

It is the mid-level expression of generalized understandings, garnered through sustained reflection on personal practice and how these will shape future action, that appear to be most important in reflective writing in this context. While students do evidence some theorizing in their submissions and while staff confirm that this is valued, it tends to be relatively fleeting with little elaboration. More sustained conceptual engagement may be partly precluded by the word limit (2,000 words) but is not a principal assessment goal.

This differs somewhat from other studies of reflective writing in HE contexts, where the onus on connecting theory to experience may be greater (e.g. Stevenson et al. 2018; Macnaught 2021), and highlights both the variation that may be evident in reflective tasks across disciplines and the value of examining local instantiations of 'reflective writing'.

LCT-informed pedagogy and exploration of stronger and weaker student exemplars enables a more critically analytical approach. Students are able to visualize not just *what is* in extracts of writing but also *what might* (or *should) be*, such as the need to spend longer unwrapping an example or the value of invoking a conceptual lens to reach new understandings of a critical incident. This discussion can enable students also to see the importance of language itself in relation to practice, seeing how weakening of semantic gravity in the articulation of (a pattern of) experience enacts understandings that rise above the experience, to serve as the basis for new action: language choices themselves as effecting changes in thinking and in the world. The pedagogic toolkit further enables a critically integrative view of reflective writing within the wider context of other academic and employability practices.

LCT has thus proved especially valuable in designing and enacting reflective writing pedagogy at Durham. Recontextualized concepts provide a basis for classroom practice; a shared metalanguage with module staff, enhancing the way they are able to discuss work with students; and a critical lens for the ongoing evolution of local practice. The iterative, evolving nature of session design and focuses has been informed particularly by ongoing critical dialogue with LCT studies in reflective practice. Studies such as those in this volume will no doubt continue to enrich this work.

Notes

1 In 2020–21, during the Covid crisis, a similar profile diagram was built up online in stages using PowerPoint.
2 Special Educational Needs.
3 Learning Objective 2 referred to improving employability skills.
4 Students' placement handbook includes example question prompts around these areas.

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6

CONSOLIDATING PERFORMANCE

Reflection in the service of developing presentation skills

Jodie L. Martin

Introduction

Presentations are often assigned in university classes as assessments without explicit instruction on how to present or how they are assessed; the same is true of reflective writing assessments. Students without particular skills or knowledge risk being marked down for not conforming to a tacit standard. International students from differing high school cultures, and both domestic and international multilingual students, can be particularly disadvantaged by unspoken expectations for performance and writing. It can be challenging to ensure all students develop academic presentation skills no matter their topic, talent, or experience. This chapter examines how short reflective self-assessment pieces were introduced in an Academic English program for first-year international science students at a Canadian university to encourage students to connect their preparation and participation to their performance, and to shape their behaviour for subsequent presentations.

The reflective self-assessment pieces were introduced during a semester-long (13-week) focus on presentations in which students presented a research article of their choice in three formats: pecha kucha (an automatically-timed slideshow using only images to accompany speech, PechaKucha 2021), poster, and slideshow presentation. The three formats allowed iterative and cumulative instruction on images and image-language relationships (Roehrich 2016), semiotics of static and dynamic layout, the grammar of writing with bullet points, and the use of the body to engage the audience. The pedagogical design implemented a Teaching and Learning Cycle (TLC) (Rothery 1994) to dedicate weeks for modelling and deconstructing the format, preparing the presentation in class, and practicing with colleagues before finally performing for assessment; despite this, students seemed un- or under-prepared, and risked approaching the

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presentations separately rather than cumulatively. A reflection activity was therefore introduced to draw attention to valued actions and behaviours. In order to do so responsibly, low stakes, short-answer questions were posed with self-assessment for participation marks. This chapter explores why and how these reflective self-assessments were introduced, and how, through analysis of both particular questions posed and student responses, they served to consolidate aspects of performance that were focused on in the instruction.

This chapter begins by positioning this study within studies of reflection, as a meta-reflection by the instructor. It then describes the context of the pedagogy and the processes of data collection and selection which provided the corpus for this study. The Specialization dimension of Legitimation Code Theory (LCT) is presented with a particular focus on the *4-K model* (Maton 2014). A *translation device* (Maton & Chen 2016) for enacting the 4-K model in presentations is proposed and illustrated. A 4-K analysis then explores why and how the reflective self-assessments were introduced and how the students responded to two questions in particular. This study therefore provides an example of the low-stakes use of reflective writing to consolidate performance knowledge when success can be achieved in multiple ways and students have a wide range of experiences and expertise to draw on.

From reflection to presentations

This chapter takes reflection to mean the process by which actors – typically students or practitioners – review their past experiences with a measure of interpretation, whether through disciplinary concepts or professional principles; similarly, reflective writing describes a wide variety of text types which essentially centre on personal experience, again with some measure of interpretation. Such writing is frequently used in education associated with professions, such as teaching (Beauchamp 2015; Macnaught 2021), nursing (Brooke 2019), or business and social work (Szenes & Tilakaratna 2021), yet has been criticized for issues including the vagueness behind the 'critical thinking practices' purported to underpin such writing (Szenes et al. 2015), issues around the ethics of assessing such writing (Beauchamp 2015; Szenes & Tilakaratna, this volume) and lack of clarity about the position of emotion, identity and context (Beauchamp 2015; Tilakaratna & Szenes 2020) as well as the role of pedagogy (Ryan & Ryan 2013).

Consequently, multiple studies focused on English for Academic Purposes (EAP) or academic discourse in general have revealed both the complexity and the underlying values that may be tacit in reflective writing (Szenes et al. 2015; Brooke 2019; Macnaught 2021; Szenes & Tilakaratna 2021). Such work has been successfully applied to reveal the forms and grammar of reflective writing to students (Ryan 2011; Ryan & Ryan 2013; Kirk 2017; Brooke et al. 2019; Macnaught 2021; Meidell Sigsgaard & Jacobsen 2021). This chapter therefore responds to such work by endeavouring to take

responsibility for the assessment practices enacted while being responsive to students and contexts. It reveals a new context of reflective writing practices by focusing on an undergraduate general science program, where students are developing academic language and language practices. It also focuses on reflective writing introduced to support a type of performance: academic presentations. The reflective self-assessments were designed to emphasize presentation practices and processes. Following Grossman's (2009) categorization, the reflective writing assessed in this course were mostly descriptive accounts of students' preparation and participation before and during their presentations.

Presentations in this chapter are taken to mean polished performances in which a speech is accompanied by a presentation product such as a slideshow or poster. They are therefore highly complex multimodal artefacts. An academic slideshow presentation includes a slideshow using appropriate software, which itself involves images, layout, sequencing, and language, and a speech by the presenter, who interacts with the audience. For in-person presentations, speakers typically stand in front of an audience, and interact both with the audience and with the slideshow through eye contact, gesture and body language (Hood 2020). Online presentations may be pre-recorded or live, the presenter may be visible in a video or simply heard through a voice-over, and they may interact with the slides using a mouse. These possibilities and constraints – both contextual and technological – are continually shaping and being shaped by the presentation and the presenter.

In order to discuss this topic, it is necessary to delineate the terms used: for the digital or physical object which accompanies the speaker, the format will generally be used as the label, such as slideshow or poster, or presentation product where a general term is required. The term presentation will thus be used to encompass the complete process of presenting, including the words and actions of the presenter, and the content and design of the presentation product, and those activities required before and during the presentation event for success. Similarly, reflection is used to refer to the processes of reflecting on students' experiences, while reflective self-assessments labels the specific tasks which are examined in this chapter.

Context of pedagogy

This study comes from an EAP course for first-year international Science students at a Canadian University. A focus on presentations was introduced in the second term of the two-term course in order to prepare students to present in their concomitant courses as well as in a subsequent student research conference. The preceding year, students had reported a wide range of previous presentation experiences and skills, with some having never presented with slideshow software while others had extensive experience with multiple formats in the Canadian high school system. Students had also struggled with the conventions of academic research presentations in the

previous year's conference, with many closely replicating their written reports in their slides and speech. While language support had been provided through workshops, an extended focus over a semester in this course would provide the opportunity to engage at length with multiple facets of presentations as well as have students present multiple times to better consolidate their knowledge and skills. The course, including teaching materials, assessment design, and assignments completed by students, therefore forms the focus for this study.

Data collection and selection

The textual corpus for this study is formed from the responses of 42 students to four separate activities over the 13-week term focused on presentations, although no single activity was completed by all students. The four activities included elements of survey and critical reflection in short responses:

1. Initial presentation skills survey (homework in week 1)
2. Pecha kucha reflective self-assessment (week 5)
3. Poster reflective self-assessment (week 9)
4. Final reflective self-assessment (week 13)

The first activity was an unmarked homework survey, asking students to rate with a 5-point descriptive scale their knowledge and familiarity with presentation formats, and their own presentation skills, as well as describe characteristics of successful or weak presentations, and their own strengths and weaknesses in presentation. The remaining three activities followed each presentation assessment and contributed towards the students' participation grade for the term, worth 5% of their overall grade. The second and third tasks used an identical structure, with two questions asking students to grade how well they prepared for the presentation, how well they supported their colleagues, and to justify those grades with 100-word responses, while a third question asked for advice on how to deliver that particular presentation format. In week 11, classes shifted online as part of the COVID-19 global lockdown. Therefore, the final reflective self-assessment was simplified due to the disruption to preparation and practices. It asked students for advice they would give someone delivering an academic slideshow presentation for the first time, with emphasis on the differences between online and in-person presentations. It also directed students to review their initial survey responses and reflect on what they had learnt the most about since the start of the semester. They rerated their familiarity with each of the presentation genres, identified which format they would present if given the choice, and explained why. For this task, full marks were awarded for completion. If students did not complete any task, they received zero for that activity. The dataset therefore consisted of 15 numerical responses, and 14 short-answer responses of up

to 100 words each, for up to 42 students. The dataset was collated after the end of term, after consent from students was obtained.

A pilot study of ten students' responses to all four tasks was initially conducted to develop and test the analytical methodology described below. The numerical responses to the initial survey were then used to select a sub-corpus for this study. Students' self-ratings from the initial survey on their familiarity with presentation formats and their confidence with presentations were averaged and sorted. The six lowest and highest responses to the two questions were identified and used to compile two sets of students with significant overlap between questions, in order to investigate students with a range of previous experience and perceived talent. Nine students were therefore grouped as 'low confidence students', some of whom had not completed or partially completed all tasks, while seven were 'high confidence students', for a total of 16. The four tasks for the 16 students were then coded and analyzed, and their responses to the second and third activities selected for discussion.

For any examples given, a three-factor code is used, with 1 or 2 for the low or high confidence students respectively, a unique letter to identify each student within each group, plus a number to indicate the task the response comes from (1–4). For example, a high confidence student's response to the final reflective self-assessment is coded as [2C4]. Examples have been lightly edited to correct typographic or punctuation errors which may lead to misinterpretation but are otherwise as students submitted.

Methodological framework: From Specialization to translation

Specialization and the 4-K model

The LCT dimension of Specialization (Maton 2014) is useful for this study as it explores the different ways artefacts, practices and people may be specialized as legitimate and successful. This enables the discussion of aspects of presentation ranging from the presentation product itself to the presenters' behaviours, attitudes and practices. Specialization identifies *epistemic relations* (ER) between knowledge practices and their objects of study, and *social relations* (SR) between knowledge practices and their subjects. Each of these relations can be independently emphasized (+) or downplayed (–) as the basis of legitimacy. These strengths are represented as continua of strengths to create the specialization plane, shown in Figure 6.1, which generates four principal *specialization codes*, each with stronger and/or weaker relations.

Specialization codes are particularly useful to analyze situations when there are clashes between actors or changes over time in whether a practice is legitimated by, to put it simply, knowledge or knowers or both or neither. For presentations, we can consider the object of study to be the content and presentation product itself (the slideshow or poster), while the subject of study is the student presenter. Thus, presentations involve both 'knowledgey' and

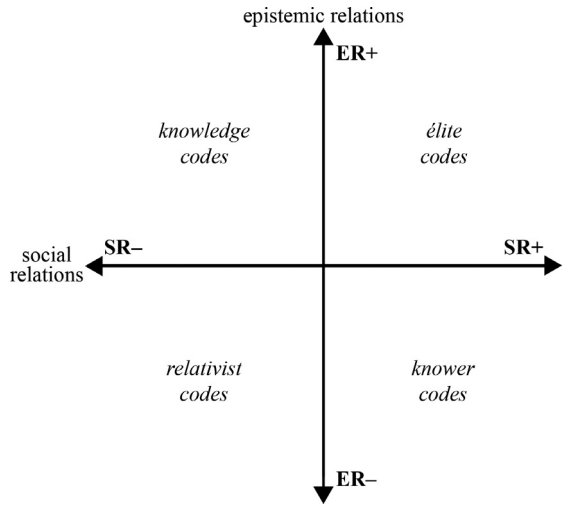

FIGURE 6.1 The specialization plane
Source: Maton (2014: 30)

'knowery' features, which can be emphasized separately or together at different times while still producing what may be judged as a successful presentation. This chapter, however, will go deeper by using the 4-K model to tease apart exactly what aspects of presentation knowledge and/or which characteristics of presenters were important.

As described in Table 6.1, the 4-K model subdivides epistemic relations into *ontic relations* and *discursive relations*, subdivides social relations into *subjective relations* and *interactional relations*. The title of the model reflects what each relation is to: ontic relations (OR) are to what is or may be *known*; discursive relations (DR) are to other knowledges; subjective relations (SR) are to characteristics of *knowers*; and interactional relations (IR) are to ways of *knowing*. Each may be more or less emphasized as the basis of legitimacy. So, when epistemic relations are stronger, either or both ontic relations and discursive relations are stronger, but if epistemic relations are weaker, both these sub-relations are weaker. Similarly, when social relations are stronger, either or

TABLE 6.1 The 4-K model

		Relations to:
epistemic relations (ER)	ontic relations (OR)	Known
	discursive relations (DR)	Knowledges
social relations (SR)	subjective relations (SubR)	Knowers
	interactional relations (IR)	Knowing

Source: Maton (2014)

both subjective relations and interactional relations are stronger, and social relations are weaker, both sub-relations are weaker. These concepts allow us to delve deeper into what an emphasis on specialized knowledge or special knowers as the basis of legitimacy might mean.

The *epistemic plane* of Figure 6.2 involves ontic relations (OR) and discursive relations (DR) whose strengths generate four *insights*. *Situational insights* (OR+, DR–) emphasize what is known, such as what is a legitimate object of study to talk about in a presentation, while downplaying knowledges, such as ways to construct a presentation. *Doctrinal insights* (OR–, DR+) downplay what is known, such as being open to any topic for presentation, but emphasize how it should be discussed. *Purist insight* (OR+, DR+) emphasize both the known and knowledges. *Knower/no insights* (OR–, DR–) downplay both the known and knowledges – if social relations (which are not on this plane) are relatively strong, it is 'knower' and if they are relatively weak it is 'no'. *No insights*, associated with open situations where anything may be acceptable and legitimate, do not appear in this study.

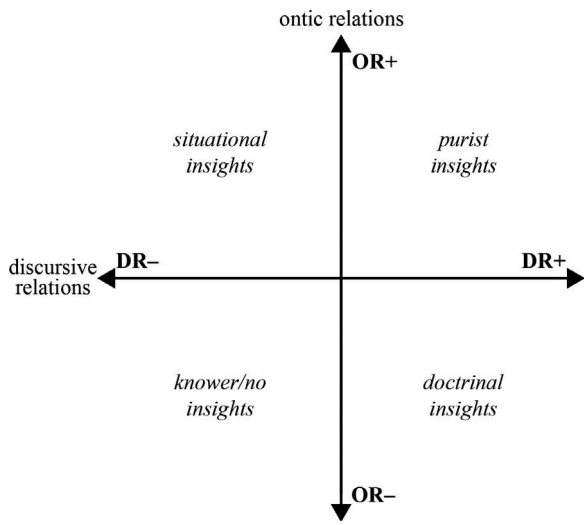

FIGURE 6.2 The epistemic plane
Source: Maton (2014: 99)

The *social plane* of Figure 6.3 involves subjective relations (SubR) and interactional relations (IR) whose strengths generate four *gazes*. *Social gazes* (SubR+, IR–) emphasize categories of knowers, such as characteristics of presenters, while downplaying ways of knowing, such as presentation behaviours. *Cultivated gazes* (SubR–, IR+) inverts these emphases. *Born gazes* (SubR+, IR +) emphasizes both characteristics of knowers and experiences of knowing. *Trained/blank gazes* (SubR–, IR–) downplays social relations in all forms (and which gaze depends on the strengths of epistemic relations: stronger gives a *trained gaze* and weaker gives a *blank gaze*).

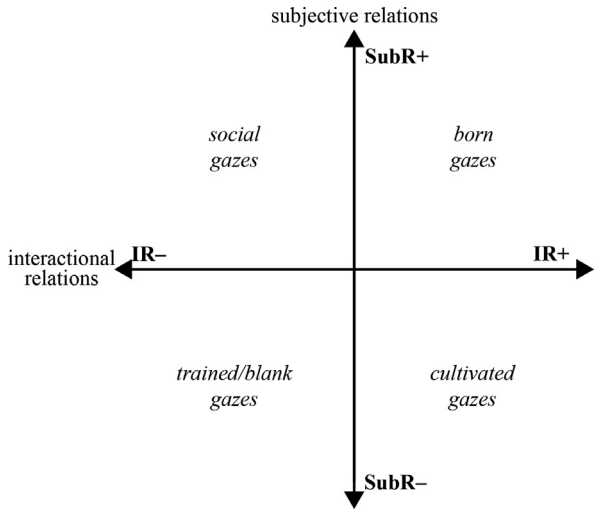

FIGURE 6.3 The social plane
Source: Maton (2014: 186)

In investigating both insights and gazes in presentations, it is important to make clear that this is not suggesting that presentations are fundamentally *élite code* (ER+, SR+; see Figure 6.1). Rather it is suggesting that presentations always involve both a presentation as object and presenter as subject and therefore it is useful to consider these aspects together. However, these concepts are very abstract, so to investigate both my teaching and my students' responses empirically, a *translation device* is required.

A translation device for 4-K model in presentations

A translation device is a way of relating concepts to a dataset by identifying signs of manifestation in that dataset (Maton & Chen 2016). I drew on both my own goals and materials for teaching and the students' survey responses and reflective self-assessments to identify common themes and, through processes of soft-focus and hard-focus analysis involving immersion in the data and iterative movements between concepts and data (Maton & Chen 2016: 42–43), create and refine the translation device. The translation device for the 4-K model in presentations is summarized in Table 6.2. The four sets of relations will be described separately under the higher-level concepts of epistemic relations (presentation knowledge) and social relations (presenters' characteristics and experiences) along with examples from all four reflective activities, where each set of relations is clearly emphasized. Insights and gazes will be described as relevant in the following discussion.

TABLE 6.2 Translation device for 4–K model in presentations

Specialization		4–K	Translation	Manifestations
epistemic relations (ER)	ontic relations (OR)	known	content or context	topic, information, science knowledge, specific pictures or language
	discursive relations (DR)	knowledges	technical skills or preparation	design, voice modulation, technical know-how, procedures and (solo) practice
social relations (SR)	subjective relations (SubR)	knowers	talent or confidence	emotion, nervousness, confidence, non-native-speaker status
	interactional relations (IR)	knowing	interaction or practice	audience interaction and engagement, eye contact, practice with peers or instructors, feedback

Presentation knowledge

Epistemic relations in a presentation relate to an emphasis on what is being presented and how it is prepared. Ontic relations have been translated as referring to content or context, especially when they are controlled or controlling. In Example 1, the student's advice on how to give a pecha kucha presentation began with an emphasis on the content, both in terms of the topic and the pictures themselves, while Example 2 explained a preference for a slideshow presentation in contrast to the pecha kucha due to the formats' features:

Example 1

> [1E2] I think there are some suggestions for a pecha kucha. First, I think it'd be better not to choose a topic with abstract things. Because it is really difficult to prepare pictures for the slides.

Example 2

> [1A4] PPT presentation is more flexible than the pecha kucha presentation since we can control the time for each slide.

The student responses strengthen ontic relations through emphases on the topic of the presentation itself, specific information or science knowledge, as well as specific pictures or language related to the topic or format. The strict format of the pecha kucha – strict automatic timing, with only pictures on slides – resulted in several responses reacting to the constraints of the format and consequently emphasizing the importance of the topic.

Discursive relations have been translated as an emphasis on technical skills or preparation. In Example 3, a student at the end of semester evaluated his

skill development by alluding to procedural knowledge in the 'proper way' to prepare as well as to pedagogical activities.

Example 3

> [2G4] I think 'Talking on a topic I know but without a script', 'Writing text for a poster' are the skills that I improved effectively. I have mostly learnt about the proper way to get any text ready for a poster presentation and creating links to give an effective speech without a script. All the activities helped me to inculcate the ideas which helped me to perform well in the assignments.

The student responses which related to presentation design, public speaking, and solo practice with repetition rather than interaction with an audience strengthened discursive relations.

Presenters' characteristics and experiences

Social relations were also present in the corpus as an emphasis on the presenter and practices involved in the presentation. Subjective relations have been translated as relating to talent or confidence. Stronger subjective relations in student responses often involved references to confidence or nervousness, demonstrated respectively in Example 4 by a high confidence student assessing his own skills, and in Example 5, where a low confidence student suggests the reasons a presenter might be less successful.

Example 4

> [2G1] I think my strongest skill in presenting is being confident. I don't have a fear of people whether it's 10 or 1,000 in number. I think this skill is inherited from my mother because she is a very good orator and my idol as well.

Example 5

> [1E1] I think sometimes the speaker might be nervous so that they couldn't do well, like forgetting words, speaking unclearly.

Social relations manifested as references to emotion, and to characteristics of the presenters represented as stable and essential, such as their self-described non-native speaker status, which were more significantly present in the initial reflections at the start of the semester, before the course emphases were clear. By contrast, subjective relations were rarely emphasized in the end of semester responses, with a few exceptions where the students emphasized their own

inexperience and subsequent increase in confidence. Although not a major emphasis in this study, it is useful to identify subjective relations because it can raise awareness of negative self-talk which harms students' ability to achieve, as well as highlight positive emotions that result from learning (see Tilakaratna & Szenes 2020).

Interactional relations are translated as relating to interaction or practice, where interaction can be with an audience during a presentation, with peers during practice or with a significant other such as an instructor. Example 6 focuses on audience engagement when describing common mistakes presenters make, Example 7 shows an example of apprenticeship-style interactions, while Example 8 describes the student's preference for in-person presentations.

Example 6

> [2C1] I notice that sometimes presenters do not care about how audiences feel and what they think. Presenters just do their jobs and read their scripts. And they may read really quick and they do not pay attention to whether audiences understand or not. I think sometimes they need to speak slower and clearer.

Example 7

> [1B3] In addition, I go to the office hour twice to talk with Jodie and check my poster. The images that I choose are all relate to the paragraph and I choose several images and picked the best four. For the hook,[1] after talking with Jodie, I tried to find the most interesting points for my poster. I did lots of work, so I want to give myself 5 out of 5.

Example 8

> [2A4] I kind of like doing a PowerPoint presentation in-person. When actually facing someone, you are making interactions. You are giving and receiving eye contact, body language, which makes you feel like you and your audience are all engaged in the presentation. It feels more comfortable than talking to no one.

The practices associated with stronger interactional relations were particularly highlighted when students switched from face-to-face to online presentations as a consequence of the sudden shift online due to COVID-19 in 2020, and often their preference for a format referred to audience presence or absence, revealing the importance of interactional relations.

These examples have demonstrated how the 4-K model manifests in this dataset, revealing nuances in values and priorities, which shifted somewhat between the beginning and end of the semester, and with the introduction of

emergency remote education. The next sections will apply these concepts to reveal the main emphases of reflective self-assessment in this study, in instructional and assessment design, and in student responses.

Reflecting on reflective self-assessments

Why I introduced reflective self-assessments

As the instructor, I chose to introduce reflection activities at a point of need, and it is worth exploring why I did that and how I endeavoured to do so responsibly. I was concerned students were not recognizing or valuing the practices and processes I was teaching as vital for presentation success. The semester involved reiterative assignments: the students presented one research article in three presentation formats. Students were free to choose any article related to science that interested them, therefore ontic relations were not emphasized. This was important as students in a general science program studied a range of courses, all of which the Academic English course supported. Instead, I focused on the practices associated with preparing a good presentation product: the design elements such as image selection and placement, semiotic elements such as the logical relationships between images and language (Roehrich 2016), and linguistic elements such as the grammar of bullet point form in slides. That is, I emphasized technical skills and practices, or discursive relations. As such, my teaching presented a doctrinal insight (OR–, DR+), where they learned skills and practices that could apply to any topic and across the three formats.

Subjective relations were also relevant to my teaching. The decision to focus a whole semester on presentations was underpinned by an endeavour to *cultivate* students into presentation skills by giving them extended experience; that is, I actively tried to weaken subjective relations by emphasizing that talent and confidence were less important than practices that would help everyone present well. I emphasized interaction by encouraging audience awareness and engagement through eye contact, posture, and voice, and by having students help their classmates in practice sessions. Overall, I was implementing a *cultivated gaze* (SubR–, IR+) to endeavour to help both high and low confidence students to present well.

The reflective tasks which bookended the term were always planned, but after the first presentation I decided to introduce and designed the reflective self-assessments. Despite an explicit schedule with a week for teaching the presentation format and relevant semiotic and linguistic features, and a week for working on the presentation in class, students arrived at the third week unprepared or underprepared to practice their presentation with their classmates.

I designed the assessments to be cumulative and was concerned students would approach the presentations separately and fail to transfer what they learnt to the next presentation. I was also concerned they did not recognize the procedures of design and the processes of practice and participation as part

of the presentation process. I wanted to ensure that students became aware of what they could do to be successful in subsequent presentations, within and beyond the course. I therefore introduced the reflective self-assessments to draw attention to specific behaviours, but endeavoured to do so responsibly.

How I designed reflective self-assessments

I was actively concerned at the time that students had had limited experience and instruction in reflective writing and that in evaluating that writing, I may unintentionally overvalue writing which happened to match my cultural expectations (see Tilakaratna & Szenes, this volume), or which gratified my ego as a teacher. Nevertheless, I wanted to encourage students to reflect on their experiences and build on them in subsequent assignments. I mitigated my concerns about writing by using short answer (100-word) questions. I mitigated my concerns about assessment by asking students to evaluate their own behaviour and justify it with the writing. Spinelli (2019) highlights self-assessment and self-evaluation as a strategy to encourage self-awareness through reflection. In marking the students' first reflective self-assessment, I validated their grade and only made adjustments of half a mark in a couple of cases which will be discussed below. The marks were also allocated to their participation grade; 27 marks were allocated across the three reflective self-assessments, worth 5% of their overall mark. Therefore, the difference in assessing themselves with a mark or two higher or lower would not have a significant impact on their overall mark, while still prompting them to consider their practices and justify them in their written responses. Ultimately, I was less interested in the validity of the marks they allocated themselves as in their ability to identify factors in their own success.

An analysis of my assessment design reveals a match with my instructional design. I focus here on the two main questions in the pecha kucha and poster reflective self-assessments. The first self-assessment question asked students to give themselves a grade based on how well they prepared for each presentation and detailed the activities they had been expected to perform in class:

Pecha kucha reflection question 1:

> Give yourself a grade out of 5 for how well you prepared for the pecha kucha. This includes making the most of time in class to find the article, read it, find images, assemble your presentation in PowerPoint, and write your script. A grade of 5 indicates that you maximized your work in class.
>
> Explain IN AT LEAST 100 WORDS why you have given yourself this mark.

Poster reflection question 1:

> Give yourself a grade out of 5 for how well you prepared for the poster presentation. This includes making the most of time in class to adapt your text for the poster, design the poster, format the text, images and data representations for the poster, and prepare what you would say as your hook and to discuss your poster. A grade of 5 indicates that you maximized your work in class.
>
> Explain IN AT LEAST 100 WORDS why you have given yourself this mark.

Both questions emphasized what counted as successful preparation: that a perfect grade indicated that the student had 'maximized [their] work in class'. Therefore, it emphasized discursive relations by asking students to evaluate how they had followed the procedures of preparation. It did not ask them to evaluate the presentation product itself, such as the quality of the images for the pecha kucha or the design of the poster; therefore it did not emphasize ontic relations, implying a doctrinal insight (OR–, DR+).

The second self-assessment question asked students to give themselves a grade based on how well they participated with their colleagues before each presentation and detailed the different ways they were expected to participate in class and with each other:

Pecha kucha reflection question 2:

> Give yourself a grade out of 5 for how well you helped your colleagues prepare and practice their pecha kucha presentations. This includes the feedback you gave during the practice classes as well as any other times you helped them inside or outside class. A grade of 5 indicates that you gave detailed feedback, helped them to improve their presentation significantly and gave that feedback almost entirely in English.

Poster reflection question 2:

> Give yourself a grade out of 5 for how well you helped colleagues by giving them feedback and assistance with slide design; and how you discussed their posters with them on the presentation day. A grade of 5 indicates that you gave detailed feedback, helped them to improve their presentation significantly and gave that feedback almost entirely in English.
>
> Explain IN AT LEAST 100 WORDS why you have given yourself that mark.

These questions emphasized the types of interaction that would be legitimate and would add to students' achievement, both for their presentations and their language development. It emphasized how I wanted and expected them to behave as students but related the behaviour to other students' achievement, rather than their own. Therefore the question asked for an emphasis on interactional relations. It did not ask them to rate their confidence as the initial reflective survey had; it therefore did not emphasize subjective relations. Overall, these questions suggested a cultivated gaze (SubR–, IR+), complementing the doctrinal insight of the first question and highlighting the values of instruction.

How students responded to reflective self-assessments and what that reveals

On the whole, students' written responses matched the emphasis on discursive relations asked by the first question and the emphasis on interactional relations asked by the second question in both reflective self-assessments. Their responses reveal that these emphases were made not only through recounting the relevant experiences prompted by the questions, but also by drawing on and interpreting other experiences from both inside and outside the classroom. This section presents examples of responses to each question which matched the asked-for emphasis, as well as a response which did not. Together these reveal the diverse practices and experiences which can contribute towards the success of an academic presentation.

The first question asked students to rate their preparation and therefore recount how they prepared. For the most part, students recounted what they did and therefore based their self-assessed score on following those procedures. One clear example comes from a high confidence student who gave a particularly successful and memorable pecha kucha presentation; however, she had had difficulty at first selecting an article in class, delaying her processes. Her reflection in Example 9 ultimately attributes her achievement not to following the in-class procedures, but in practicing by herself at home, another legitimate preparation strategy. Therefore, both her failure and her success established what counted as legitimate for presentations through an emphasis on discursive relations.

Example 9

> [2B2] I give myself a 4. I spent too much time in class to find an article so I didn't have much time left in class to find image and practice. I did most of the work at home but I successfully completed and practiced at home so I think. It wasn't a big deal. I sometimes get attracted [distracted] in class too so I actually find myself more efficient doing stuff at home or alone. I think my presentation went well as I spent a lot of time practicing over and over to make sure I don't get stuck in such a limited time.

Most responses emphasized discursive relations and some also emphasized other sets of relations, both epistemic and social. Students could therefore generate a successful presentation and reflect on different values and bases of that achievement in their reflective writing and still be graded successfully (especially as it was self-assessment). There was, however, a key target for the task which can be identified from the few instances where I critiqued a student response as inappropriate and adjusted the grade by half a mark. For example, following the poster presentation, one of the high confidence students provided the response in Example 10 to the first question.

Example 10:

> [2D3] I think I can get 4.5 in this section because I think I did a quite good presentation and a nice poster. I like the design of the poster and images. However, the poster has too much words and the size is quite small, and the data from the graph is unclear enough. As for the presentation, in the hook part, I did attracted audience and let them to listen my presentation. When I discussed my poster, the flow was good and I can discuss with the audience because the topic I chose related to everyone. The images in the poster might attract audience, but it might distract the main part of the poster.

Unlike other responses to this question for both presentations, including by this student, this response neither focuses on the actions of the student leading up to the presentation, nor legitimizes other foci with an emphasis on discursive relations. Instead, it evaluates the poster itself and the presentation. As such, it emphasizes ontic relations – that is, the content and form of the poster. Even the mention of discussion with the audience, and how the poster attracted the audience, which could emphasize interactional relations, was predicated on the choice of topic as relevant to the audience. I did not give feedback on most of the responses, and mainly ratified the marks they awarded themselves as long as there was some justification and I had not directly observed contradictory behaviour. For this response, however, I gave a brief statement: 'This was supposed to be a reflection on your preparation not your performance', and I lowered the mark he had awarded himself from 4.5 to 4; misunderstanding the task did not seem too great a mistake to penalize significantly.

The second question asked students to evaluate their participation with colleagues. One of the high confidence students detailed in Example 11 how he helped students prepare and directly related the use of English to their success.

Example 11

> [2C3] Since I didn't attend the poster practice day, I will not talk about giving feedback about their poster design. I will give myself 4.5 out of 5

> on discussions about their posters on the presentation day. This is because I tried hardly to ask questions and go around check their posters in order to make them be well-prepared. And I was speaking English all the time to help my classmates get ready. If I speak other language to them, then this whole process will be meaningless because this can't help them to be prepared. I hope they can do well on this presentation and I would like to give them a helping hand when they need.

In this way, he emphasized interactional relations quite strongly, even though he chose to focus on participation on the day of the assessment, rather than in the preparation and practice weeks. By contrast, a low confidence student in Example 12 did not see the relevance of interaction, although he appreciated the technology which let them edit posters (pod screens displayed the posters from laptops, rather than printing them).

Example 12

> [1H3] Actually I think it is not that helpful for us in this part. We had already been so busy and tough understanding our own content of article. The advice we can trade is so limited. But one thing is important that we can give useful advice on the format of the post instead of its content. It is a good way to present the poster on the screen for preview. We can adjust poster arrangement in time and find out which part we need to improve on the format.
>
> In general, I think it is a relatively individual job.

By minimizing the importance of giving feedback to colleagues, this student downplays interactional relations and instead emphasizes discursive relations. Essentially, he adopts a trained gaze (SubR–, IR–), or, in specialization codes, a knowledge code (ER+, SR–) rather than a knower code (ER–, SR+). I deducted half a mark from the student's self-assessment, especially as I had noticed this student's lack of participation in class.

Overall, students responded to the self-assessment prompts by describing specific activities as directed, focusing on preparation and participation. They emphasized discursive relations and interactional relations as the basis for their success, though sometimes they also emphasized other sets of relations, both epistemic and social. The only times students were marked down was when they exclusively emphasized other relations or downplayed the targeted relations. The 4-K analysis of these responses provides insight on why both reflection and performance may require diverse ways of achieving a successful presentation be recognized.

Conclusion

This chapter reflects on a pedagogical intervention introducing reflective writing to consolidate and improve performance of academic presentations. It

offers an example of designing and assessing such writing in a way which aims to be responsive to students' multiple starting points of knowledge, confidence and experience, and multiple pathways to creating a successful presentation event. Using the 4-K model for analysis, it reveals that through both instruction and assessment design I emphasized particular procedures and practices for presentations, and that almost all students matched these emphases with multiple experiences, sometimes supplementing with additional emphases.

This chapter focuses on two questions from two reflective self-assessments, each following an academic presentation performance. They were created as low-stakes, in-class activities, including self-assessment by students to encourage reflection while avoiding teacher bias in assessment. For the first question on preparation, students were prompted to demonstrate stronger discursive relations by identifying principles and procedures involved in the presentation. For the second question on participation, they were prompted to demonstrate stronger interactional relations by identifying practices and interaction with each other or the instructor before or during the presentation event. The few instances where the short answer responses were deemed less appropriate often involved the wrong experiential focus in their responses, suggesting the importance of identifying the relevant experiences in reflective writing and explaining the requirements of the task. A focus on the wrong object, experience, or activity makes it difficult if not impossible to demonstrate that the activity is legitimized by the appropriate actions and behaviours and therefore matching the required emphasis on relations. While the examples included showed clear examples either matching or failing to match an emphasis on discursive relations and interactional relations respectively, this did not mean all other relations were downplayed; students also variously emphasized other sets of relations, both epistemic and social, not only without penalty but sometimes more effectively.

Therefore, specifying relevant experiences to reflect on did not restrain students from drawing on other experiences which demonstrated the same emphases on preparation or participation, and encouraged the vast majority to meet that expectation. Including self-assessment allowed students the opportunity to critically reflect on their experiences, without expecting the performance of a different type of writing that had not been explicitly taught. The assessment practice described in this chapter therefore provides an example of an effort to include reflective writing in a way that consolidates knowledge and facilitates transfer, endeavouring to be responsive to students' needs and diverse abilities, and take responsibility for assessment practices.

Note

1 The 'hook' was a one-minute speech to the class before the poster presentations to encourage audience members to come and see their poster and talk to them about it. It was introduced based on experience and suggestion of the graduate teaching assistants.

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7

TEACHING CRITICAL REFLECTION IN EDUCATION DIPLOMA PATHWAYS

A pedagogic intervention

Daniel O'Sullivan

Introduction

This chapter reports on part of a pedagogic intervention in Education units within a Diploma program at an Australian institution. The aim of the intervention was to address challenges in ensuring international students in pathways to initial teacher education (ITE) develop the discipline-specific knowledge and language practices required for success. The work presented here focuses on the design and delivery of materials targeting the critical reflection practices used to assess students' learning. The primary challenge was to develop an approach to teaching critical reflection that is accessible, teachable and learnable, in order to have a transformative impact on the learners in particular but also on teachers. The intervention used Legitimation Code Theory to explore and shape knowledge practices, motivated by a need to address the relatively opaque nature of critical reflection practices in teacher education. This chapter describes the pedagogic choices I made as a practitioner, making this a meta-reflection on what was relevant and useful in a complex and often challenging situation.

The chapter begins with a brief introduction to some of the challenges in teaching and learning critical reflection in ITE, to the theoretical foundations of the intervention and to Diploma Pathways programs in Australia. The following sections deal with the enactment of the concept of *semantic gravity* and *semantic profiles* from Legitimation Code Theory (Maton 2013, 2014b, 2020) in the intervention. The first discusses how the concepts served as the basis of an analytic framework for revealing the organizing principles of critical reflection and providing a lens for analysis *of* practice. The framework was operationalized to analyze relations between a model text and the task prompt which it addresses, and to predict semantic structures from task prompts. The

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second section addresses how knowledge was embedded within the intervention to enable analysis *for* practice. It discusses the principles that underpinned the design of the intervention to make the materials accessible, teachable and learnable. It concludes by using feedback from students, the unit leader and external moderators to demonstrate the efficacy of Legitimation Code Theory in revealing the organizing principles of critical reflection and in guiding principled pedagogic design.

Critical reflection in initial teacher education

Critical reflection is widely accepted as crucial in the preparation and professional development of novice teachers (e.g. Hatton & Smith 1995; Jay & Johnson 2002). This highly valued form of reflection requires teachers to relate disciplinary theory, approaches and concepts with their own beliefs, values, experiences and practices (Ryan 2011). Throughout the stages of ITE, pre-service teachers (PSTs) are expected to engage in reflection to mediate between existing and new knowledge (Cohen-Sayag & Fischl 2012), to challenge preconceived ideas and beliefs about approaches to teaching and learning (Brandenburg 2021), and ultimately to metamorphosize into a 'reflective practitioner', a common characteristic of a successful professional educator (e.g. Schön 1983; Adler 1991; Jay & Johnson 2002; Bahr & Mellor 2016). Within units, PSTs are assessed on the ability to critically reflect on their engagement with conceptual and contextual knowledge, and socialization into disciplinary and professional communities with specialized methods of inquiry, dispositions and ways of knowing/being. However, critical reflection skills are often treated as 'perceptions' rather than as 'practices' (Szenes et al. 2015). The dominance of a 'subjectivist doxa' (Maton 2014a) sees critical reflection being reduced to states of consciousness and mental processes, reducing the significance of *what* is being critically reflected on. Consequently, rather than explicitly training students how to write sound critical reflection assessments, they are often left to intuitively produce texts (Brooke 2019). Not unsurprisingly, few PSTs attain the higher levels of critical reflection expected of a graduate (Cohen-Sayag & Fischl 2012).

For PSTs to be apprenticed into disciplinary practices of critical reflection, they must learn how to engage with knowledge, specialized procedures, skills and ways of thinking (Maton et al. 2016: 75). The organizing principles of these practices can be revealed by using the dimensions of Legitimation Code Theory to analyze different aspects of the basis of practices. The dimension of Semantics has been used to analyze the structures and forms of knowledge (practices) in successful critical reflection (e.g. Szenes et al. 2015; Brooke et al. 2019) and reflective writing (e.g. Ingold & O'Sullivan 2017; Kirk 2017). Within ITE, studies are demonstrating the potential of Semantics to address challenges of reflective and academic writing (e.g. Stevenson et al. 2018; Macnaught 2020; Meidell Sigsgaard & Jacobsen 2021), to investigate PST's pedagogic reasoning (Langsford 2021), and to respond to demands for

inclusive education (Walton & Rusznyak 2019). This chapter contributes by reporting on an intervention that aimed to make the practice of critical reflection visible, teachable and learnable in an Education Diploma course.

Legitimation Code Theory: Semantic gravity

Legitimation Code Theory is a framework for researching and changing practice (Maton 2014). It includes different sets of concepts called 'dimensions' that explore different facets of practices. This chapter draws on one concept from Semantics: *semantic gravity*, which explores context-dependence (Maton 2013, 2014a, 2014b, 2020). Semantic gravity conceptualizes the context-dependence of practices along a continuum of possible strengths. The empirical forms in which the semantic gravity of practices are expressed is often different in each object of study. In this project, the relative strength of context-dependence is related to the content of critical reflection and what students are expected to include in their reflective writing. Relatively stronger semantic gravity is related to the specific scenarios, experiences and events at particular places and times. These include the students' previous education and their experiences as PSTs in the course and during their professional placements in local schools. Thus, stronger semantic gravity is associated with descriptions of teaching observations, materials and lesson plans because these are more context-dependent. Relatively weaker semantic gravity is related to the educational theories, concepts and models that students are introduced to in their weekly tutorials and course materials across the two units, and which are not so contextually limited. These forms of knowledge were bound within the curricular content and included learning theories, such as Behaviourism, Cognitivism, and Constructivism, and foundational concepts such as curriculum, pedagogy, and assessment.

Semantic gravity can also be dynamized to analyze changes over time in knowledge practices. Semantic gravity can be weakened by, for example, drawing generalizing principles from the specifics of a particular context or strengthened by, for example, exemplifying abstract ideas with specific contexts, practices and experiences. Analysing shifts in the strengthening and weakening of semantic gravity over time can be traced as *semantic profiles* (Maton 2013, 2014a, 2014b, 2020). This analytic is being widely enacted in studies of educational practices (for example Szenes et al. 2015; Clarence 2017; Kirk 2017; Brooke 2019).

The *semantic range* of a semantic profile indicates the difference between the strongest and weakest strengths of semantic gravity (Maton 2014a, 2014b). As there may be limits to how abstract and generalized one's knowledge is expected to reach at different stages of education, learning the appropriate semantic range appropriate to different situations is one aspect of being inducted into a subject area (Maton 2013; Georgiou 2016). Students enrolled in Education Diploma units are at the very early stages of ITE and are only beginning to learn about education as a practice and a discipline, requiring a relatively limited semantic range. As they progress through ITE, the semantic range required for success is likely to increase.

Profiles can take many forms. A semantic gravity *wave* indicates recurrent shifts in the strengths of semantic gravity (Maton 2013, 2020). Waves can themselves take many forms, such as starting and ending at different strengths. Within written assessments in these units, these entry and exit points of a wave are influenced by the order of questions in a task prompt. For example, the first question within a task prompt (see Figure 7.1) may focus on a specific scenario or experience (A), which would indicate a relatively lower entry point, or on a theory or concept (B), which would suggest a relatively higher entry point. The follow-up question(s) may strengthen and/or weaken semantic gravity and the final question indicates a likely exit point. The resulting semantic profile, semantic range and entry and exit points may thus be closely related to the progression of questions in the task prompt.

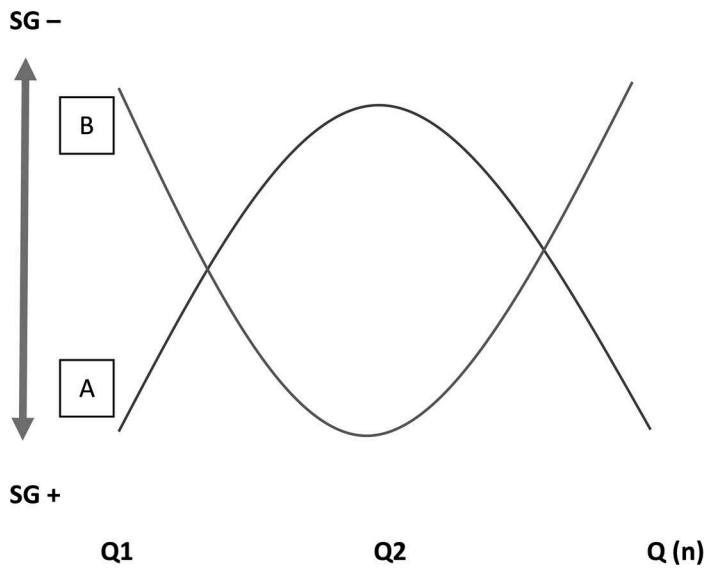

FIGURE 7.1 Changes in semantic profile depending on the nature of questions in a task prompt

Within the intervention, *semantic gravity* and *semantic profiles* were used in two ways. The first was as the basis of a framework for the analysis *of* critical reflection practices. The second was to inform the embedding of theory *within* pedagogic practices.

The context of the intervention

Pathway programs are a feature of the Australian higher education system that prepare and orient students to participate in the language and academic cultures of Australian tertiary institutions (Murray & O'Loughlin 2007: 7). Diploma Pathways specialize in offering discipline-specific courses that develop the

requisite foundational knowledge, and English for academic purposes (EAP) skills to meet entry requirements for a specific degree. A feature of these courses is a conditional offer that guarantees a place in the first or second year of a Bachelor degree upon successfully completing the course and meeting any additional admissions criteria, making them popular with international students. Despite strict entry criteria regarding English proficiency, there are no common exit standards for pathway programs (Murray & O'Loughlin 2007: 11). While pathways indicate that students have met the English as language of instruction entry requirements, they do not imply that students have the required communication skills to successfully complete their subsequent university course (Arkoudis 2014: 29). A critical issue for the pathways sector is thus addressing perceptions about the quality and effectiveness of pathways programs in relation to international students' English competency and their transition to tertiary study.

Education pathways play an important role in ensuring students have developed the requisite discipline-specific foundational knowledge and English language skills to meet university entry requirements and set them up for success in their destination ITE degrees. As critical reflection is a highly valued practice within teacher education, understanding what is required is vital for pre-service teachers (PSTs) to demonstrate their learning and growth as they become a professional reflective educator (Stevenson et al. 2018; Macnaught 2020). Throughout the stages of their journey, PSTs will be assessed on their ability to reflect on relations between accumulated curricular knowledge and the professional practice of teaching. Making critical reflection practices explicit and accessible to pathways students is thus essential.

The pedagogic intervention reported on here was based in two successive core units of an Education Diploma pathways program. The primary aim was to create materials and develop pedagogic practices which help students master the specific forms of language used to assess their learning, thus establishing stronger links between the institution's English language outcomes and the units' academic and disciplinary content objectives. This provided a unique opportunity for collaborative work that enabled the author, an English and academic language specialist with extensive EAP experience, to work alongside a content specialist in developing effective forms of learning support for students making a transition into the specific disciplinary context of ITE. The pedagogic materials were designed by the author with input from the content specialist and approval from the Academic Language and Learning Manager. A project plan was jointly negotiated and resulted in the design of materials for sixteen sessions that were embedded within tutorials across both units. The content specialist delivered the materials, which were taught face-to-face during the tutorials. Seven were dedicated to providing clear specific guidance on how to approach, make sense of and respond to the critical reflection assessment tasks across the two units.

Supporting students in understanding what was expected in assessment tasks presented a challenge: although they alluded to notions of 'reflection', the nature of these tasks was relatively opaque. Through analysis and consultations with the content specialist, the author identified that assessment tasks were characterized by a need to relate more context-independent meanings, such as conceptual understanding of learning theories or the role of curriculum in teaching, to more context-dependent meanings, such as past educational experiences in classrooms as a student or specific lessons observed as part of their professional experience placements in a local school. Making these organizing principles visible to students became a primary focus of the intervention.

Making critical reflection visible in diplomas

Semantic gravity and semantic profiles can be used as a pedagogic tool for analysis *of* practices to clarify expectations in critical reflection assessments. Analysis of critical reflection tasks reveals that what is valued is movements between different forms of knowledge, or semantic waves, which weave together more context-dependent forms of knowledge, such as practice, with less context-dependent meanings, such as theories and concepts (e.g. Szenes et al. 2015; Brooke 2019; Brooke et al. 2019). Analysis of successful critical reflection assessments suggests that higher grades can be achieved when descriptions and interpretations of personal experience are pushed 'higher' by weakening semantic gravity, e.g. through engagement with academic theory (Kirk 2017: 112). The explicit presentation of semantic waves equips students with a theoretical lens through which they can "genuinely transform their understanding of a critical incident or pattern of experience, enabling new understandings and the potential for new or revised future action" (Kirk 2017: 112). Semantic waves have been shown to be a prominent feature of successful academic writing, especially in teacher education where students are expected to integrate theory with practice, reflect on their practice, and use theory to inform practice (e.g. Macnaught 2020; Meidell Sigsgaard & Jacobsen 2021).

In the intervention, semantic waves provided a useful analytical lens to show students not only *what* types of knowledge were expected within the assessment tasks but also *where* and *how* to shift between writing about more abstract theories and concepts and about their more specific experiences. Assessments across the two units were all characterized by a need to relate more context-independent meanings to more context-dependent meanings. To make these organizing principles visible to students, semantic waves were operationalized in two ways; to analyze the relationship between a task prompt and a model text, and to deconstruct task prompts to identify predictive semantic structures.

Relating task prompts to model texts

Semantic waves were used to scaffold understanding of the relationship between a task prompt and a model text. A prompt was selected, and a model text was written that was judged by the content specialist to successfully address the assessment task criteria. This text was then analyzed to identify changes in the relative strength of semantic gravity and trace a semantic profile. This generated a relatively simple visualization of the text as it progressed across paragraphs. This profile (see Figure 7.2) made explicit the need to include both context-independent and context-dependent meanings, recontextualized as 'theory' and 'specific' respectively. To more clearly visualize the text, boxes drawn at the peaks and troughs of the wave identified the main content points within the stages and paragraphs. The boxes functioned as a heuristic 'translation device' that enabled students to identify relations to the knowledge within the text and the different degrees of context-dependence. This highlighted to students that it was not only one form of knowledge, such as 'theoretical/conceptual' or 'practical/situational', that was valued, but rather how these forms were connected; the text 'waved' as semantic gravity strengthened and weakened to relate and integrate knowledge. The analysis also made explicit that the semantic range was not beyond the students' ability and the degree of accuracy allowed for some 'fuzziness'.

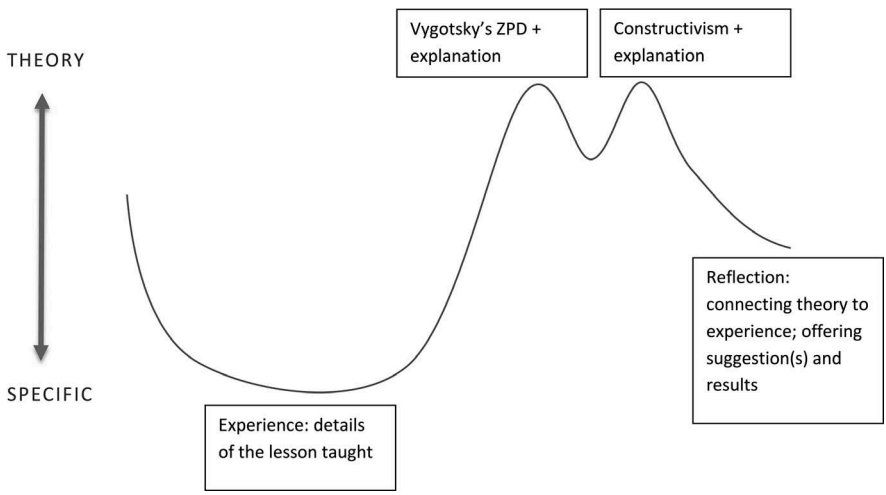

FIGURE 7.2 A semantic wave as a visual heuristic representation of the text

This analysis of the semantic gravity realized by the model text made explicit to students some of the expectations of their reflective writing that may have otherwise remained tacit. The presentation of the semantic wave revealed that what they may have perceived as a relatively simple list of questions in the task prompt (see Table 7.1) concealed the complexity of the task.

TABLE 7.1 The task prompt

Effective learning only takes place on the condition that new knowledge has to be linked to learner's prior/existing knowledge in a meaningful way. Describe one lecture/school lesson you were taught:
• What subject was taught?
• What content was taught?
• What activities were included?
• Was the lecture successful? Why/why not?
• How did you feel about that lecture?
• What implications does it have for you as a pre-service teacher?

Firstly, a student may misinterpret this task as requiring a list of relatively context-dependent ideas responding to details asked for by each question in the prompt. However, a successful response required not only elements of relatively context-dependent descriptive explanation, such as descriptions of behaviour, instructional acts, and feelings, but also relatively context-independent meanings that may not be immediately evident in the questions. While the questions also asked for critical elements, such as an evaluation of the learning experience and a justification, it was less clear that students should relate their learning experience to educational theory rather than just personal opinion. The visualization made this clear. Second, the presentation of the semantic wave highlighted that a valued response required the selection of context-independent theories that were bound to a specific week's topic; as this question was alluding to constructivist learning theories covered in week two, success in the task required the naming and explanation of theories (e.g. zone of proximal development, constructivism) and/or theorists (e.g. Vygotsky) covered in that week. The point of this analysis was less to provide students with a model they could copy, but rather to illustrate the underlying principles of what was perceived to be more successful critical reflection in this specific task. This enabled the generation of a shared language for understanding, discussing and planning critical reflection tasks, which could then be transferred to other critical reflection assessment tasks.

Predicting semantic structures in task prompts

As critical reflection assessments become more complex and involve more elements, it may not be feasible to provide model texts. There may be insufficient time for deconstruction or alternatively, model texts may not exist. In these situations, semantic waves can be used to focus on the way specific language features in a task prompt contribute to predictive semantic structures. This provides a heuristic for scaffolding the preparation and planning of responses. Semantic waves can provide students with a lens to analyze questions constituting a task prompt and/or to visualize predictions of possible semantic structures across an entire response.

In the intervention, providing students with visualizations of semantic waves offered opportunities for guided deconstruction of elements within larger task prompts. Elements of task prompts were deconstructed in two main ways (see Figure 7.3).

CONNECTING THEORY TO EXPERIENCE

3. Relate	the learning factor to your personal learning episode…
Task word (what you have to do)	**Scope (what you have to cover)**

To successfully address this element of the task, you need to identify relevant theories from the course content. Then, you need to clearly explain **why** and **how** this source is relevant. Remember, **good** reflective writing makes clear connections between theoretical concepts and experience.

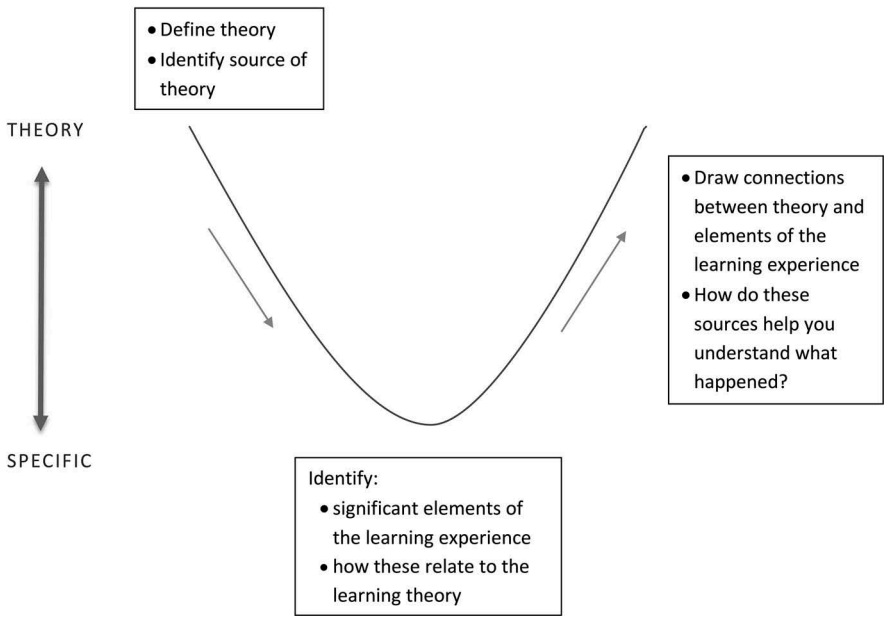

FIGURE 7.3 Deconstructing an element within a task prompt to generate a predictive semantic wave

First, language features within the prompt were identified and an explanation was provided to promote discussion or requests for clarification. Each element or question within a task prompt could be analyzed for a 'task word' that identified what had to be done (e.g. describe, discuss, reflect on, assess) and the 'scope', which identified what had to be covered. This foregrounded the role of discipline-specific meanings of vocabulary within the context of the question, and

created opportunities to clarify the relative context-dependence of meanings expected. For example, 'relate the learning factor…' required reference to relatively context-independent meanings covered in course readings, such as Gardner's theory of multiple intelligences (Gardner 1983) or Sternberg's triarchic theory of intelligence (Sternberg 1985). Second, the semantic wave sketched a semantic profile that was likely to be valued, and therefore receive a higher grade. This highlighted the expected semantic range (i.e. relating theory (learning factor) to the specific (personal learning episode)), and movements that weakened and strengthened semantic gravity to make connections between the theory and significant elements of the experience. It also identified the likely entry and exit points, i.e., start with theory and finish by interpreting the experience through a theoretical lens.

Semantic waves were also used to predict and visualize the likely semantic flow across an extended written text addressing a task prompt. Figure 7.4 displays a semantic profile that relates all elements of a task prompt for a 2,400-word essay. This assessment required students to "reflect on, analyze, and explain personal insights of yourself as a learner also using the associated readings you explored in the tutorial/workshop activities during weeks 6–12" and included a number of guiding questions. Question one asked for a relatively context-dependent description of a personal learning experience. Question two required relatively context-independent discussion of theories and concepts related to the topic of 'learning'. Question three required the establishment of relations between the theory and experience. It should be noted that the

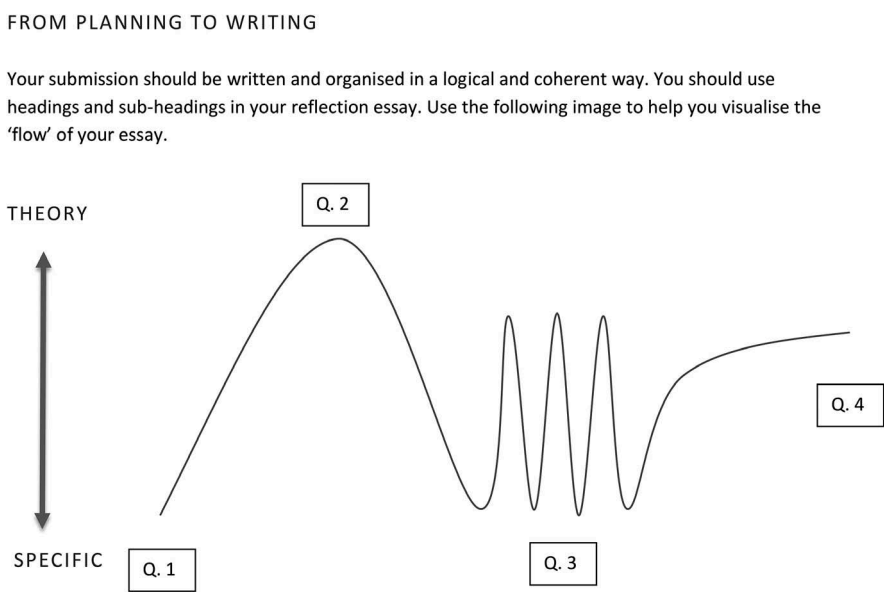

FIGURE 7.4 A predictive semantic profile

recurrent movements in Figure 7.4 elaborated on the relatively simpler semantic structure provided in Figure 7.3, emphasizing the need to repeatedly strengthen and weaken semantic gravity as connections were made between multiple elements of the theory and experience. The final question required students to weaken semantic gravity by using the concepts or theory as a lens through which to re-view and reassess the experience, "transform(ing) their understandings, enabling new understandings and the potential for new or revised future action" (Kirk 2017: 112). Use of the wave thus made visible and explicit what was expected in a response to the task prompt – the relative context-dependence of forms of knowledge, the movements and relations within and between the questions, and the likely entry and exit points.

This section has shown how semantic gravity waves can make visible to students the valued semantic structures of knowledge practices expected in critical reflection tasks. Semantic gravity reveals the relative context-dependence of different meanings, and semantic waves make visible how successful critical reflection is characterized by strengthening and weakening semantic gravity that connects and integrates meanings. This provides an analytical lens that enables identification of the *types* of knowledge that are expected, *where* these are likely located, and *how* they could be related or connected. This empowers both students and content specialists by offering tools with which they can analyze texts and prompts in a way that is appliable and transferable across assessment tasks.

Making knowledge practices accessible, teachable, and learnable

Effectively embedding knowledge of the organizing principles of successful critical reflection within pedagogic materials is not straightforward. To ensure principled knowledge is teachable and learnable to those it is seeking to help, careful pedagogic choices regarding selection and recontextualization of LCT concepts are required. This process of pedagogization is governed by principles that guide decisions about "what gets selected, how it is sequenced, paced and evaluated" (Shay 2013: 4). These notions of selection, sequencing and pacing proved useful in enacting LCT and integrating principled knowledge within the pedagogic materials. To illustrate how this was achieved, I show how these concepts were used to guide the design of the pedagogic intervention. This is not meant to be a definitive methodological guide for enacting LCT in practice but rather what I found to be useful and contextually appropriate.

Selection

To ensure development of shared understanding, the selection of contextually appropriate pedagogic metalanguage was essential. Although the concepts of semantic gravity and semantic profiles revealed the organizing principles of critical reflection practices, they were *external* to the pedagogic context of the intervention. Their *internal* role in the pedagogic materials required

transformation into contextually appropriate terminology. Enactment within the intervention thus required tacit praxis, where theory is 'silent, invisibly integrated into action, and significant but not made manifest' (Maton et al. 2016: 73).

While LCT informed the pedagogic approach, it was not necessary for the teachers and learners to learn LCT. The concepts had to be 'translated' into terms that retained conceptual integrity but could be more easily understood and adopted for practice by students and content specialists. The concept of semantic profiles was relatively easily translated as 'waves'. This notional visualization of movement appealed to common-sense understanding and was a relatively accessible metaphor. Recontextualizing semantic gravity was more challenging. Firstly, changing a technical term into everyday language is not straightforward (Maton et al. 2016: 79). Secondly, the empirical form of semantic gravity depends on how the concept is enacted for practice (Kirk 2017: 111). Accordingly, several models were considered (see Figure 7.5). Similar to finding the right temperature porridge in 'Goldilocks and the three bears', terminology in version 1 was deemed too abstract, version 2 was too simple, but version 3 was 'just right'. The selection of weaker semantic gravity as 'theory' and stronger semantic gravity as 'specific' aligned with expectations of the content specialist. It also paralleled previous work by the author (Ingold & O'Sullivan 2017) and with the content of the instructional video used in the intervention (O'Sullivan 2017). The recontextualization of concepts in this way enabled development of transparent and shared understandings of the organizing principles of successful critical reflection.

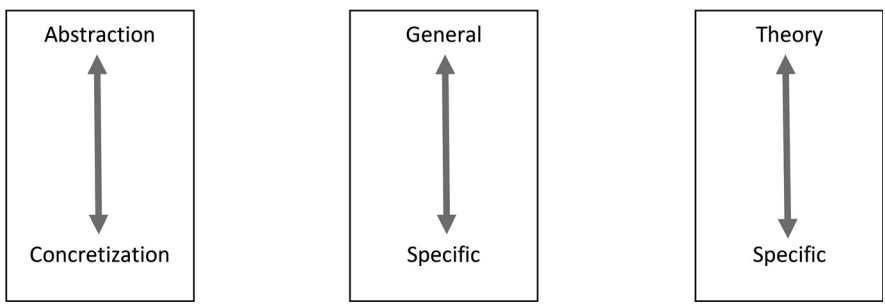

FIGURE 7.5 Recontextualization choices: Versions 1, 2, and 3

Sequencing

Sequencing refers to the order in which pedagogic content is organized. The sequencing of activities, materials and sessions over time can enable or constrain cumulative learning and impact students' ability to "transfer knowledge across contexts and through time" (Maton 2014b: 108). Enabling this transfer was a critical factor in the design of the intervention. While the author intuitively used a

semantic wave to inform pedagogic design, it was necessary to conceptualize how the specific order of activities *within* and *across* teaching sessions within the intervention could be made more explicit.

Inspired by the use of semantic gravity waves to inform the design of writing tutorials (Clarence 2017), waves were used as a guiding tool to sequence activities *within* sessions. The thinking behind this was that a session may start with a task that is relatively more or less context-dependent than the following task. The subsequent activity may move up towards a more decontextualized meaning or understanding, such as a theoretical perspective, or down towards a more contextualized meaning, such as an example, scenario, or specific task. Mapping changes in relative strengths of semantic gravity offered a means of identifying a session's starting point and organizing the flow and sequence of activities to increase likelihood of cumulative learning.

Across the intervention, pedagogic design was informed by two semantic profiles shaped by different entry and exit points. The first heuristic (see Figure 7.6) guided design of the first session. As most students had never encountered reflective writing before, this session functioned to introduce reflective writing and the organizing principles of critical reflection. It began with relatively context-independent activities introducing the social purpose of reflective writing. This included the video introducing the organizing principles of reflective writing as waves that connected and integrated theory and specific meaning (https://vimeo.com/207029935). The following activity was relatively more context-dependent; the task analysis modelled the deconstruction of the generic and linguistic features within a specific reflective writing task prompt. This created opportunities for the content specialist to slightly weaken semantic gravity by emphasizing that deconstruction is a key stage in preparing for tasks. Semantic gravity was then strengthened again by moving into activities based around a model text. Finally, semantic gravity was weakened by using the semantic wave to guide students in analyzing the structure of the model text. Semantic gravity was further weakened by then relating the use of the wave to other assessments; students were informed that the 'wave' would be a useful, appliable, and transferable analytical tool for their assessments throughout the course and in their future studies in ITE.

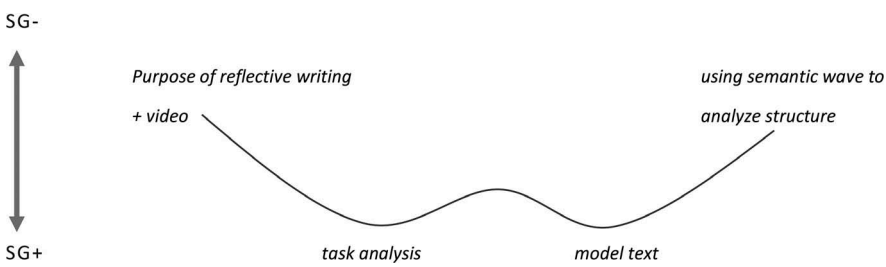

FIGURE 7.6 A heuristic SG wave guiding the sequence of activities within a session: entry and exit points with relatively weaker SG

Other sessions required a profile with different entry and exit points. A second heuristic (see Figure 7.7) guided design of a lesson that deconstructed the second assessment. The entry point was relatively lower, beginning with an analysis of the specific task prompt for assessment 2. The next activity weakened semantic gravity by providing opportunities to discuss the notion of task words and scope. The following activities continued the iterative strengthening and weakening of semantic gravity as the activities moved between the relatively more context-dependent nature of planning and note-taking for the task and relatively more context-independent discussions related to the use of semantic waves as a means of selecting content and organizing ideas. This type of wave became the typical model for sessions guiding preparation for assessment tasks.

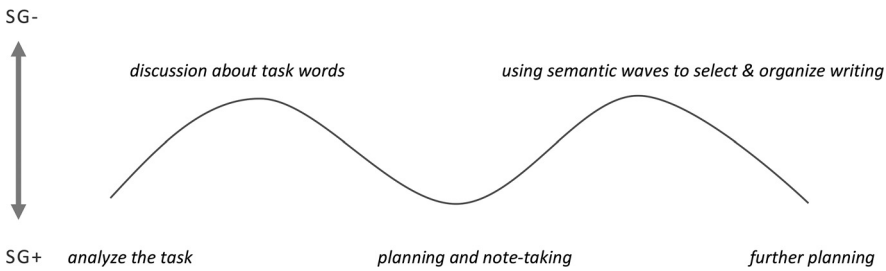

FIGURE 7.7 A heuristic SG wave guiding the sequence of activities within a session: entry and exit points with relatively stronger SG

Semantic gravity waves were also used heuristically to plan cumulative learning *across* sessions (see Figure 7.8). This offered principled sequencing of sessions seeking to cumulatively build understanding of the complexities of knowledge and linguistic practices associated with successful critical reflection while also consolidating a process approach to academic writing. To a large extent, the sequence of sessions scaffolding each of the four assessments was aligned to the curricular structure.

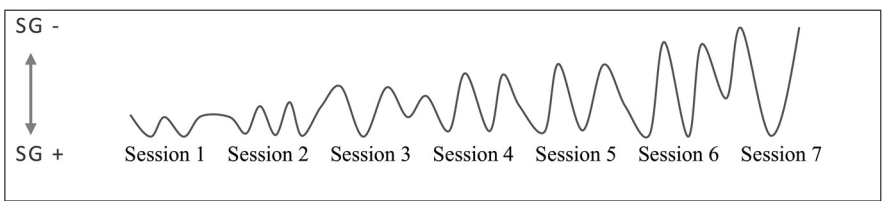

FIGURE 7.8 An ideal heuristic SG wave informing pedagogic design across sessions

Across all sessions, materials emphasized process over end-product to maximize early and sustained learning engagement. They also foregrounded key aspects of language and focused on developing communicative and discourse

competence through activities such as close analysis of tasks to determine their specific purpose, clarify key terminology and identify relevant theories. The sessions progressively integrated different forms of knowledge through iterative movements between more context-independent meanings, such as theories and concepts related to educational and linguistic knowledge, and more context dependent meanings, such as assessment task prompts and specific linguistic features.

The significance of the heuristics shown in this section is twofold. First, they provide a *conceptual guide* for principled sequencing of pedagogic phases and stages. This assisted the author in sequencing activities and sessions in ways that integrated and consolidated knowledge within and across teaching sessions. Second, they provide a *design framework* for teaching practices. Semantic profiles with different entry and exit points can offer teachers alternative and more precise means of selecting and sequencing activities, materials and lessons. In these ways, semantic gravity waves can effectively inform pedagogic design, ensuring iterative movements that enable the integration of meanings and encouraging cumulative knowledge-building within and across pedagogic materials.

Pacing

A key aspect of the intervention was the creation of time and space within the existing curriculum. The importance of dedicating time to the explicit teaching of principled knowledge of reflective practices cannot be underestimated; "in order to foster effective reflection, what is needed is time and opportunity for development" (Hatton & Smith 1995: 37). Prior to the intervention, no time was dedicated to the teaching of critical reflection or to showing students how to effectively integrate different forms of knowledge. It is not that critical reflection was considered insignificant but rather that it was not explicitly taught and remained a tacit aspect of the course. It was thus necessary to slow the pacing of the course to create space, time and opportunities for teachers and learners to analyze, deconstruct, and co-construct model texts and assessments to cumulatively build knowledge of critical reflection practices.

As students had not encountered reflective writing previously, it was necessary to dedicate time to its introduction before deconstructing model texts and assessment prompts. Three of seven sessions were therefore dedicated to the first assessment. The first session introduced reflective writing and its social and disciplinary purposes, followed by deconstruction of an assessment task prompt and a model text. Sessions two and three each focused on one of the two reflective writings that constituted assessment 1. Lasting around 30 to 40 minutes, each of the three sessions was shorter than later sessions but relatively more time was dedicated to this assessment as a whole. Devoting this extra time was motivated by the need to ensure students were prepared for the more challenging critical reflection tasks later in the course.

The sequence of subsequent sessions addressed each assessment in turn, at an appropriate time in the unit structure. Each of these sessions was relatively longer (up to two hours), allowing more time for guided preparation and planning. Within sessions, the content specialist delivering the materials controlled both the length of the session and the timing within and across activities. As the benefits of taking time to teach principled knowledge became apparent, more time was dedicated. That time was allocated to the sessions is testament to relevance, functionality, and practicality of the materials.

Evaluations of the project

The impact of the intervention was measured through feedback from students, the unit leader and comments from external moderators. The first indicator was perceptions from students on the benefits of the materials, gathered through surveys across the two units. Students reported that analyzing the model text using semantic gravity waves helped them improve their understanding of the organizing principles of successful critical reflection and reflective writing. They appreciated how the tools helped them recognize *what* is expected and valued in critical reflection and *where* and *how* to relate theory to experience within the unit's assessment tasks; for example:

> I am more confident saying I know why certain learning practices take place and how to better improve it by grounding on the knowledge I have gotten from the theories (*student 1*).

They also valued semantic profiling as a useful and appliable tool to analyze task prompts for predictive semantic waves and construct their own texts. Once students could distinguish different forms of knowledge, they learnt how to weave their own semantic profile with contextually-appropriate entry and exit points; two examples are:

> …(it) provides a rough guide and outline as to what is required in a piece of writing so I can plan out what to write (*student 2*).

> …(it) helped me think and reflect and also dropped 'hints' as to how to tackle the writing. As I pen my answers, it actually created opportunity to expand my thoughts and allowed me to link concepts, theories and ideas etc. together (*student 3*).

The unit leader was extremely engaged, positive and generous with her time. She valued the collaborative work and was very complimentary about

the materials: "…the use of semantic waves proves to be effective…students had a clearer idea about key elements and structure of a good reflective writing". She also valued the reflective writing video, which "became a powerful tool to assist students in connecting the theories with their relevant personal learning experiences…". In personal correspondences, she reflected on the affordances of semantic waves in revealing the principles of critical reflection in ITE:

> ... my past experiences indicated I struggled to teach students how to write reflective essays and had a blurred idea about using semantic model [sic] in my field…Having successfully applied them in xxx and xxx [units 1 and 2], I decided to borrow this semantic wave … to teach xxx [unit at the Faculty of Education]…(where), [it was] well received and … assisted my postgraduate students a great deal ...

Finally, comments from external moderators working in the Faculty of Education have consistently commended students' performance in assessment tasks, especially their capacity to critically reflect on relations between theory and practice; for example expressing:

> ... admiration for these students and what they have achieved. I thought the actual topic was a very challenging one in that students are being asked to think about their teaching in relation to learning while still PSTs. I particularly enjoyed reading their thoughts on what makes for an effective teacher and aligning theoretical perspectives with practical examples ...
>
> … students have demonstrated understanding of key theories and were able to synthesize these against examples from both practice and case studies. Clear that excellent teaching scaffolded these skills.
>
> I'm always incredulous that students for whom English is a second language engage in essay writing focusing on theories of education. I was even more impressed that they were able to incorporate their own experiences and perceptions into the theoretical narrative.

These comments praise not only the students for producing critical reflections that meet disciplinary, linguistic and academic expectations, but also the teaching practices. Overall, perceptions from students, content specialists and moderators suggest that the intervention was a success and that the pedagogic materials actively contributed to the development of students' understanding of and ability to successfully produce written critical reflection assessments.

Conclusion

Theory can offer means of addressing the complex and often challenging task of designing pedagogic interventions that successfully target specific teaching and learning needs. However, that an intervention or pedagogic approach is theoretically-informed does not ensure its success. Not all theories are equal. Some theories offer conceptual frameworks that are "good to think with and about", yet their analytical frameworks "offer little…grip on empirical data" (Maton 2014a: A-35). The challenge is to find frameworks that improve pedagogic design by generating greater explanatory power to address substantive problems.

This chapter has reported on part of a pedagogic intervention seeking to address the relatively opaque nature of critical reflection within units of an Education Diploma pathway. The design of the intervention was a complex task that required consideration of several factors, including the development of the language and literacy skills of international students. This chapter has not attempted to cover all aspects of the intervention. Rather, it has focused on the enactment of theoretical concepts from LCT. The intervention did not seek to impose the learning of LCT. It sought to generate explanatory power to make explicit the often-tacit nature of the 'deep' and 'critical' reflective practices of ITE and so empower the content specialist and students by offering them a practical, appliable and transferable analytical lens for understanding, discussing, and planning critical reflection tasks.

LCT was integral to the intervention and informed strategies employed by the author to embed theoretically-informed practices in contextually appropriate ways. First, the concepts of semantic gravity and semantic profiles were operationalized as the basis of a framework for the analysis *of* critical reflection practices. This relatively simple set of concepts were used to scaffold students in understanding the expectations of assessments and capturing the variant and contextual nature of 'theory' and 'practice' within ITE. Drawing attention to how different *forms* of knowledge can be related and woven together provided an analytical lens that is useful, applicable and transferable. Second, LCT offered a conceptual framework that informed the embedding of theory *within* and *for* pedagogic practice. To embed these concepts within the materials, the principles of selection, sequencing and pacing proved useful: selection of contextually appropriate recontextualizations of metalanguage; careful sequencing within and across sessions; slowed pacing to create time and space for students to engage with principled knowledge.

Reflections on the intervention highlight three key points. First, LCT offered "an explicit, systematic, principled and hierarchically organized conceptual framework" (Maton 2016: 9), which was 'good to think with' and offered transferable and appliable tools for practical engagement in the specific pedagogic problem situation. This enabled the appropriate selection of ideas from one body of knowledge (semantic gravity, semantic profiles) to address a problem situation (the teaching and learning of critical reflection) and then recontextualize that selection to be embedded within another body of knowledge (Education Diploma curriculum), site of practice (units within

Education Diplomas) and field of practice (pathways to ITE). It is hoped that this chapter further strengthens the case for using LCT to re-orientate ideas about teaching and framing EAP (Ding & Bodin-Galvez 2019: 82). Second, the importance of opportunities for close collaboration between EAP and content specialists must be emphasized. Improving pedagogic practices requires specialized linguistic and disciplinary expertise to understand how discipline-specific language and content knowledge is cumulatively built. Consequently, synergy between language and content experts can improve curriculum, pedagogy and assessment practices, better supporting international students, while also ensuring inclusive teaching practices for all students across higher education (Bond 2020: 181). Finally, dedicating time and resources to interventions such as this can ensure students enrolled in pathways programs successfully transition to university. In this case, making the organizing principles of critical reflection practices explicit to PSTs from the beginning stages of ITE empowers them by offering appliable and transferable tools for integrating theory, practice, and evaluation, thus contributing to their disciplinary and professional development.

Ultimately, LCT offered frameworks and tools to reveal the organizing principles of critical reflection and to guide principled pedagogic design. This enabled the development of an approach to teaching critical reflection that is accessible, teachable and learnable. The pedagogic enactment of LCT reported on in this chapter is by no means definitive, but hopes to offer inspiration and guidance to others dedicated to addressing complex challenges in curriculum, pedagogy, and assessment practices within higher education.

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8

WRITING BLOG CRITIQUES IN TEACHER EDUCATION

Teaching students what is valued with semantic gravity and genre theory

Lucy Macnaught

Introduction

Tertiary education institutions commonly identify non-discipline-specific outcomes through terms, such as graduate attributes, graduate qualities, or generic competencies. As Faulkner and colleagues elaborate, recent years have seen an "international convergence towards a common set of skills" or outcomes, including critical thinking (Faulkner et al. 2013: 871). Such 'skills' are assessed through a wide range of tertiary assessment tasks, including reflective journals, eportfolios, case studies, narratives, reflective essays, and reports (Szenes & Tilakaratna 2021). In these kinds of writing tasks, a challenge for student-teachers is to use academic discourse to show that they are 'being critical' as they reflect on educational theories and classroom practices. In this sense, there is not one all-encompassing definition of what 'critical reflection' is, but rather varying manifestations of it in different types of assessment tasks. As scholars have identified, this perspective marks a shift from examining abstract definitions, processes or perceptions of critical reflection to examining practices where students have to demonstrate it in the form of academic discourse (Szenes, Tilakaratna & Maton 2015).

Compared to more traditional forms of assessment, one distinctive expectation of critical reflection in academic discourse is for students to engage with 'self'. Students are expected to write about 'their emotions and express their opinions' (Szenes & Tilakaratna 2021: 2), and this is widely seen as important to improving professional teaching practice as well as on-going professional development (Hume 2009; Otienoh 2009). Standards for graduating teachers, for instance, commonly expect teachers to critically examine their own assumptions and beliefs (see New York State Education Department 2012; Department for Education 2013 [England]; Education Council of Aotearoa New Zealand

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2019). However, as scholars have observed, teaching, assessing, and producing assessment tasks that are regarded as 'reflective' and/or 'critical' poses challenges related to atypical text structure (Shum et al. 2017), assessment rubrics and marking criteria (Chan et al. 2020), and shared expectations of what constitutes 'success' (Stevenson et al. 2018). The significant time spent on such writing tasks also does not guarantee that students will improve their quality or 'level' of reflection (Cohen-Sayag & Fischl 2012; Orland-Barak 2005).

A hierarchical classification of reflection has long been evident in scholarship concerned with the gradual process of becoming a reflective practitioner (e.g., Calderhead 1989; Hatton & Smith 1995). Models or frameworks of reflection commonly identify lower levels of reflection as being limited to description and reporting, whereas higher levels of reflection involve explaining the reasoning behind decisions and events, and also considering these in light of future choices (e.g., Bain et al. 2002; Hatton & Smith 1995). The ways in which these higher levels of reflection manifest as language choices can be illuminated through the analysis of texts that students produce. A focus on practices, including assessment tasks, enables educators to identify and then teach what is valued. The underpinning rationale is that features of successful texts are 'teachable' and that students benefit from not only seeing what a high-scoring 'end product' looks like, but also understanding choices that contribute to its success (Rose & Martin 2012). The analysis of writing samples and use of model texts in teaching is particularly relevant in light of research which shows that assessment task descriptions, rubrics, and learning outcomes are always open to varied interpretation by students – even in cases where extensive efforts are made to make assessment standards clear (O'Donovan, Price & Rust 2004).

One widely used framework that has been used to identify what is valued in student writing is Legitimation Code Theory (LCT). Studies that draw on the dimension of Semantics from LCT (Maton 2009, 2013, 2014, 2020) have, thus far, mostly focused on how changes in context-dependence contribute to successful writing. This includes changing the degree to which meanings are bound to a specific context in order to relate the concrete particulars of experiences to theories and concepts. Recent contributions with a focus on student writing span a wide range of fields, including: social work (Boryczko 2020), nursing (Brooke 2019), history (Macnaught et al. 2023), physics (Steenkamp et al. 2019), and English for academic purposes (Brooke, Monbec & Tilakaratna 2019). The complementary framework of Systemic Functional Linguistics (SFL) has also been used to reveal what is valued through the analysis of key semiotic features in specific types of texts, such as the contribution of evaluative language in critiquing one's own practice (e.g. Szenes & Tilakaratna 2021).

This study involves research in the field of teacher education. A recent study drawing on Semantics from LCT focused on reflective writing tasks within the first year of a Bachelor of Education program (Macnaught 2020). This

chapter examines a 'blog critique' assessment task in year 2. In this context, blog critiques contribute to students developing 'an educational philosophy that will guide and improve their teaching practice in classrooms' (Hume 2009: 247). A step towards this long-term goal is for student-teachers to respond to the educational practices and opinions of others, such as those represented in blog posts written by teachers. The overall aim of the study is to use text analysis with concepts from LCT and SFL to better understand what constitutes a 'critique' for a specific assessment task at a particular point in a program of study. Building on insights from year 1, these findings from year 2 aim to generate knowledge about how students can be supported to reflect on and critique educational practices as part of completing assessment tasks within a Bachelor of Education program.

Context

Research in this chapter is part of a wider project called Sustainable Embedded Academic Literacy (SEAL). This project investigates collaborative practices for teaching academic literacy development within a Bachelor of Education program at Auckland University of Technology (AUT). This chapter focuses on one second-year course titled, Principles of Learning and Teaching (EDUC651). One of the assessment tasks involves critiquing published blog posts as a precursor to writing a series of new blog posts. According to the lecturer (see Macnaught et al. forthcoming), the pedagogic purpose of this type of assessment task is for students to draw on the ideas of fellow teachers, respond to the opinions of others, and engage with theory-based ideas in a practical and accessible way. It is also designed to encourage students to identify and provide reasoning for their own views. Past students, however, have tended to find integrating theory and managing multiple points of view difficult. In particular, they have tended to elaborately describe specific classroom events, but struggled to clearly and consistently identify and relate these to more abstract concepts in their field of study. They have also had difficulty with using language to clearly distinguish between the view of the blog author, views expressed by researchers (within the blog or in literature), and their own view.

In response to these challenges, learning advisors at AUT have collaborated with the lecturer of EDUC651 to design and deliver face to face and online teaching materials for writing blog critiques (Macnaught et al. 2022). An example teaching sequence from 2019 appears in Figure 8.1. The eighth and ninth steps of using model texts and guided note-taking are discussed in this chapter[1]. While these strategies for teaching academic literacy development are strongly influenced by SFL genre pedagogies (see Rose & Martin 2012), the focus of this chapter is on the text analysis that informs what is included in model blog critiques and note-taking templates.

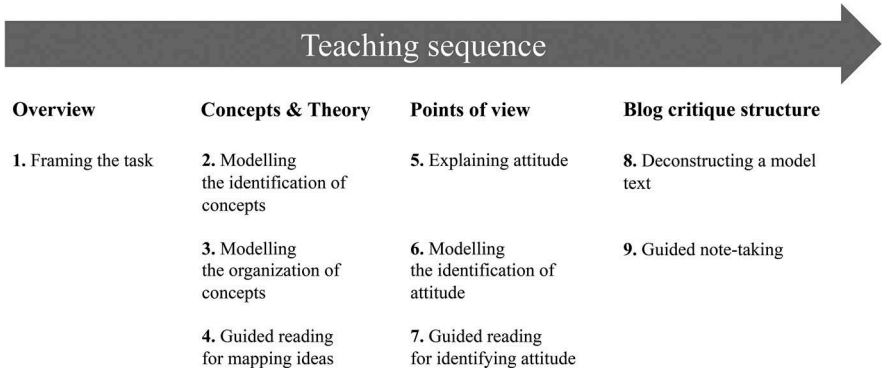

FIGURE 8.1 A teaching sequence to prepare students for writing blog critiques

Methodology

The teaching reported on in this chapter is informed by the qualitative discourse analysis of student writing. The purpose of collecting blog critiques that have been awarded a high grade is to identify common features that contributed to their success. With permission from three students who had completed EDUC651 in a previous semester, three complete sets of blog critiques were collected for use in teaching future cohorts of students. This text collection provided a set of 15 blog critiques – each being approximately 400 words in length. Each of these critiques focused on a published blog written by an accredited teacher about their teaching practices.

Analysis of the data set focused on two significant challenges for students. Based on the marking criteria (see Table 8.2, further below) and conversations between the lecturer and learning advisor, it was clear that students need to not only respond to the specifics of classroom teaching practices and the ideas of others – as described in the blog posts – but also integrate theory. Students also need to manage multiple points of view, including those of the blog authors, the researchers as represented in the blogs and/or published research, and their own view. The theoretical frameworks with which to conduct the qualitative discourse analysis of data are chosen specifically to investigate each of these challenges.

LCT – semantic gravity

To address the issue of how students can successfully integrate theory as they write about teaching practices, this study draws on the concept of *semantic gravity* (Maton 2013, 2014, 2020). Semantic gravity describes the degree of context-dependence of practices. Where something has *stronger* semantic gravity (SG+), it is said to have more dependence on a particular context for its meaning, such as writing details about the actions and behaviours of

specific teachers and students in a specific classroom setting. Where something has *weaker* semantic gravity (SG–), it is said to have less dependence on any particular context, such as identifying the classroom behaviour of students as an instance of a type or category of motivation. Semantic gravity is chosen because it considers how more to less abstract representations of knowledge work together. In teacher education, this has been shown to generate insights about how student-teachers can successfully integrate theory with personal experiences in reflective writing tasks (Macnaught 2020).

More specifically, in order to examine the language that students use in their blog critiques, this study uses a newly developed *generic translation device* by Doran & Maton (forthcoming) that explores how a particular kind of semantic gravity is realized within English discourse. It should be emphasized that a *generic translation device* is a means of describing for a broad phenomenon (such as the whole of English discourse or all images) how a concept may be realized (see Maton & Doran 2017). It is not a model of English discourse, not a model of clauses and not a model of context-dependence. The generic translation device is simply (though it is anything but simple) a set of 'rules of thumb' for how an LCT concept is realized within an object of study and thus how what it conceptualizes can be seen in data.

The focus of the generic translation device by Doran & Maton (forthcoming) is *epistemic–semantic gravity*, which explores the context-dependence of meanings involving formal definitions and empirical descriptions, rather than *axiological-semantic gravity*, which concerns affective, aesthetic, ethical, political and moral stances (Maton 2014: 153–70). They are developing several tools that explore how context-dependence for these kinds of meanings appear in English discourse at the levels of wording, word-grouping, clausing, and sequencing. Here I focus on the 'clausing' tool. This identifies how changes in epistemic-semantic gravity (ESG) are created when words are brought together into clauses; it explores how different combinations change the context-dependence of the constituent meanings to different degrees. This change in ESG is called *epistemological gravitation* (EG). Put simply, some kinds of 'clausing' change the context-dependence of constituent words more than others, and some not at all.

The two main types of 'clausing' identified by Doran & Maton (forthcoming) are *atemporal* and *temporal*. This distinction centres on the extent to which meanings are tied to some particular time, as indicated by verb choices. Weaker epistemological gravitation (EG–) is created through atemporal clausing, as meanings are not bound to particular times and settings. There are two main sub-types of atemporal clausing: *atemporal-transcendent* and *atemporal-potential*.[2] An example of atemporal-transcendent clausing in a blog critique is: *She prefers not to promote extrinsic rewards* [*atemporal-transcendent*]. Here, the verb choice of 'prefers' indicates some sort of habitual or generalized time.

Stronger epistemological gravitation involves *atemporal-potential* clausing where some sort of modality is used in terms of possibility, obligation, necessity, etc. An example in a blog critique is: *An extrinsic approach to learning can stifle the development of a learner's internal drive and motivation to study* [atemporal-potential]. Here the verb choice of 'can stifle' uses possibility to discuss the impact of teaching choices.

The second main type of clausing, *temporal clausing* has stronger epistemological gravitation (EG+) than atemporal clausing. It is organized into two sub-types: *temporal-elsewhen* and *temporal-current*. Temporal-elsewhen is where clausing indicates that meanings occur at a point in time that is different to the current time, generally either the past or future, such as: *I first heard about the idea of a community circle when I spoke to a senior teacher in my school.* The verb choices of *heard* and *spoke* identify meanings as occurring sometime in the past. Even stronger epistemological gravitation occurs in temporal-current clausing where meanings are positioned at the current time, such as: *As a student teacher who is studying early childhood education, I am currently experimenting with using prizes and rewards.* The verb choices (*is studying* and *am experimenting*) indicate current time.

Table 8.1 provides an overview of the four clausing types used in this paper. This newly developed generic translation device enables context-dependence to be consistently analyzed in unfolding texts that use English discourse.

TABLE 8.1 The clausing tool for EG with concepts translated for use with our specific data set

EG	Type	Subtype	Examples
EG –		*transcendent*	She prefers not to promote extrinsic rewards.
▲	*atemporal*		
		potential	An extrinsic approach to learning can stifle the development of a learner's internal drive and motivation to study.
		elsewhen	I first heard about the idea of a community circle when I spoke to a senior teacher in my school.
	temporal		
		current	As a student teacher who is studying early childhood education, I am currently experimenting with using prizes and rewards.
▼ EG+			

Source: Doran & Maton (2018, 2021)

SFL – genre analysis

To address the issue of how students can successfully manage multiple points of view in a blog critique, this study draws on genre theory within the theoretical framework of Systemic Functional Linguistics (hereafter SFL). In this applied

linguistic tradition, genre is theorized as an abstract layer of meaning about the recurrent "social practices of a given culture" (Martin & Rose 2008: 6). For the pedagogic purposes of examining the social practices related to what students have to read, write or create, genres are characterized as "staged, goal-oriented processes" (Rose & Martin 2012: 54). This practical definition centres on what a text is trying to achieve and the main steps or 'stages' that a text moves through to achieve that goal (see Martin (2014) for locating the concept of genre within the broader theoretical architecture of SFL). Complex texts may have sections that contribute to one main social goal (i.e. there is a unified 'whole'). Alternately, sections may each have their own distinctive social purpose. When purposes vary and shift from one section to another, a text can be theorized as a *macrogenre* (Martin 1994). The justification that one genre is different to another or that one text consists of a series of genres arises through analysing language and other semiotic choices that are used in specific social settings: different configurations of meanings provide evidence of distinctive genres.

Genre analysis in this chapter focuses on language resources that contribute to allowing for and responding to "alternate positions and voices" (Martin & White 2005: 102). More technically, this is referred to as dialogic expansion with the opposite being dialogic contraction. As Martin and White explain, these terms draw on Bakhtin's and Voloshinov's influential notions of dialogism and heteroglossia where "to speak or write is always to reveal the influence of, refer to, or to take up in some way, what has been said/written before, and simultaneously to anticipate the responses of actual, potential or imagined readers/listeners" (Martin & White 2005: 92). In SFL, the main heteroglossic choices of dialogic expansion or contraction and their subtypes are theorized as the system of ENGAGEMENT (Martin & White 2005).

For data in this study, four choices within the system of ENGAGEMENT are particularly relevant. The first resource, *acknowledge*, creates dialogic expansiveness through identifying the positions of 'others', such as the i) blog author (*Flanagan believes that…*), ii) named researchers (*Duchesne and McMaugh argue that*) or iii) researchers that are identified through referencing conventions (*Research has defined…(Duchesne & McMaugh 2016)*). The second resource, *pronounce*, involves authorial emphasis, such as the student blog critic inserting their own view by writing: *I strongly agree with Flanagan that…* This choice creates dialogic contraction by limiting the scope of alternate positions. The third resource, *endorse*, also creates dialogic contraction but in a different way. Alternate views are excluded from an unfolding text when 'the internal authorial voice' construes an external source "as correct, valid, undeniable or otherwise maximally warrantable" (Martin and White 2005: 126). An example is: *As research shows… (Duchesne & McMaugh 2016*). This choice serves to take over "the proposition or at least shares responsibility for it with the cited source" (Martin & White 2005: 127). The fourth resource, *counter,* contributes to dialogic contraction through resources that create a shift in point of view, such as the use of *however* in: *Smith stated in her blog that she mainly uses techniques related to extrinsic motivation. However this form of motivation has been associated with rote learning.*

In this chapter, such language choices contribute linguistic evidence for arguing that one genre is different to another.

Findings and discussion

In this section, the clausing tool is used to analyze context-dependence in blog critiques that have been awarded a high grade. In particular, findings focus on how changes in epistemological gravitation – as identified by changes in clause type – are used for specific functions in blog critiques. This analysis is complemented by genre analysis which focuses on identifying the overall social goal of blog critiques and language features that create clear shifts between points of view. Analysis shows how theory from LCT and SFL usefully informs the design of a note-taking template and model texts for use in teaching.

Findings and pedagogic insights from analysis with the clausing tool

The first finding is that atemporal-transcendent clausing is very prominent and serves at least five different functions in blog critiques. As a type of clausing with generalized or habitual time, it can be used to explicitly identify theory through introducing a concept and also elaborating on it. For example, weaker epistemological gravitation is maintained throughout clausing, such as:

> [Extract 1] One major type of motivation is intrinsic motivation (atemporal-transcendent). This term refers to motivation (atemporal-transcendent) that is generated from within children themselves (Duchesne & McMaugh 2016) (atemporal-transcendent). Research associates intrinsic motivation with a tendency for students to think deeply and explore complex concepts (Duchesne, McMaugh, Bochner, & Krause 2013) (atemporal-transcendent).

Such sustained use of atemporal clausing (see the verb choices of *is, refers, associates, think, explore*) enables writers to create a distinctive section about theory without simultaneously trying to juggle any concrete particulars about teaching practices. This creates a space to demonstrate that key readings have been found, read, and understood. A distinctive theory section contributes to addressing marking criteria about demonstrating knowledge and using terminology (see marking criteria 1 in Table 8.2).

Three further functions of atemporal-transcendent clausing in blog critiques involve expressing points of view. Recurrent functions include summarising a blog author's view, encapsulating this view with a blog extract, and connecting these to one's own view, as in:

> [Extract 2] In her blog post, Smith emphasizes the importance of fostering intrinsic motivation (atemporal-transcendent). She states this clearly in the following extract (atemporal-transcendent): 'too many treats lead to

rotten teeth and rotten motivation!' (atemporal-transcendent). I strongly agree with Smith (atemporal-transcendent) that intrinsic motivation is critical to successful practice (atemporal-transcendent).

TABLE 8.2 The blog critique marking criteria

Criteria:		A
1	Key concepts and terminology of chosen topic.	Evidence of comprehensive knowledge of the topic and some use of related terminology.
2	Critique of excerpts with links to literature & personal views linked.	Excerpts are critically analyzed in a comprehensive manner with clear links to the literature. Own views are comprehensively given.
3	Discussion of the role of the teacher in relation to the topic.	Comprehensive discussion shows understanding of the role of the teacher in relation to the topic for the chosen sector.
4	Referencing and citations.	Referencing is consistently accurate.
5	Clarity of expression (incl. spelling, grammar & word limit).	Fluent writing style. Grammar and spelling accurate.

In such examples, the choice of atemporal clausing (as evident in the verb choices of *emphasizes, states, lead, agree, is*) sustains a point of view. Weaker epistemological gravitation, without change, suggests that these views are carried through time and not necessarily dependent upon specific or changing settings and circumstances. In terms of marking criteria, these functions contribute to a critique that succinctly interprets the main message of a blog and includes the view of the student who is writing the blog critique – hereafter referred to as the 'blog critic' (see marking criteria 2 and 3 in Table 8.2.) All five main functions of atemporal-transcendent are represented in Table 8.3 (page 154).

The second finding is that atemporal-potential clausing is particularly important for providing reasoning that underpins a point of view about theoretical constructs. A change from atemporal-transcendent clausing to atemporal-potential clausing (stronger epistemological gravitation) marks a shift from writing about theory towards starting to consider its application. An example is:

> [Extract 3] I strongly agree with Smith that intrinsic motivation is critical to successful practice (atemporal-transcendent). Intrinsic rewards that come from exploring interests in depth, and mastering difficult concepts and problems can be smothered by a reward system that focuses on grades rather than understanding (atemporal-potential).

Here, stronger epistemological gravitation is used to specify the possible impact of applying or enacting concepts in teaching practices. In this case, the

TABLE 8.3 The main functions of atemporal-transcendent clausing in blog critiques

Clause type	Function in a blog critique	Example
atemporal-transcendent	1. Introducing a concept	One major type of motivation is intrinsic motivation. This term refers to motivation that is generated from within children themselves (Duchesne & McMaugh 2016).
	2. Elaborating on a concept	Research associates intrinsic motivation with a tendency for students to think deeply and explore complex concepts (Duchesne et al. 2013).
	3. Summarising a blog author's view	In her blog post, Smith emphasizes the importance of fostering intrinsic motivation.
	4. Encapsulating a view with a blog extract	She states this clearly in the following extract: 'too many treats leads to rotten teeth and rotten motivation!'. Smith views herself as a 'mere facilitator' of learning activities which are fun, challenging and designed to develop curiosity.
	5. Connecting own view	I strongly agree with Smith that intrinsic motivation is critical to successful practice.

use of *can* in *can be smothered* involves reasoning about the negative impact of taking a different approach.

The modality of possibility is also used to show understanding of how a practice or outcome can be achieved, such as:

> [Extract 4] I strongly agree with Smith that intrinsic motivation is critical to successful practice… As research points out (atemporal-transcendent), intrinsic motivation can be fostered through practices, such as giving students the space for self-directed learning (Duchesne & McMaugh 2016) (atemporal-potential).

Here, stronger epistemological gravitation is used to specify the possible means through which a desired outcome can be achieved (*can be fostered through…*). This function contributes to reasoning by providing more details about how something conceptual can be enacted in a classroom. What is valued is thus positioned as grounded and achievable. These two main functions of atemporal-potential clausing are represented in Table 8.4. In terms of marking criteria, a focus on impact and means contributes to a critique that articulates the value of theoretical constructs for practitioners and their students. Such explicit reasoning serves to relate concepts to the role and decision making of the teacher (see criteria 2 and 3 in Table 8.2).

TABLE 8.4 The main functions of atemporal-potential clausing in blog critiques

Clause type	Function in a blog critique	Example
atemporal-potential	6. Specifying the possible impact of teaching practices	Intrinsic rewards that come from exploring interests in depth, and mastering difficult concepts and problems can be smothered by a reward system that focuses on grades rather than understanding.
	7. Specifying possible means of achieving pedagogic goals	As research points out, intrinsic motivation can be fostered through practices, such as giving students the space for self-directed learning (Duchesne & McMaugh 2016).

The third main finding from clausing analysis is the use of temporal clausing to identify completed activity. One recurrent function of temporal-elsewhen clausing is to introduce the selection of each blog post, as in:

> [Extract 5] The second blog that I selected for the topic of engagement (temporal-elsewhen) was written by Cooke in the Mindshift blog (temporal-elsewhen).

Here the blog critic identifies their own actions (*I selected*) and those of the author of the original blog post (*was written* by Cooke). In an assessment task that requires students to critique multiple blog posts by different blog authors, this choice of clausing can usefully mark the shift from writing about one blog to another.

A further function of temporal-elsewhen clausing is to elaborate on teaching practices that are discussed in the blog post. In the following example, the blog critique includes details from the blog post, such as when the blog author encountered a particular teaching strategy and how students responded:

> [Extract 6] Cooke really values building a sense of belonging in her classroom (atemporal-transcendent). She explained (temporal-elsewhen) that a colleague introduced her to Tribes Learning Communities (temporal-elsewhen). It really worked for her students (temporal-elsewhen) because they participated much more than previously (temporal-elsewhen).

Such changes to stronger epistemological gravitation (from atemporal-transcendent clausing to temporal-elsewhen clausing) are important to blog critiques 'bringing in' the practitioners who are thinking about and enacting teaching practices. This is vital because the assessment task asks student-teachers (as blog critics) to overtly state whether they agree or disagree with what is being discussed and who is discussing it. The use of

temporal-elsewhen clausing thus provides one option for tying the discussion of teaching to specific people, their actions, and the settings in which something is being applied.

The third and final function of temporal clausing involves the blog critic firmly positioning themselves in their field of study. An example is:

> [Extract 7] As a student teacher who is studying early childhood education (temporal-current), I am currently experimenting with engagement strategies (temporal-current).

Here, temporal-current clausing is one option for the student-teachers to 'join the conversation' with other practitioners. This is achieved by locating who they are and what they are doing in current time (*is studying*, *am experimenting*). This choice of clausing is relevant to crafting a critique that is less like an isolated response, and more like a contribution to an ongoing dialogue within a field of study and practice. Part of personally responding to other practitioners and researchers may include locating your experience (and standing), in this case, a *student teacher who is studying early childhood education*. These three main functions of temporal clausing in blog critiques are represented in Table 8.5. With regards to marking criteria, a focus on locating the thoughts and activity of practitioners (teachers and student-teachers) and school children in relation to time contributes to contextualized and concrete discussion of the role of teacher, including the student-teacher's own emerging role (see marking criteria 1 in Table 8.2).

TABLE 8.5 The main functions of temporal clausing in blog critiques

Clause type	Function in blog critique	Example
temporal-elsewhen	8. Introducing a blog	The second blog that I selected for the topic of engagement was written by Cooke in the Mindshift blog.
	9. Elaborating on teaching practices	Cooke explained that a colleague introduced her to Tribes Learning Communities. It really worked for her students because they participated much more than previously.
temporal-current	10. Positioning self	As a student teacher who is studying early childhood education, I am currently experimenting with using prizes and rewards.

Using findings from analysis in teaching

Prior to analysis with the clausing tool, teaching included guided reading activities. For example, a note-taking template was developed to support the

student-teachers with extracting relevant content from the blog posts. This kind of template involves prompt questions that guide students to look for specific things as they read. One key rationale for this activity choice is that the blog posts are sometimes more like a stream of consciousness than a tightly structured and organized text. The student-teachers, therefore, sometimes have to work hard to sift through the blog content in order to interpret the main message and identify the underlying reasoning. The use of prompt questions for guided reading thus contributes to critical thinking processes (such as what to look for while reading) that are less generic (e.g. Gibbs 1988) and more tailored to a specific assessment task.

The insights from the new analysis have been used to revise and improve this note-taking template. In particular, the section pertaining to interpreting the blog now draws on the findings about atemporal-potential clausing. To briefly recap, two main functions of this type of clausing in a blog critique are to identify the possible impact of teaching strategies on students, and the possible means for achieving teaching goals. This contributes to 'critical analysis' (see criteria 2 in Table 8.2), that is, analysing a blog post to find and then respond to the author's reasoning. The importance of identifying the reasoning behind a point of view can be made more explicit through prompt questions, such as those represented in Table 8.6. Language that creates a clear shift between different points of view is discussed in the next section.

TABLE 8.6 Part of the updated note-taking template for the guided reading of blog posts

Interpreting each blog post
What blog did you find that relates to the concept?
What is the blog author's view (in a nutshell)?
What short quote from the blog encapsulates the author's view?
What reasoning and elaboration does the teacher use to support their view? • research findings about benefits/consequences? • views of other experienced teachers? • possible impact of strategies on students? • possible practical means of achieving teaching goals? • other?

Findings and pedagogic insights from analysis with the system of ENGAGEMENT

Linguistic analysis with the system of ENGAGEMENT shows that successful blog critiques make a clear distinction between the view of the blog author and the view of the blog critic. This is achieved by organizing one section of the blog critique for interpreting the blog post and a subsequent section for personally

responding to it. A shift between these sections is marked by a change in heteroglossic resources. In the data, the part dedicated to interpreting the blog post primarily involves dialogic expansion through acknowledging 'the other' (e.g. *Flanagan emphasizes the importance of fostering intrinsic motivation)*. At this point, the internal voice of the blog critic is in the background. A shift to the section pertaining to the blog critic's own view is marked by dialogic contraction. Here the internal voice of the blog critic is made explicit with proclamations, such as: *I strongly agree with Flanagan that intrinsic motivation is critical to successful practice*. After this shift in voice is created, the blog critic's view is sustained and justified by bringing in the voice of researchers. For example, after pronouncing their own view, the blog critic may write: *As research shows… Duchesne & McMaugh 2016*. Here the authorial voice is selectively endorsing the view of the researchers. This enables the blog critic to substantiate their own views with literature and not just their personal experiences. These differences in heteroglossic resources contribute linguistic evidence for the differentiation of two social goals: a text response with the purpose of interpreting the main message of a text; and a text response where the writer responds personally. In genre terms (Martin & Rose 2008), these sections can be labelled as two different genres: *interpretation ^ personal response*.

Additionally, the voice of researchers may be used at the start of the blog critique. This involves designating a section of the blog critique for theory that is relevant to all of the subsequent blog posts. In genre terms, this section constitutes a short *classifying report* (Martin & Rose 2008). Heteroglossic resources of acknowledgement are used to identify an external source for the purpose of classifying and then describing a theoretical construct, such as:

> [Extract 8] One major type of motivation is intrinsic motivation. This term refers to… (Duchesne & McMaugh 2016). Research associates intrinsic motivation with… (Duchesne et al. 2013).

Here, the voice of researchers is identifiable as *research* and through referencing conventions. As noted in the complementary findings about the sustained use of atemporal-transcendent clausing, by organizing the blog critique with a substantial section for theory, the student, as the blog critic, is attending to the marking criteria about integrating 'key concepts', 'terminology' and 'literature' (see criteria 1 and 2 in Table 8.2).

Analysis also shows some flexibility with where theory can be integrated across the blog critique. It can also be used in the interpretation section to reaffirm or challenge the view of the blog author. For example, the blog critic could write: *Duchesne and McMaugh (2016) support Flanagan's viewpoint stating that…* In such instances, dialogic expansion is created by bringing in or 'acknowledging' another view (i.e. Flanagan's + Duchesne and McMaugh). Conversely, challenging the blog author's view serves to contract the dialogic

space by narrowing to the view held by the blog critic, as in: *Flanagan stated…. However this form of motivation is has been associated with… (Duchesne et al. 2013)*. Here, the blog author's view is firstly acknowledged, but then a counter view is introduced, as indicated by '*however*'. In year 2, few students countered a blog author's view; they tended to choose blog posts that they agreed with. As the final section of this chapter will discuss, such 'positioning by agreement' indicates that challenging the view of others is an aspect of critique that may be developed later in students' program of study.

To sum up, the analysis of heteroglossic resources for dialogic expansion and contraction contribute to the identification of a blog critique as a macro-genre. It unfolds as a series of three distinctive genres: *classifying report ^ (interpretation ^ personal response)^{n}*. In this notation, the brackets and 'n' indicate iteration. This means that the genres of interpretation and personal response repeat for each blog post that is critiqued. A brief overview of the underpinning analysis that has been discussed appears in Table 8.7.

Summary of complementary findings contributing to the creation of model texts

The findings about genre and context-dependence provide complementary perspectives on recurrent features that are important to successful blog critiques. The SFL analysis has highlighted that successful blog critiques can be organized into three distinctive sections or genres. These genres are differentiated by the use of varying heteroglossic resources which enable the clear identification of who holds a point of view. Analysis also highlights language resources that enable blog authors to align with the views of others, including those of experts in the field of education. From this perspective, 'being critical' involves identifying points of view, making clear shifts between them, and using the views of experts to support your own view. Such language use can be included in model texts to show students how to manage multiple points of view successfully.

The analysis of epistemological gravitation has highlighted that blog critiques have a wide semantic range where maintaining or changing epistemological gravitation serves particular functions within the blog critique. The functions of specifying the possible impact of teaching practices on students, and the possible means of achieving pedagogic goals are particularly important for providing explicit reasoning that underpins a point of view. Clausing analysis has shown that this is achieved by a change to weaker epistemological gravitation from atemporal-transcendent clausing to atemporal-potential clausing. From this perspective, 'being critical' involves using a focus on impact and means as a way of articulating the value of theoretical constructs for practitioners and their students. It also grounds what is valued as practical and achievable in classroom settings. Like the insights about heteroglossic resources, the types of clausing that create such changes in context-dependence can be included in model texts.

TABLE 8.7 A blog critique as a macrogenre

Genre	Stage (1st Capital)	Example	Dialogic expansion or contraction	Voice
report: **classifying report**	Classification	This term refers to… (Duchesne & McMaugh 2016).	acknowledge	researcher
	Description	Research associates intrinsic motivation with… (Duchesne et al. 2013).	acknowledge	researcher
text response: **interpretation**	Evaluation	In her blog post, Flanagan emphasizes the importance of fostering intrinsic motivation.	acknowledge	blog author
	Synopsis	Flanagan further supports this argument by…	acknowledge	blog author
	(Re-affirmation or Challenge)	Duchesne and McMaugh (2016) support Flanagan's viewpoint stating that… Flanagan stated… …However this form of motivation is has been associated with… (Duchesne et al. 2013).	acknowledge counter	researcher
text response: **personal response**	Evaluation	I strongly agree with Flanagan that intrinsic motivation is critical to successful practice. I agree with Hutchins and Bentham (2012) that…	pronounce	blog critic
	Justification*	As research shows… (Duchesne & McMaugh, 2016).	contract: proclaim: endorse	blog critic

KEY
Genre name = lower caps
Stages within the genre = 1st capital
( ) = optional genre stage
( )n = iteration. In this case iteration involves a series of two genres for each blog post that is critiqued.
*Adapted from Martin & Rose (2005).

Students can then see how different representations of knowledge enable them to demonstrate engagement with theory and also tie it to practitioners and students in specific pedagogic contexts.

An overlay of findings about genre and context-dependence in blog critiques is represented in Figure 8.2. These complementary findings can inform model texts that can be examined interactively with students as a way of making successful features visible. The analysis of 'where theory goes' has also shown that there are different options for integrating theory successfully, and such variation is an important part of using exemplars with students.

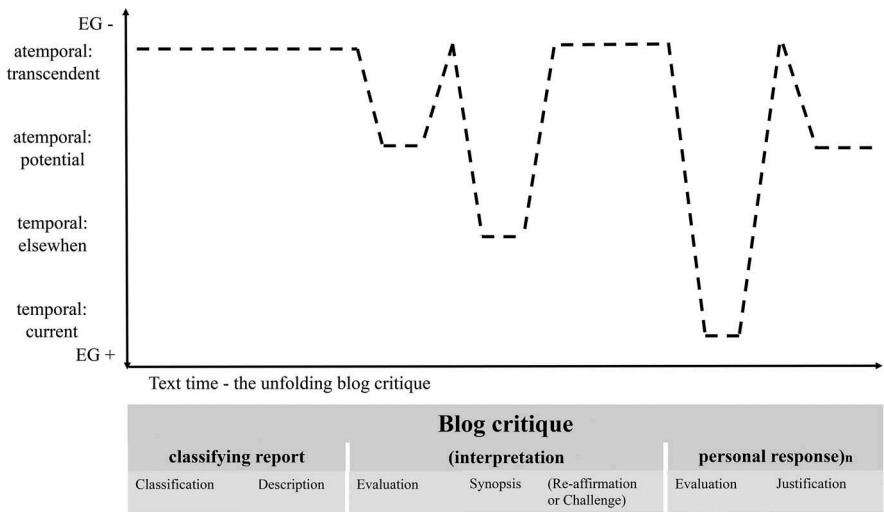

FIGURE 8.2 Relative shifts in epistemic gravitation in the unfolding genres and constituent stages of a blog critique

Conclusion

This chapter has focused on how critical reflection manifests in academic discourse. Rather than use broad decontextualized definitions of what 'being critical' involves, it has used theory within LCT and SFL to identify key features of critique in a specific kind of assessment task. This text analysis has been motivated by wanting to reveal what second year students in a Bachelor of Education program are expected to do and demonstrate as they craft a blog critique, and one that would be awarded a high grade. The findings about the structure of blog critiques and their intricate clausing and language resources informed the creation of model texts for use in teaching. They also informed the creation of a note-taking template, as one of several guided reading activities. Scholars have long argued that such explicit teaching is particularly relevant for assessment tasks where expectations are not always obvious to students (Rose & Martin 2012; Stevenson et al. 2018).

These findings raise questions about claims that blogs may be 'ideal' for developing reflective and critical thinking (Dudley & Baxter 2013). While blogs may be a type of assessment task where 'pre-service teachers feel comfortable in revealing their levels of understanding' and teacher-educators may 'gain real insight into what students are actually understanding' (Dudley & Baxter 2013: 195), this study has shown that students need to demonstrate 'critical analysis' through specific types of language choices. Therefore, notions of blog writing as an example of an assessment task where students can engage in 'exploratory risk-free talk', use a 'conversational voice' (Fawcett 2010: 82), and 'express their own personalities' (Christie & Morris 2019: 578) may be misleading. The successful blog critiques in this study were highly-structured with very deliberate shifts in points of view and explicit connections to theory. Clearly, like other types of tertiary assessment tasks, a blog critique is a specialized way of making meaning.

Findings from this study invite further investigation of how demonstrating critical reflection through academic discourse can be taught gradually and cumulatively across a program of study. Previous findings related to assessment tasks in the first year of a Bachelor of Education program indicate that student-teachers are expected to predominantly focus on personal life experiences, connecting these experiences to theory, and identifying the relevance of concepts and issues (Macnaught 2020). Then, as this chapter has shown, around year 2, the focus of critique extends to the specific pedagogic practices of others. This includes positioning one's own view in relation to the views of others. Students are expected to use literature to provide reasoning for their own views, consider the impact of actions, and specify means of achieving pedagogic goals. In terms of frameworks that classify reflection (e.g. Bain et al. 2002 reviewed above), this shift, from approximately year 1 to year 2, involves 'deeper' levels of reflection, such as extending 'reporting and responding' to 'reasoning', as illustrated in Table 8.8.

Depending on the practical element of their program, students in year 2 may have had limited opportunities to reflect on classroom experiences where they are taking a leading role as teachers. This means that, at this point in time, 'critical analysis' may not involve what Bain and colleagues (2002) refer to as a 'reconstruction' of classroom events where students relate their teaching experiences to future actions. In other words, what frameworks regard as the ultimate level or outcome of reflection may not be required until later in their program. Further research is needed to investigate the expectations of 'being critical' in the assessment tasks during year 3, such as identifying where students may move beyond 'positioning through agreement' to challenging the views of others. A progression where expectations of critique are specified, like in Table 8.8, could inform a systematic and visible way to teach and assess what is valued.

TABLE 8.8 A possible progression of critique in Year 1–3 assessment tasks

Year	Assessment task examples	Focus of critique	5Rs Framework for Reflection (Bain et al. 2002)
1	Annotated bibliography Autobiographical essay (see Macnaught 2020)	*Personal life experiences* a) Connecting experiences to theory b) Identifying the relevance of concepts and issues	Reporting & Responding Relating
2	Blog critique (as analyzed in this chapter)	*The teaching practices of others* a) & b) + c) Identifying views of others d) Identifying/differentiating one's own view e) Supporting own view with research f) Identifying the possible impact of actions/choices g) Specifying the possible means of achieving pedagogic goals	Reporting & Responding Relating Reasoning
3	Extended essay (for future analysis)	*Own teaching experiences* a), b), c), d), e), f), g) + h) Challenging the views of others i) Specifying future actions	Reporting & Responding Relating Reasoning Reconstructing

Notes

1 For steps related to the process of collaboration see Macnaught et al. (forthcoming).
2 As the tool has yet to be published, changes by Doran & Maton (forthcoming) to the names of categories may occur. However, if this does happen, which categories I am referring to will be obvious.

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9

KNOWLEDGE-POWERED REFLECTION IN TEACHER EDUCATION

Semantic waves and genre-based writing practice of museum experiences

Nóra Wünsch-Nagy

Introduction

Demonstration of reflective thinking and reflective practice is part of the expected outcomes in teacher education programs. Although there are numerous descriptions of what is expected from teacher trainees to complete a reflective assignment, the concept of reflection is used in reference to so many activities and processes that it remains difficult to grasp objectively (e.g. Ryan & Ryan 2013). During a course on multimodal literacy development for English teacher trainees, I set out to make an impact on the way students demonstrate their reflective skills through a set of pedagogical tasks. My main objective focused on developing the group's language and multimodal literacy skills, and I also aimed at challenging the way students responded to cultural and pedagogical experiences.

First, this study reviews the challenges and considerations of developing reflection as a cognitive process demonstrated through language, and then it reports on possible pedagogical solutions to achieve positive change in the students' reflective practice. In doing so, the study draws on the concept of *semantic waves* from Legitimation Code Theory (Maton 2013, 2020) and examines the shifts between everyday and more specialized knowledge demonstrated in the students' classroom dialogues and writing assignments. During the course, writing tasks were carefully planned based on a genre-based approach to writing instruction to provide a scaffolded pathway through tasks with different purposes. Apart from aiming at reflection in writing, students received guidance in their spoken reflection tasks during the collaborative dialogues built around exhibition visits. The main organizing principle for both the scaffolded genre pathway and the lessons was the use of semantic waves in pedagogy, assessment and analysis.

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Reflective practice in teacher education

In the context of teacher education, reflection has become a concept with a multitude of complex meanings, models and frameworks. Vaguely defined, reflection might seem both as an everyday task and a challenge for students who are required to show evidence of their reflective skills either in speaking or writing. Reflection is often understood as a written assignment, a pedagogical task, pedagogical practice, or a cognitive process. To further complexify the situation, reflective assignments might include critical reflection essays, learning journals, reflective journals, critical reflection reports, case studies, reflective text analysis, and reflective paragraphs (e.g. Szivák 2014; Tilakaratna & Szenes 2021). For example, in Hungarian teacher education programs, students are expected to write a portfolio, in which reflection takes the form of a larger text, and it also has to be part of every lesson plan and report, and either integrated or standalone written documents (Kucserka & Szabó 2015). There are recommendations to divide the career path reflection essay (*pályakép reflexió*) into three main parts, such as description, analysis/argumentation and self-evaluation. Within reflective writing assignments, teacher trainees are expected to demonstrate the integration of theoretical frameworks in their pedagogical practice, shifting between personal experiences and academic knowledge (e.g. Bolton 2010; Kucserka & Szabó 2015; Stevenson et al. 2018). In short, students are expected to make tacit knowledge explicit through reflection.

Related to this, pedagogical tasks which encourage reflection as a mental activity include various written assignments described as reflective essays and also spoken tasks either individually or as a collaborative activity, for example, as dialogues between mentors and teacher trainees. However, what exactly students and teachers understand by such an assignment often remains unclear (e.g. Calderhead 1989; Hatton & Smith 1995; Ryan & Ryan 2013). Indeed, the question remains what text type teachers are expecting students to write when they give instructions such as '[r]eflect on…'. This area of reflective pedagogy remains to be researched.

Inspired by Dewey (1933), reflection as cognitive process and reflective thinking have been defined as the conscious thinking and analysis of current, previous actions and experiences, and what and how people have learned during this process. It includes a high level of awareness of one's own knowledge, assumptions and experiences in the context of a theoretical framework, either during or after an activity as categorized by Schön (1983) as *reflection-on-action* and *reflection-in-action*. An important aspect of reflective thinking is the integration of academic knowledge in the context of a personal experience. In this context, one challenge of the development of reflection as a cognitive process is that it is time-consuming. As teacher cognition research reported (Westerman 1991; Borg 2003; Gatbonton 2008), there are significant differences between novice and expert teachers' cognitive practices simply because novice teachers need time and experience to integrate

pedagogical knowledge in their practice. Such research reveals that although reflective thinking can be cultivated and scaffolded through pedagogical tasks, it cannot substitute pedagogical experience.

As a pedagogical practice, reflection is expected to become part of teachers' everyday routine and it needs to be demonstrated through written and spoken reflective tasks. The reflective teaching practice is a cyclical, active and dynamic process which follows the stages of planning, action, data collection, analysis, evaluation, and reflection (Szivák 2014). The common traits of the various models of reflective practice include description, analysis, evaluation with the outcomes of solving problems and raising awareness of one's own pedagogical practice which integrates academic knowledge in everyday routine. In this regard, reflection also depends on collaborative dialogues among colleagues (Cruickshank et al. 1981; Chick 2015), which indicates the need for development of dialogic skills. In the Hungarian context, reflective practice in education is defined as thinking, practice and cognitive strategy that continuously and consciously analyzes pedagogical activities and guarantees teacher's continuous self-assessment and development (Szivák 2014: 13). In summary, reading the various guidelines and research studies on reflective thinking and practice in teacher education, one might notice that the term 'reflective' is used more like an epithet in front of a range of teaching-related activities, such as reflective dialogues, reflective analysis, reflective evaluation with high expectations from teacher trainees. For this reason, a clear definition of expectations and assessment criteria in connection with reflective assignments needs to be shared with students.

Three aspects of reflection in Hungarian teacher education

In the Hungarian context, expectations of the reflective practitioner may seem demanding: they need to be able to write about their professional identity, their relationship with the teaching profession, planning, goals, competences, motivation, and demonstrate, evaluate, interpret their own professional development while discussing each teacher competence (Szivák 2014; Kucserka & Szabó 2015). In this complex framework of various aspects of reflection, three main concerns have become salient.

Firstly, in connection with self-reflection and self-assessment, teacher trainees might feel as though they are in a vacuum where they need to report on their own experiences without much understanding of what is expected from them or what they need to consider as reflection-worthy. Also, students might concentrate too much on their own personal reactions and opinions without contextualizing them or viewing them through an objective lens. Such a situation might create a kind of Narcissus-effect with the teacher trainee as the mythological figure who carries out reflection only for reflection's sake. For this reason, courses that aim at building reflective skills need to explicitly focus on contextualization with the guidance of a teacher, if possible, supported by group

dialogues. Two pedagogical approaches can contribute to dealing with this issue: contextualization of experiences within local and international environments, and collaborative dialogues which promote the co-construction of meaning made during teaching experiences (e.g. Wells 2007).

Secondly, the main purpose and outcome of reflective practice is developing awareness and conscious decision-making in teacher trainees. A major challenge, as mentioned above, is that such development takes much time and needs to be based on experiences. One way to guide this process may be found in a variety of explicit teaching practices that scaffold learning, writing and speaking about pedagogical experiences at the early stages of their reflective practice. Such pedagogical models can be found in genre-based pedagogy informed by Systemic Functional Linguistics (hereafter: genre pedagogy) and its pedagogical model, the Teaching-Learning Cycle (Rothery 1994). In second language higher education contexts, the positive impact of genre pedagogy has been emphasized in connection with its influence on the development of genre awareness (Yasuda 2011), with special focus on summary writing (Chen, Y. S. & Su 2012; Yasuda 2015). The necessity of pedagogic metalanguage for teachers has also been discussed as a major factor for the success of the pedagogy (Rose & Martin 2012). Another beneficial solution lies in the potential of field trips to museum as sites of informal and multidisciplinary learning. Museums have been identified as powerful sites of learning for teacher trainees where they can see theory in action and observe how pedagogical knowledge transcends formal learning contexts (Clark et al. 2016), and practice metacognitive skills while promoting museum literacy (Sims 2018).

Finally, one of the most defining characteristics of reflective practice and reflective writing is finding and verbalizing connections between personal experience and theoretical knowledge. As Tilakaratna & Szenes (2021: 105) point out, a major challenge in this regard is that "unlike learning traditional disciplinary content, critical reflection requires students to examine their actions, behaviour and feelings from a theoretical perspective". Not only does such a situation confirm the above-mentioned need for experiences in a guided learning plan over several courses, but it also indicates the need for a transparent model which explains, visualizes and scaffolds the links between different subjective and objective knowledge. One framework that fulfils such a role is Legitimation Code Theory (LCT). LCT is a sociological framework for studying practices that comprises different sets of concepts or 'dimensions', each of which explores different facets of practice. One dimension is Semantics which both theorizes and visualizes the means by which legitimated practices appear in different contexts (see Maton 2013, 2014, 2020). Specifically, the Semantics dimension offers a toolkit which can serve as a pedagogical, assessment and data analysis tool that gives insights into how context dependency shapes texts. Context-dependence reveals the relative degree to which theories and concepts and concrete experiences are related. Recent studies which rely on LCT to study reflective practice include research in the field of social work and business (Boryczko 2020; Tilakaratna & Szenes 2021), teacher education (Macnaught 2021) and nursing (Brooke 2019).

Research question

An important implication of Schön's (1983) observations of the reflective practitioner is their use of language: "One must use words to describe a kind of knowing, and a change of knowing, which are probably not originally represented in words at all." Although this sentence might not intentionally highlight the role of language in reflective practice, for linguists and language teachers it underlines the unique access only language provides in terms of integrating and sharing reflective observations on knowledge practices. Language development aims in this context to surpass vocabulary building or focus on skills development. Instead, the key role of language underlines the necessity of explicit teaching approaches which guide students in using language effectively in reflective dialogues and written assignments. There are several aspects of reflective practice which need to be addressed through pedagogical practice: different skills such as analysis, interpretation and evaluation; demonstrating links between theoretical knowledge and concrete experiences in connection with an event; and developing dialogic and writing skills to show evidence of reflective thinking. In this context, I set out to find ways to influence and change teacher trainees' reflective thinking skills within the context of a course on multimodal literacy development.

Context

In order to find answers to this question, I examined the details of a course I designed and taught on multimodal literacy development called *Making Meaning with Visual Narratives* at Eötvös Loránd University (ELTE), Budapest in 2019. The course focused on social semiotic multimodality (e.g. Kress & van Leeuwen 1996; Kress 2010) and academic language development. However, the explicit teaching of reflection per se was not the main objective of the course. Rather, reflective practice was integrated in a series of dialogues and writing tasks. Two exhibition visits were at the core of the course, and the main museum visit took place at the Petőfi Literary Museum in Budapest (PIM), where a temporary exhibition presented the life and work of Géza Csáth, born József Brenner (1887–1919), a Hungarian psychologist-writer who became well-known for his struggles with drug abuse, violence, and suicide. The choice of such a controversial literary figure was a conscious decision with the aim of inciting dialogues. The other exhibition visit took place in a smaller gallery near the university. The students in the course were doing their teaching practice in secondary schools during their final year at the university. They were enrolled in two majors, and their common discipline was English as a foreign language.

The course was divided into three parts over 13 weeks. First, the students were introduced to multimodal analysis focusing on the main concepts of social semiotic multimodal theory, visual analysis, image-text relations, and multimodal reading strategies. The second phase of the course was built around the two exhibition visits. Before the visits, the group learnt about language and

learning in museums. After the visits, the students joined discussions on the online educational platform used during the course, and the lesson that followed the visit was dedicated to dialogues about various aspects of the visit. To conclude the term, in the final phase of the course, the students presented a project such as a lesson plan or a presentation applying the approaches they studied during the course. During the course, the students were requested to complete different types of written assignments ranging from short reflective tasks through image descriptions, reviews to presentations.

Methodology

The study presented here takes a case study approach to classroom research and relies on the qualitative analysis of different sets of data collected during the course. These data sets include: the course syllabus, the students' written texts (with a special focus on exhibition reviews), and the students' post-course feedback questionnaire answers. The thematic analysis of the students' feedback was based on the qualitative content analysis of Saldana's (2009) coding directions. The students' reviews were examined through the analytic codes of LCT Semantics. The course content was analyzed for genre drawing on genre-based pedagogy from SFL and LCT Semantics.

Genre pedagogy

The SFL view on genres guided the course design in terms of writing tasks. In this approach, genres are viewed as

> staged, goal-oriented social processes. Staged, because it usually takes us more than one step to reach our goals; goal-oriented because we feel frustrated if we don't accomplish the final steps; social because writers shape their texts for readers of particular kinds (Martin & Rose 2008: 6).

These three aspects of genres provide both the students and the teacher with the clarity of the context, audience and organization of their writing. Such kind of genre pedagogy reveals the organizing principles of different genres through explicit pedagogy. In Hyland's words, it is "perhaps the most clearly articulated approach to genre both theoretically and pedagogically" (2007: 153). Rose and Martin (2012) introduce the most common school genres categorized by their social purposes and their most common features and their main social functions such as engaging, informing and evaluating. Their detailed taxonomy with information about the social purposes and stages of each genre provides teachers with a metalanguage that helps them create well-defined and scaffolded writing tasks. Influenced by the detailed genre map by Rose and Martin (2012), I included six writing tasks in the course design:

- a short recount of childhood reading experiences in about 300 words,
- a short recount of a memorable museum experiences in about 300 words,
- image descriptions,
- multimodal text descriptions,
- an exhibition review,
- and presentation of a multimodal text analysis or lesson plan.

The first two writing tasks aimed at encouraging students to recall some of their own memories and make them think about what they meant to them. They gave me insights into how students approached these experiences: whether they contextualized them within larger conceptual frameworks or focused mostly on the emotional and social aspects of their experiences. The image and multimodal text description tasks gave students the opportunity to practice the freshly gained knowledge of social semiotic multimodal theory in an objective manner. They were also asked to carry out picture research based on some guidelines.

For the next writing task, students were introduced to the genre of reviews within the response genre family. They read model reviews in popular literary and cultural magazines, and then the group deconstructed some sample texts based on the genre stages of *Context, Description*, and *Evaluation*. The review genre task aimed at encouraging students to control their response to a museum exhibition through thinking about the context and providing a detailed description before moving on to evaluating the text. This writing task asked students to take on the role of a language teacher writing a review for fellow teachers about the exhibition in a language teaching magazine. Such an approach resonates well with the expectations of reflective practice. In my text analysis, I focused on how successfully the students created the reviews based on the expectations of the genre. The final presentation task invited students to view an experience or a concrete multimodal text through the theoretical framework of the course. After the course, the final anonymous feedback on the course invited the students to reflect on their learning experiences.

LCT: Semantic gravity and semantic waves

The idea of context-dependency was introduced to the students to guide them in organizing their thoughts around the theoretical framework of the course and the experiences of museum visits. Context-dependency is theorized in the Semantics dimension of LCT through the concept of *semantic gravity*. The dimension of Semantics is centred on two organizing principles underlying practices: *semantic gravity*, which explores context-dependence, and *semantic density*, which explores complexity (Maton 2013, 2014, 2020). These two concepts can be enacted either together or separately. In this study, semantic gravity is enacted on its own to explore the organizing principles of the course content and the students' reviews in terms of their context-dependence.

Semantic gravity represents a continuum of strengths with infinite capacity for gradation and variation (Maton 2013: 110). Stronger semantic gravity indicates more context-dependence; for example, more concrete examples, such as the description of a lesson or what someone has seen at an exhibition. Weaker semantic gravity indicates less context-dependence; for example, less focus on manifest experiences and more on generalized or abstracted ideas. Semantic gravity can also be traced across time and text time as *semantic profiles* (Maton 2013, 2014, 2020). As Figure 9.1 illustrates, a semantic profile shows strengths of semantic gravity (and/or semantic density) on the *y*-axis and time on the *x*-axis. The profile traced by analysing strengths of (in this case) semantic gravity over time can take any shape and that pattern may have significant implications for practice. Figure 9.1 shows three illustrative profiles for semantic gravity, which is weaker at the top (more general or abstract) and stronger at the bottom (more particular or concrete). 'A' traces a *high flatline* of semantic gravity: relatively context-independent practices, such as abstract discussion of theories. 'B' traces a *low flatline* of semantic gravity: practices remain constrained in their own context, such as personal responses or recounts. 'C' traces a *semantic gravity wave*, indicating movements of context-dependence through the text, such as starting a lesson with the description of an image (concrete, particular – stronger semantic gravity) to introduce the concept of colour theory (weaker semantic gravity), and then listing more examples on the various colour schemes in paintings (stronger semantic gravity). *Semantic gravity waves* can begin and end anywhere on the profile and take many shapes; the key is that they involve shifts in semantic gravity in both directions.

Successful student writing has been found to produce semantic waves, which indicate shifts between experiences and specialized knowledge (Szenes et al. 2015). When considered in the longer text time of a lesson or course plan, the

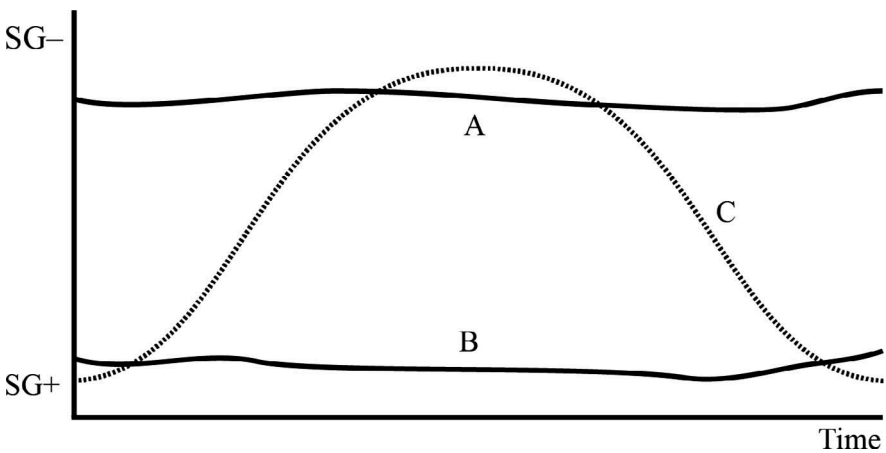

FIGURE 9.1 Three semantic profiles
Source: Maton (2013: 13)

graduality of semantic waves also supports the idea that knowledge-building takes time and needs to be carefully guided towards a successful outcome.

During the course, one lesson and several shorter discussions were dedicated to the concept of semantic gravity and its significance in writing and oral reasoning. The students read an article about semantic gravity (Ingold & O'Sullivan 2017) and watched a short video about the role of semantic waves in reflective writing (AUT literacy for assessments 2018). During the data analysis, I relied on the concept of semantic gravity and semantic waves to analyze the course content and the students' reviews. For the purpose of transparency in data analysis, I created a *translation device* (Maton & Chen, T. H. 2016), which shows how a concept is realized within a specific problem situation, including indicators and examples from the data. This is how the analysis of the data becomes explicit and transparent. My translation device demonstrates the degrees of semantic gravity examined in these texts, presented in Table 9.1. This translation device was developed based on other research studies enacting semantic gravity (Maton 2009; Georgiou 2016; Kirk 2018).

TABLE 9.1 Translation device for semantic gravity of students' exhibition reviews

Semantic gravity coding categories	Description of coded content	Example quote from student reviews
SG– –	Student shares a theoretical principle, specialized or abstract knowledge without reference to the text/experience	The anomalies of a given social reality are and always were the chief concern of most modern Hungarian writers. (S3)
SG–	Student describes the text/experience while explicitly providing some references to theoretical views, multimodal analysis and pedagogical perspectives.	Visitors go through a non-linear path where they encounter Csáth's *Gesamtkunstwerk*. (S3)
SGØ	Student summarizes the text/experience.	It contains visual images (uniquely rich and so far never seen by the audience), tactile, witty elements, and also random verbal quotations from his diary. (S3)
SG+	Student describes text/space and objects/experience with concrete examples. Shares suggestions about pedagogical practice.	It is highly recommended for any language teacher who wants to create a multimodal learning experience. (S3) There is a voice recording of the author's daughter, which brings the listener very close, almost to an intimate distance to her notorious father. (S3)
SG++	Student reflects on personal engagement and emotional reaction in connection with a text/experience.	As I read these sentences, I felt pain and sadness. (S9)

The strengths of context-dependency were determined based on the analysis of complex and simple clauses. Five levels of semantic gravity were defined based on the knowledge practices the texts exhibited. The details of these five levels are described in the 'Description of coded content' column. The description of the coded content explains how students describe a text or an experience and how they link it with theoretical principles or specialized knowledge. An experience can include any individual or group activity, a lesson or a critical event. In this analysis, texts refer to multimodal texts such as an exhibition, a film, a website, or an illustrated book. During the lessons, the three main levels of concrete experiences, generalized ideas and theories were introduced to the students in the context of exhibition and teaching experiences.

Dialogues and exhibition visits to support knowledge-building

From a pedagogical perspective, it is important to highlight the integration of dialogues and museum visits in the course. Exhibitions offer a wide range of pedagogical learning outcomes, and as Blunden and Fitzgerald (2019: 194) have pointed out, museums are "the ultimate multimodal classroom, where students have the opportunity to engage through multiple modes with authentic and/or original objects, records, artworks and other content related to their studies". However, an exhibition visit without guided discussions would remain a simple memorable experience. Dialogic interaction can contribute to professional growth and support reflective practice (Chick 2015; Farkas 2019), and for this reason, collaborative dialogues dominated each lesson with only occasional monologic episodes during which I introduced the students to a new concept or demonstrated model text analysis. The discussion of texts and museum visits were guided through dialogues, giving the students enough time to comment on each other's opinions and insights. During these dialogues, students were often reminded to use semantic waves to structure their reasoning either by providing evidence to their theoretical comments or expanding the description of an image, text, or experience by finding a link with the discussed theoretical framework of multimodality. The exhibition visits were scaffolded with tasks before, during, and after the visit. The students were introduced to research on the role of language in learning in the museum, and they were encouraged to observe multimodality in action. During the Csáth exhibition visit, the students received guidance with a list of questions about the exhibition as a multimodal space, the use of language, disciplinary learning and second language learning with extended discussion points.

The writing and speaking tasks included:

1. Writing task 1: Short recount of a memorable museum experience
2. Writing task 2: Short recount of childhood reading experiences
3. Speaking task 1: Picture/Text description
4. Speaking task 2: Picture/Text description

5. Writing task 3: Picture research and description
6. Writing task 4: Picture research and description
7. Speaking task 3: Book presentation
8. Writing task 5: Exhibition review
9. Presentation task

The questions in the end-of-course questionnaire included:

1. Which tasks did you enjoy the most? Why?
2. Which tasks did you enjoy the least? Why?
3. In what ways do you think the course has helped you to learn something new? Specify at least three new things you have learned during the course.
4. In what ways have the exhibition visits contributed to your learning?
5. What did you like about the course?
6. What would you change about the course?

After the exhibition visit, I initiated an online discussion on the educational platform used during the course to keep the conversation going until the next lesson. During the lesson after the visit, the group reflected on their experiences, and discussed the pedagogical potential of the visit as well as the idea of introducing controversial topics and figures to their own students.

To find answers to my question regarding ways of influencing students' reflective thinking, I relied on the data sets presented in Table 9.2 and their analysis. The students' end-of-course-questionnaire was handed in anonymously, and the students signed a consent form to participate in the research.

TABLE 9.2 Data sets collected during the course

Data sets	Analytical approach	Focus	Number of texts
Course plan	LCT semantic gravity	Writing and speaking tasks	1
Students' exhibition reviews of the Csáth exhibition	LCT semantic gravity; genre stage analysis	Knowledge practices in the reviews	9
Students' answers in the end-of-course questionnaire	Thematic analysis	Students' reflection on the course in terms of knowledge building and development	9

Findings and discussion

The semantic gravity analysis of the writing and speaking tasks focused on the strength of context-dependency for each writing task and whether the students were expected to integrate specialized knowledge or theoretical frameworks into

their writing. Each task was assigned a relative semantic strength in terms of its context-dependency and connection to either experience or specialized knowledge. As demonstrated in Figure 9.2, this can be modelled as a gradually rising semantic wave. The first tasks aimed at activating their own experiences but were not graded due to their personal tone. During the various description tasks, they were guided towards using multimodal references and analytical approaches instead of expressing their personal preferences. By the time they arrived at writing the reviews, enough knowledge was scaffolded to expect students to take an analytical perspective that helped to distance themselves from solely focusing on the description of an event or their emotional responses. The final presentation task was the main outcome of the course: it encouraged students to find their own research topic and analyze it from a theoretical perspective through analysis and interpretation. The pedagogic design depicted by the gradual strengthening of the wave in Figure 9.2 aimed at making the students feel confident about working with multimodal images and exhibition experiences.

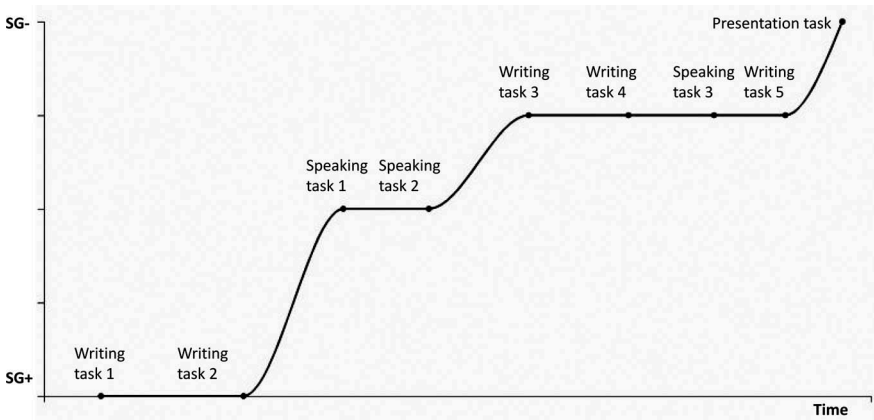

FIGURE 9.2 The writing tasks presented in a semantic wave

Genre analysis of the students' reviews revealed that out of nine reviews, seven followed the typical genre structure with minor modifications. One student wrote a personal response with some descriptive paragraphs. One student diverted from the task and created a guide with multimodal perspectives for language teachers about the exhibition. This student did this on purpose, being inspired by the exhibition. Except for the one personal response, the students took the role of the language teacher writing the review for fellow teachers, and they shared pedagogical perspectives in the evaluation of the exhibition. The detailed overview of the genre stages can be seen in Table 9.3.

Following the genre stage analysis, the reviews were coded using the web application SG-Plotter Heroku App. The reviews, except for the one personal response, demonstrated a range of semantic profiles. The main objective of

TABLE 9.3 Genre stages of the reviews

Student	Genre stages
S1	Context ^ Description ^ Evaluation
S2	Context ^ [[recount]] ^ Evaluation ^ Description ^ Evaluation
S3	Context ^ Description ^ Evaluation
S4	Context ^ Description ^ Evaluation
S5	Context ^ Description ^ Evaluation
S6	Context ^ Description ^ Evaluation ^ Evaluation
S7	Context ^ Description ^ [[personal response]] + Evaluation
S8	A guide for teachers on multimodality and the exhibition
S9	[[recount]] ^ [[personal response]] ^ Description ^ [[personal response]]

Note: The caret sign ^ is used in SFL genre theory to indicate that the stages are in a sequence in the structure. The square brackets [[…]] indicate an embedded genre, i.e. a genre functional as a genre stage.

introducing the idea of semantic gravity to the students was to help them understand that persuasive and effective texts shift between different levels of context-dependency i.e. semantic gravity. They were reminded that they should avoid writing in semantic flatlines for academic tasks except when a task specifically asks for a text typically demonstrating one, for example, an anecdote. Table 9.4 demonstrates the analysis of a student's review that includes most of the common traits of the students' approach to simultaneously writing about the exhibition as a group experience, pedagogical event and multimodal text. In the introductory paragraphs, students shared basic information about the exhibition and the author, sometimes with literary commentary. The second paragraph of the texts focused on the description of the exhibition through a multimodal lens using concepts from the analytical tools they studied during the course. Finally, the last paragraph gave an evaluation from a pedagogical perspective, focusing on the learning potential for second language learners. Seven out of the nine reviews effectively wove different types of knowledge and experiences together.

This coding is demonstrated as a semantic wave in Figure 9.3 below. From a pedagogical perspective, there is a significant difference between sharing the simple coding and the visual representation of the analysis with the students. This graph provided visual scaffolding to support understanding of the concept of semantic waves, and thus made grasping and recalling the idea of changing perspectives easier.

The students' feedback was then analyzed to gain insights into how they experienced the course and reflected on its outcomes for their own knowledge-building. First, the answers were coded, and then codes were organized into main themes. The major themes with some illustrative examples are presented in Table 9.5 below.

TABLE 9.4 Semantic gravity coding of a student's review

The anomalies of a given social reality are and always were the chief concern of most modern Hungarian writers. [SG– –] Yet there have always been important and often neglected artists whose work reveals an entirely different orientation. [SG–] One realizes just how unusual the fiction is of this highly gifted early-twentieth-century Hungarian writer Géza Csáth (1887–1919) when one reads, for example, the stories of *The Magician's Garden*. [SG–] This polymath is usually classified as decadent and often questioned on his position in the Hungarian literary canon, however his work and life do reveal important affinities with that of the first generation of Hungarian modernists, especially with the early poetry and prose of his cousin, Dezső Kosztolányi. [SG–]

The Magician's Death at the Petőfi Literary Museum offers a true multimodal experience. [SG–] Visitors go through a non-linear path where they encounter Csáth's *Gesamtkunstwerk*: [SG–] it contains visual images (uniquely rich and so far never seen by the audience), [SGØ] tactile, witty elements, and also random verbal quotations from his diary. [SGØ] There is a voice recording of the author's daughter, which brings the listener very close, almost to an intimate distance to her notorious father. [SG+] To exaggerate this intimacy between the visitor and Csáth, one can have a close look at his personal notes about his sexuality and mental deterioration. [SG+] These various paths of discovery offered by the museum contribute very much to the semiotic work that one gets involved in as a visitor of the exhibition. [SG–]

This is a special and unordinary experience by the Petőfi Literary Museum. [SG+] Not just because it highlights sensitive topics (e.g., addictions, sexuality), [SGØ] but also because it leaves the interpretation to the visitor, which can be a double-edged sword. [SG+] If language teachers consider taking an L2 class to the exhibition some preparation should take place beforehand. [SG+] Project-based learning can help to prepare for the visit: [SG-] reading a short story in English by Csáth, [SG+] conducting some short research on his life, [SG+] exploring what kind of addictions he suffered from and what his motifs were – just to mention a few. [SG+] After the visit a reflection and an open discussion with the group are very much advised. [SG+] It is highly recommended for any language teacher who wants to create a multimodal learning experience. [SG+]

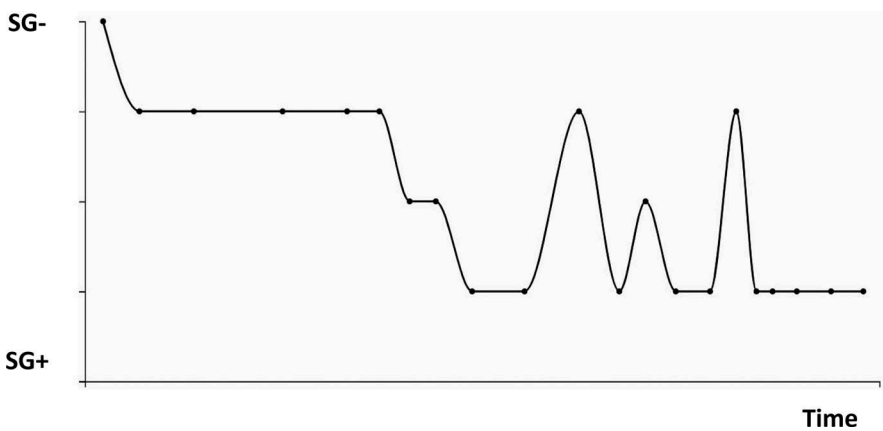

FIGURE 9.3 The semantic profile of a review

TABLE 9.5 Students' answers after the course

Questions	Themes	Illustrative quotes
Which tasks did you enjoy the most? Why?	EXHIBITION VISIT REVIEW WRITING PRESENTATION	It was an interesting exhibition and due to this (writing) task I paid more attention – I paid attention differently. To tell the truth, I hated the idea of presentation at the beginning of the course. However, it was my favourite at the end. I liked that the topic was optional. I enjoyed presenting and listening to my peers' presentation, too. I could learn more about them, as well.
Which tasks did you enjoy the least? Why?	DIFFICULT READING	I cannot remember anything in particular. There readings were quite difficult though.
In what ways do you think the course has helped you to learn something new? Specify at least three new things you have learned during the course.	VISUAL LITERACY MULTIMODALITY AWARENESS	I learned to take a whole new perspective to look at every single movie poster, advertisement etc. after the class. Coursebook layouts and their influence on learners, text displays and their meaning, it encouraged me to use more books, esp. picture books and pictures in my classes (they work wonderfully).
In what ways have the exhibition visits contributed to your learning?	PEDAGOGICAL APPROACH THEORY/PRACTICE KNOWLEGE-BUILDING	I was more conscious during the visits and I was given help to better categorize what I see: how different features contribute to the exhibition. How to gather separate but relevant information and make a whole piece.
What did you like about the course?	TEACHER'S PERSONALITY AND TEACHING WRITING TASKS EXHIBITION VISITS MULTIMODALITY	The parallel between theory and practice. It's not a usual thing in higher education. I liked your attitude and representing style. It was one of the courses of which I didn't have to be afraid and dread every week when going to class. The topics were interesting and useful for teaching, however, the theoretical parts were difficult.
What would you change about the course?	READING	As the reading tasks were difficult, some additional help could be useful. For example, giving some questions for each reading.

The overall feedback received from the students indicate three significant findings. First, students found value in the exhibition visits for both personal and professional development. They highlighted how much they enjoyed the visits, and at the same time realized that each exhibition contributed to their pedagogical practices. Second, building knowledge about the topic of the course through writing and research tasks and the museum visits was appreciated. As one student commented, they liked "[t]he parallel between theory and practice. It's not a usual thing in higher education". Such a comment indicates that the students expect guidance in developing their reflective practice. As some feedback shows, the fact that they were asked to write a review of the exhibition changed the way they observed it. The focus on active participation and interaction guided by concepts and analysis contributed to their learning and development. As one student remarked: "Seeing theory in real life is exciting." Finally, the teacher's attitude and the general atmosphere in the classroom also have an impact on how the students experience the course. Several students highlighted that the sincere and open communication among the participants contributed to the success of the course. In an environment where teacher trainees are treated as real professionals, they can truly start practicing the role of the reflective practitioner.

Discussion of pedagogical implications

Based on these findings, I present three pedagogical strategies that can contribute to developing students' reflective thinking and help them with demonstrating it successfully.

Pedagogical strategy to develop reflective practice 1: The genre pathway

The integration of writing tasks with different roles taken by students contributed to changing their perspectives and thinking about writing. First, they wrote recounts of personal experiences, but they were asked to gradually move towards taking the role of a teacher who observes exhibitions and multimodal texts informed by theoretical and pedagogical knowledge. The gradual shift from the student's own world through objective descriptions, scaffolded review writing, and finally the presentation task guided them towards more autonomy in their choice of topics but supported by more specialized knowledge. As the semantic gravity analysis of the writing and speaking tasks show, the assignments can be organized on a specific semantic wave, for example working towards stronger semantic gravity and less context-dependency.

Pedagogical strategy to develop reflective practice 2: Using the semantic wave as a pedagogical tool

The fact that a whole lesson was dedicated to the enactment of semantic gravity in writing practice contributed to the way the students approached writing their reviews. However, the students were reminded of semantic waves during the collaborative dialogues and analysis of educational materials in museums. During these dialogues, the teacher can stop and reflect on the students' comments, who can also give feedback on each other's observations. Challenging why and how students respond to experiences and texts can be eye-opening as long as it is carried out in a supporting learning environment where straightforward communication is motivating for the students. Inspired by the idea that reflective practice is not simply taught like disciplinary subjects, the understanding of the functions of semantic waves also needs to be approached all through a course in different situations and tasks. LCT Semantics can inform both teaching and assessment practices. The analysis of the reviews shows that providing feedback in the form of a visual scaffold like the semantic wave can give students more insights into how and what needs to be developed in their writing. Such explicit assessment demands explicit instructions and transparent expectations.

Pedagogical strategy to develop reflective practice 3: Working with experiences

Over the whole course, I focused on activating students' past experiences, creating shared ones, and inspiring them to observe their own new experiences from new, multimodal perspectives. Such an approach means accepting the relevance of personal experiences and recalling them in meaningful ways for pedagogical practice. By asking the students to write about memorable experiences, they were motivated to think about how they shape them and their future students. Apart from activating experiences, creating shared experiences is significant. The idea that "guidance through interaction in the context of shared experience" by Rothery (Martin 1999: 26) has a significant impact on students' development echoed in my ear during the course. Analyzing multimodal texts and visiting two exhibitions followed by collaborative dialogues created experiences that helped the students find immediate relevance of the new theoretical frameworks they studied during the course. Finally, the opportunity to choose and present their own research topics from a multimodal perspective at the end of the course guided students towards autonomous research practice. One of the most important lessons of the course is that field trips such as exhibition visits are great opportunities which create enough distance and new context for reflective practice.

Conclusion

This case study presented how explicit pedagogical practice and a rich, experience-filled learning environment can transform students' reflective practice in teacher education. The main guiding principle for this pedagogical practice was the LCT concept of semantic gravity, which shaped both the course design and the dialogic and writing assignments during the course. The benefits of different SFL-informed genre-based writing tasks were also demonstrated in this context as students were asked to write a variety of texts heading from recounts through descriptions and reviews towards the more complex knowledge-powered but experience-based multimodal presentations at the end of the course. The semantic gravity of the course scaffolded an arch that aimed at controlled reflective practice, appreciating the fact that reflection as a cognitive process embraces both the personal response to experiences and theoretical and methodological knowledge, which was based on social semiotic multimodality and exhibition experiences in this course. The enactment of semantic waves facilitated both pedagogical and assessment practices and guided students in forming their descriptive, analytical and reflective practice in the context of exhibition visits. An important aspect of recontextualizing semantic gravity for classroom lies in the power of visualization through semantic waves. The visual scaffold of a wave gives students a reference point and supports transferring the underlying idea that different knowledge practices come to life in different pedagogical tasks and these can be accessed easily through the concept of semantic waves. LCT-informed pedagogy and genre pedagogy thus contributed to a transparent, explicit and accessible approach to developing reflective practice in teacher education students.

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PART III

Cultivating critically reflective students

10

FRAMING THE LOOKING GLASS

Reflecting constellations of listening for inclusion

Jodie L. Martin and Jennifer Walsh Marr

Introduction

Reflecting on learning has increasingly been incorporated into undergraduate education as a means of enhancing metacognition (Zimmerman 2002; Hadwin & Winne 2012; Butler et al. 2017). Its purpose is to serve as an instrument for making connections between a course's pedagogical goals and a learner's individual learning experiences and awareness of them. However, the form and function of 'reflections' and reflective practices may not be clear to learners, particularly as they are representative of cultural values. Reflective tasks may be assigned uncritically, without consideration of how reflection is framed pedagogically and the specific experiences and perspectives expected. Reflective tasks may well be assigned without a desire to upset power imbalances (Brookfield 2016) nor awareness of tacit assumptions regarding form (Szenes & Tilakaratna, this volume). In fact, the type of reflection required by such tasks may itself be acritical – focused more on knower-shaping and engagement in learning than on knowledge-building and critiquing experiences. Further, for international students navigating both a new educational context and language of instruction, the process of incorporating cultural values and representing them through appropriate language choices deserves significant instructional support.

This chapter investigates an English for Academic Purposes (EAP) course for international students in Canada where the instructor incorporated iterative reflective writing as both method for learning and object of instruction to expose assumed linguistic and cultural values. It takes as a case study two texts: a public speech viewed in class by broadcaster Shelagh Rogers about her experiences as a witness to the Truth and Reconciliation Commission (TRC) into the Indian Residential School (IRS) System, and a student's reflective

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assignment which reflected on this speech, written at the end of the course. This case study therefore extends the repertoire of research on reflection in a number of ways. It examines undergraduate student work within a general first year program, and in particular a somewhat atypical text in terms of form, compared to work described in literature so far. It also analyzes not only the reflective written piece, but directly analyzes the stimulus which the student wrote about, and discusses the pedagogy which shaped it. Lastly, it adds to the body of work enacting Legitimation Code Theory (LCT) to explore reflection by drawing on ideas hitherto not enacted, specifically concepts from the dimension of Specialization and *constellations* (Maton 2014). Specialization is useful for exploring one aspect of how practices are presented as legitimate, while *constellations* conceptualizes the networks of associations that connect ideas and concepts together. In this study, the analysis examines how specific behaviours are presented as valid and valuable through a focus on the topic of listening.

This chapter begins by reviewing literature on 'reflection' and placing this study within that literature in terms of how the instruction and assignments responded to and built on findings from previous research. It then describes the context of the study, an undergraduate Academic English course in Canada for multilingual students, including the instructor's focus on First Nations issues, and introduces the two texts selected as a case study: a student's final portfolio reflective assessment, and the public speech, itself a personal reflection. The concepts of specialization codes and constellations are introduced. The constellations around listening formed in the two texts of the case study will be explored, and then discussed for the underlying values and dispositions. This will reveal that both the case study texts and the pedagogy are underpinned by a drive towards an inclusive disposition for the classroom and its participants, by cultivating inclusive listeners.

Literature: Framing values

Much of the literature on reflection in academic contexts presents reflection as a mechanism to develop professional practice and help students "show evidence of learning through creating interconnections between personal experience and the 'academic' content of their subject areas" (Macnaught 2021: 20). The term 'reflection' is often used as a catch-all phrase, representing cognitive processes of looking back and analysing experiences, an assumed habitus of reflective practice, various pedagogical tasks to elicit reflective practices, and most often written 'reflections'; recounting an experience and connecting it to larger ideas and values (Zimmerman 2002; Hadwin & Winne 2012; Butler et al. 2017; Macnaught 2021). Pedagogically, generic 'reflection' assignments may be used to support students' metacognition, or awareness of what they have learned (Butler et al. 2017), but the purpose and valued features of such texts may not be familiar to all students (Szenes et al. 2015; Brooke 2019), particularly as

their purposes and features are bound by cultural practices representative of the disciplines and/or professions in which they are typically situated (Beauchamp 2015). Thus far, most close analyses of reflective practices and reflective writing has focused on graduate and professional education in education (Ryan 2011; Beauchamp 2015; Macnaught 2021), or business and social work (Szenes et al. 2015; Tilakaratna & Szenes 2017, 2020), or nursing (Monbec et al. 2020; Tilakaratna et al. 2020). These analyses deconstruct the features of reflective writings, getting at the underlying values of the fields in which they are situated. At times critical, these analyses have noted patterns in highly graded reflective writing through linguistic analysis (Ryan 2011; Tilakaratna & Szenes 2017; Monbec et al. 2020; Szenes & Tilakaratna 2021) and through the LCT dimension of Semantics to reveal what are termed 'semantic waves' (Maton 2013), recurrent movements between specific experiences and abstract concepts (Szenes et al. 2015; Macnaught 2021; Meidell Sigsgaard & Jacobsen 2021).

The case study examined in this chapter is predicated on pedagogy informed by these analyses. Classroom instruction incorporated the semantic wave as a flexible strategy so as to leave room for variable realizations within the international cohort of students. Students completed frequent reflective 'snapshot' tasks on course content to build a portfolio of artefacts of their learning; the student writing sample analysed here looks back on and discusses such a snapshot artefact, connecting themes from a broadcaster's speech on listening to her own values and experiences of being heard. We analyze both the student's reflective writing and the stimulus text using 'specialization codes' and 'constellations', expanding the repertoire of concepts from LCT enacted to see the values manifest and their associations in reflective practices. The text itself was selected as it was somewhat atypical; where other research demonstrates a tacit redemption cycle[1] often underpinning highly successful reflective performances (Gales 2018; Tilakaratna & Szenes, this volume) this case study shows something different. We recognized this piece of student reflective writing was successful beyond the typical patterns of stages and 'semantic waves' described in previous studies enacting LCT (Szenes et al. 2015; Macnaught 2021; Meidell Sigsgaard & Jacobsen 2021), and therefore worthy of further investigation.

Course context and case study

This case study comes from an EAP course, designed to support multilingual, international students to decipher and navigate the language features and underlying values of their affiliated first year Arts courses. The lessons' foci were selected through an environmental scan of readings, lectures and assignment specifications across students' disciplinary courses, and developed in alignment with genre theory informed by Systemic Functional Linguistics (Dreyfus et al. 2016). The inclusion of reflective writing practices was incorporated into the course to support similar assignments from students' affiliated

courses as well as develop students' academic literacy through self-regulated learning (Butler et al. 2017), supported by the university's Teaching and Learning Enhancement Fund. The goal of this initiative was to support faculty members across the university in developing teaching activities that enhanced students' metacognition by asking students about their expectations, goals and previous learning experiences specific to the course they were enrolled in, making instructions, stages and assessment criteria accessible to students throughout their assignments, and incorporating reflective tasks on their learning to make that learning visible to them. To that end, the instructor (second author) designed a curriculum that spiralled through content, revisiting and redeploying concepts and assignments, making explicit connections to new applications. Reflection was supported through a series of reflective snapshot tasks, asking students to articulate their beliefs, understandings and responses to course content, compiling an archive of their impressions as they progressed through their learning and facilitating their metacognitive development.

Further, in response to the Truth and Reconciliation Commission of Canada (2015) calls to action, texts that discuss Indigenous histories, politics and knowledge were chosen as the focus of this course (see Walsh Marr 2019). The Truth and Reconciliation Commission of Canada was a part of a settlement agreement for Canada's Indian Residential Schools program, a colonial practice of removing Indigenous children from their homes to eradicate their language, communities and connection to culture. The personal stories of disconnection, abuse and generational trauma were shared through both public and closed hearings and summarized in the Summary of the Final Report (Truth and Reconciliation Commission of Canada 2015) which advocated for new relationships between Indigenous and non-Indigenous Canadians. This EAP course used texts by Indigenous authors and about Indigenous-settler relations as a mechanism for discussion and reconciliation, incorporating compiled resources from UBC's IN/Relation project (University of British Columbia n.d.), a teaching and learning initiative to support teaching international students about Indigenous peoples in Canada.

The data for this study were collected as an extension of participating in a teaching and learning enhancement project. Institutional ethics approval was given to request students' permission to compile and archive their assignments for this course, including their reflective writing tasks. Over the 26 weeks of the course, students built a portfolio of reflective snapshots, recording their responses to the Musqueam welcome to UBC and unceded land use, the university President's apology for Indian Residential Schools, their feelings about group work, and familiarity with academic literacy practices and linguistic features. The inclusion of reflective tasks made room for some of the less technical, yet profound, non-linguistic topics of the course, particularly that of Indigenous-settler relations and histories and Canada. While offering something of a freer writing space than formally assessed assignments, reflective snapshots throughout the course made for an explicit space for students'

metacognition, pausing to think about what they were learning and what they thought about it. This course's final summative reflection task was for students to select an artefact from their collected coursework portfolio (course materials, milestone assignments or reflective snapshots) and write an extended reflective piece on its role in their learning.

As students approached this final assignment of the term, the instructor focused on reflective writing practices in class, beginning with the rationale for enhanced learning and growth (Branch & Paranjape 2002). The instructor highlighted instructions from affiliated disciplinary courses that incorporated 'reflection' assignments, highlighting typical stages and features of reflective writing (Ryan 2011; Tilakaratna & Szenes 2017) often including an articulation of 'transformation' of understanding, reviewing a previous lesson on semantic waves, and including an instructional video on waving specific to reflection (O'Sullivan 2017; see also O'Sullivan this volume). To prepare the EAP class for its summative reflective writing task, the lecturer deconstructed student exemplars, highlighting features which created semantic waves, and calibrating them to the assessment rubric. Students were reminded these were descriptive patterns of highly-graded reflective writing; students were encouraged to adapt structures to suit their purpose.

The case study of this chapter involves one student's final reflective assignment, in which the student elaborated on a particular reflective snapshot written following the viewing of Rogers' public speech. In the video (The Walrus 2017), Rogers reflects on her experiences as a broadcaster, an honorary witness to the Truth and Reconciliation Commission, and a mental health advocate to present her aspirations for Canada on the event of the sesquicentennial (Canada's 150th birthday). This chapter examines both the public speech and the student's reflective writing in order to investigate the relationship between the texts and how they both construct the topic of 'listening'.

Theoretical and methodological framework

Reflective writing practices often involve personal experiences and values. The LCT dimension of Specialization (Maton 2014) is useful to explore these meanings because its concepts reveal the ways in which knowledge and knowers are articulated within practices. Specialization begins from the simple premise that all practices are about or oriented towards something and by someone. This enables us to analytically distinguish *epistemic relations* between practices and that to which they are oriented or about (such as objects of study) and *social relations* between practices and their subjects (such as authors). Each can be more or less emphasized as the basis of legitimacy. For example, a written text is always about a topic and by a writer but can be validated in different fields through how it engages with the specific topic and procedures discussed (emphasizing epistemic relations) and/or by how it expresses the writer's dispositions (emphasizing social relations). Where

reflective writing practices base their legitimacy on the identity or experiences of the writer – as a student, professional or practitioner – social relations are being emphasized. Social relations are particularly useful for investigating reflection as they enable the exploration of aspects emphasizing the writer or speaker of the texts and their emotions, values and practices.

This chapter also enacts the concepts of *cosmologies, constellations*, and *charging* (Maton 2014). Cosmologies conceptualize 'the logic of the belief system or vision of the world embodied by activities within a social field' (Maton 2014: 152); constellations explore how ideas and concepts are organized in relation to each other; and charging describes how ideas and concepts are ascribed positive or negative attributes. Some cosmologies downplay epistemic relations and emphasize social relations; in other words, they downplay the role of specialized knowledge, skills, and procedures but emphasize the significance of attributes of knowers. The resulting constellations (linked sets of practices) are labelled *axiological constellations* (Maton 2014: 148–170). Exploring axiological constellations has proven useful for revealing underlying and associated values of texts (Doran 2020; Jackson 2020) including reflective writing (Tilakaratna & Szenes 2020).

The analysis in this chapter was implemented by identifying *central signifiers* (the main ideas, themes or concepts) and exploring *associated signifiers* to map out constellations (Maton 2014: 154–155). In both case study texts, the substantive topic is listening and the central signifiers were determined to be references to listening and listeners. Methodologically, we applied what Maton and Chen (2016: 42–43) refer to as *soft-focus* and *hard-focus* analysis. We applied a soft-focus analysis through immersion in the data to get a feel for it and to explore emergent themes around listening. These were then revisited through processes of hard-focus analysis, checking theoretical definitions and realizations in the texts. Signifiers were identified and positioned in relation to each other to construct constellations through tables. These were complemented through annotations of charging where various signifiers were positioned positively or negatively.

Constellations of listening

This section explores how constellations of listening were constructed in the two texts. It begins by examining the public speech by Rogers which was viewed in class during the term, in order to provide insight into the stimulus for the student's response. It then examines the student's reflective assignment which reframed Rogers' words and values and triangulated them with her own experiences and values.

Stimulus text: 'How to be a better listener' by Shelagh Rogers

The public speech entitled 'How to be a better listener' was given by Shelagh Rogers (The Walrus 2017) as part of a series of talks to commemorate the

150th anniversary of Canada's confederation. Rogers reflects on her personal experiences of (not) learning French, being a national broadcaster, and being an honorary witness to the TRC. She moves between personal anecdotes and listening and humility as concepts, and back again. It is a speech to a general public, yet it is clearly delivered to an audience with a certain shared understanding and common culture; Rogers is warmly received by the audience, her anecdote about a faux pas in French is received with enthusiastic laughter despite the lack of translation, and she repeatedly refers to 'we' – that is, she is talking to Canadians about Canada and Canada's history and future. She touches on delicate topics – mental health, Canada's shameful treatment of First Nations peoples through the residential 'school' system – and yet she creates an inclusive speech and ambition for the future of Canada.

Two key axiological constellations can be revealed in this speech by identifying key signifiers. The central signifiers of the first constellation are the people Rogers mentions in her speech. They are constellated by being positioned in relation to Rogers herself and to one another, through relationships and/or interactions. They are all also related to listening in some way; of those people Rogers names, all but one are explicitly described as good listeners – the last, Carla Point, is an Elder and Residential School survivor who advocates for listening. The named people are those likely to be recognizable to the Canadian audience – broadcasters and TRC commissioners. Those unnamed include implied listeners, such as the witnesses of the TRC, and those who should be listened to but who often are not, especially the Residential school survivors, who are owed 'ongoing and informed listening'. Table 10.1 summarizes this constellation by listing and identifying the people Rogers mentions, their relation to Rogers, and how they are related to listening.

All of the people mentioned in Rogers' speech are positively charged as listeners, as advocates for listening and people who should be listened to, with the exception of those who make othering statements about survivors' experiences, whose statements she disaligns with. When talking about herself, however, Rogers positions herself as an imperfect and developing listener and traces her journey over time, often through self-deprecating humour, shifting the charging back and forth between positive and negative. On the one hand, she is positively positioned through a quote from Dr Marie Wilson, saying that as an honorary witness, she validated survivors' experiences by listening; on the other, she recounts anecdotes of when she has failed to listen appropriately and the fallout caused. This positive and negative charging of her own actions, with multiple experiences of learning from many people, including writers, broadcasters, elders, and survivors, develops a constellation of values for listening through association and interaction. She therefore presents a personal reflection of becoming a better listener, and sets an aspiration not only for herself to continue to improve, but for Canada as a country to listen and to heal.

TABLE 10.1 Constellations of people in Rogers' speech

People	Description	Relation to Rogers	On listening	Charging
Shelagh Rogers herself	Speaker, Chancellor of University of Victoria, broadcaster and journalist, honorary witness to TRC, poor student of French.	Self, past self	Failed to listen at times Didn't listen in French class	–
			Learning to listen 'I have been a real listener for only five [years]' Respected as honorary witness	+
Canada / we	Audience and context of speech Event: Canada's 150th anniversary	Rogers + audience + nation	Potential to become better through listening Obligation to listen to survivors Obligation to survivors to respond to 'they' statements when we hear them	+
Peter Gzowski and Stuart McLean	Long-time, well-loved national radio broadcasters	Rogers' mentors	Great listeners	+
Dr. Marie Wilson, Grand Chief Wilton Littlechild and Senator Murray Sinclair	Truth and Reconciliation Commission (TRC) of Canada Commissioners	Dr Wilson legitimizes Rogers' contribution to the TRC as an honorary witness	Great listeners, especially to survivors	+
Indian Residential School (IRS) survivors	Indigenous people who survived the cultural genocide of being removed from their homes and cultures and institutionalized in IRS	Rogers validates survivors by bearing witness and sharing their stories Rogers invalidated one survivor when she questioned her instead of listening	People who need to be listened to, but who are not always listened to Survivors are owed 'ongoing and informed listening'	+

People	Description	Relation to Rogers	On listening	Charging
Witnesses of TRC	A Holocaust survivor A man who saw his Bosnian village destroyed A man who had survived torture in Guatemala	Rogers was also a fellow honorary witness Rogers acknowledges she has not had their experiences or those of the survivors	(implied listeners by being witnesses)	+
An unnamed woman	Friend of a survivor of the residential school system	Rogers knew the woman previously She introduced her to a friend who was a survivor She told Rogers off for interrogating the survivor	Tells Rogers to shut up and listen to survivor	+
Unnamed speakers of othering statements	Canadians who deny IRS survivors' trauma	Fellow Canadians who did not witness the TRC	Citizens who speak rather than listen; When 'we' hear their statements, we should respond	–
Carla Point	Elder at the University of Victoria Survivor of residential school system	Also at University of Victoria (where Rogers is Chancellor)	Advised students to practice the art of listening in recent speech	+
Alistair MacLeod	Canadian author	Personal friend of Rogers Listened when she had a breakdown from depression	Patient listener	+

The second constellation Rogers creates is around listening as a concept itself. This constellation is built up by repeatedly connecting multiple concepts to listening over the course of the speech. Rogers begins the speech with a funny anecdote about misspeaking in French, which concludes with the comment that she was 'not paying attention' in French lessons. This sets up 'paying attention' as a precondition for listening. She then segues into setting clear her ambition for Canada to be a country that really 'listens' and describes great 'listeners'. She moves into her experience as a witness of the TRC and describes an incident where an acquaintance introduced her to a survivor, and when she interrogated the survivor, the acquaintance told her to 'just shut up and listen'. She then argues for listening, and listening so that when we 'hear' othering, conciliatory statements about the residential school system, we respond. She adds an elder's voice to the call for listening and then gives adages and sayings around the words 'listen' and 'silence', with an anecdote about embracing silence. With more stories from great listeners' listening, and more appeals to the audience to listen, she concludes:

> I hope that by the time I turn 150, I'm a much better listener. When we really listen and all voices are heard in this beautiful, wounded country we will really heal. Before the candles of the Canada 150 cake are all blown out, let's make this the year of really listening.

This constellation articulates effective listening practices. Rogers sets up two preconditions for listening: 'shutting up' and 'paying attention'. She also describes the result of being a responsible listener is 'hearing' which leads variously to responding (especially to othering statements about survivors) and to healing. Silence, however, operates slightly differently. Silence is initially set up as a precondition of listening; she says, "To create a listening culture, we have to embrace silence though we live in a society that is made deeply uncomfortable by it." Rogers then presents silence as something to be listened to: first through validating silence as an expression of survivor testimony, and secondly through her own silence during her breakdown from depression. This re-articulation as an offer and validation of others' experiences is the crucial constellation which the student saw in the video and pursued in her reflective writing.

Overall Rogers created two constellations around listening in her speech: the first around people Rogers has interacted with; the second around the conditions for and results of listening. While the first constellation developed positive charging for listening through describing eminent Canadians as excellent listeners and advocates for listening, this constellation potentially had less impact for an international student new to the country and unfamiliar with the people mentioned. The constellation around the concept of listening, and particularly listening and silence as a transactional experience, was one that the student responded to and personalized in her own writing; this will be the focus of the next section.

Student reflective text: Portraying listening as a gift

The student's reflective text focuses on the central signifier of listening as a gift she rarely received but would like to give to others. Her text travels through realms of experience, moving between her recent experience at university, including watching the recording of Rogers' speech, to her previous experience and life in Afghanistan, to eternal truths and an anticipated future. She refers only briefly to Rogers' speech yet attributes to it her own personal revelation about her existing values; her final paragraph focuses particularly on listening and silence as a binary pair, stating:

> This video made well [sic] connections about listening and silence and its implications on people and what they want. By watching this video, I understood how much silence and listening mean the world to me in person. I realized, I have practiced giving this world to anyone who approaches me. Although coming from a background where I had very few experiences of silence myself while talking to someone, I am a very good listener and someone who can give this silence of peace to others. I learned more about the importance of listening and silence through this video, and I will practice it more so I listen better to anyone who approaches me. [underline added]

Throughout the text, she aligns with concepts of listening, silence and hearing as values she held in the past, continues to hold, and intends to foster in the future. At the same time, she disaligns with contrastive experiences of noise, lack of silence, and being unheard as both a girl and a teenager in Afghanistan. This creates an oppositional constellation represented in Table 10.2.

TABLE 10.2 Constellation of alignment and distancing in student text

Alignments	Disalignments
Strong appreciation of silence	Noise in Afghanistan
Silence brings peace, found through listening	War-ravaged Afghanistan
Rogers: 'Listening acknowledges the experience and the very existence of another human being and another worldview' Listening makes her feel she exists	Unheard as a teenager and as a girl Didn't feel that she existed (was seen)
Created own silence, spiritual existence Creating with art and writing	Hardly felt she existed physically, not given silence
Good listener and someone who can give silence of peace to others	Background with few experiences of silence
She wants to give silence and comfort	Has not received silence and comfort
When people share how they feel or think, it is to be heard and understood	The purpose of sharing how you think and feel is not to get a response

The student picks up on and develops Rogers' representation of silence and listening as interrelated and transactional. Silence is positioned as internal and personal, associated with the mind, soul and spirit, and with existence itself, while the external world is noisy, war-torn and masculine, and where she felt unheard and as if she did not exist. These oppositional binaries – internal and external, silence and noise, Afghanistan and Canada, existence and invisibility – create a strong emotive platform for the text and add conceptual cohesion to the text. The student therefore adopts one constellation of values around listening from the stimulus and reframes it with her own experiences and values.

Cultivating inclusive listeners

The analysis reveals how listening is constructed as valuable and valid in both the public speech by Rogers, and in the student's reflective portfolio assignment, through the creation of axiological constellations. This provides insight into how values from a stimulus or experience can transfer to a student's reflective writing text, where normally such experiences are inaccessible for direct investigation. Returning to Specialization, it is possible to further interpret how constellations of listening speak to larger values both within the texts and within the pedagogy through examining gazes and their alignment, and from there, provide greater insight into the role of reflection and responsible pedagogy.

Specialization further delineates between types of social relations: *subjective relations* relate to an emphasis on social or personal characteristics of the relevant actors, while *interactional relations* relate to an emphasis on personal experiences and behaviours, especially in interaction with valued people or artefacts (Maton 2014). Each of these relations can be stronger (+) or weaker (–) and, intersected on the *social plane* of Figure 10.1, generate four *gazes*. The two key gazes for the purposes of this study are *social gazes*, where actors are specialized based on their social characteristics, and *cultivated gazes*, where actors are specialized through valued interactions.

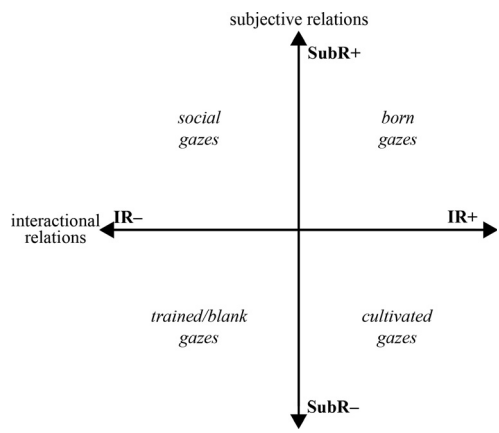

FIGURE 10.1 The social plane
Source: Maton (2014: 186).

Through their constellations around listening, both reflective texts emphasize a cultivated gaze over a social gaze; that is, they value a legitimate way of behaving (listening, being silent, paying attention) over individual characteristics. In the Rogers' text this is important in the context and subject matter: speaking at an event for the sesquicentennial anniversary of Canada, and on her experience as an honorary witness to the Truth and Reconciliation Commission into the residential school system, Rogers skilfully finds a way to include the audience in her ambitions for Canada. The residential school system – and treatment of First Nations peoples in Canada and beyond – was and is very much based on a social gaze, one which legitimizes or delegitimizes based on race. Social gazes are associated with a risk of fragmentation and segmentation into strongly-bounded groups of people (Maton 2014: 101). What Rogers does, therefore, is not position people based on social categories but on social interactions, through respectful and responsible listening. The people she legitimates includes First Nations people and settler Canadians. The interaction of listening builds a cultivated gaze, by emphasizing interactional relations; this is not to say that social identities are disregarded or downplayed, but rather that they are not positioned as the primary basis of legitimacy, as multiple and diverse identities are legitimate.

In a similar vein, we can trace the student negatively reacting to the evaluation of people based on social characteristics; she wrote:

> Coming from a war ravaged and extremely male dominated country Afghanistan, where I was raised with the voice of explosions and gunshots, and as teenagers our emotions and thoughts were hardly heard in a society where emotions don't matter, especially for girls, silence is what I appreciate the most. [underlining added]

The social categories of gender and age lead to her feeling illegitimate (and therefore not worthy of being heard). Instead, she values the interactive aspects of listening, and attributes that insight directly to the video of Rogers' public speech:

> I learned more about the importance of listening and silence through this video, and I will practice it more so I listen better to anyone who approaches me. I want to give this world, the world of understanding, listening, and silence to others, when very few people made this world possible for me since my childhood.

In a meta-reflection on her own reflective snapshot which she had written after watching the speech, she also values the behaviours of listening, writing "In the week 17 reflection activity, I did the same, I watched,

listened, maintained silence, and wrote." Although her text mentions very personal responses, the emphasis on listening as interaction also emphasizes interactional relations and downplays subjective relations, such as who is listening or being listened to, manifesting a cultivated gaze.

The result is a somewhat atypical text, one which provides a counter-example to expectations of semantic waves with successful writing and/or the tacit expectation of a redemptive transformation in the broader 'reflection' literature. It was evaluated successfully as a reflective piece because she did connect her personal experiences, both within the course and before, to ideas gained from the course, specifically ideas around listening. Many of the successful reflective writing pieces described in studies enacting LCT use semantic waves to move clearly between experiences and academic ideas (Szenes et al. 2015; Brooke 2019; Macnaught 2021), yet this text did not seem to follow this pattern as the experiences were not described in as much detail and the concepts were not as abstract and as technical as those deployed in professional and graduate programs. Another distinction is that, unlike the journey Rogers describes, the student has not learnt to listen, but instead has learnt that she values listening; it is not a journey of enlightenment, but one of revelation. The text does not employ a redemption cycle which frames her past experience as wrong or misunderstood, and transforms her through a critical experience or academic insight (Tilakaratna & Szenes, this volume). Instead, we may understand it as a journey of self-actualization, where watching the video of the public speech acted as a catalyst to a deeper understanding of herself, realizing what she had always valued, appreciated and been good at, even if she had rarely experienced it in return. In this way, she reframes her experiences and her understanding of herself, employing the reflection to reveal and empower.

The fact that the student was able to produce such a text, and that the text was highly evaluated despite not strictly conforming to typical forms of reflective writing, is attributable to the context of pedagogy and the values of the course. The instructor was explicit in her materials on the fact that 'transformation' was often an implicitly expected stage, the stages that often lead up to and follow, and what language features typically supported each stage's 'success'. Indeed, the summative reflection assignment prompt asks what had or hadn't changed in students' understanding, rather than positioning transformational change as inevitable and required. At the same time, the instructor also aimed to expand who was presented as legitimate and how. One way this was done was by including First Nations content and focus throughout her course, ensuring international students did not solely encounter a white-washed settler version of Canada, or a homogenous experience of academia, and further might reflect on Indigenous cultures in their home countries. We can therefore trace her aims to give her students

greater access to valued forms of writing within the academy, while recognizing they also bring their own experiences to enrich and transform that repertoire, an important aspect of internationalizing education. Thus the pedagogy itself reflected a cultivated gaze: by emphasizing behaviours of reflection with multiple identities and artefacts, the instructor expanded access to success to a greater range of students.

Conclusion

This chapter has investigated how values around listening and inclusion are revealed in two related texts, one a student-written reflective assignment, and the public speech that the student wrote about, itself a personal reflection. Constellations of listening were built in the two texts, with experiences, values and people positioned in relation to one another through connection or opposition. The public speech used a number of constellations, one which legitimated people as listeners, and another which articulated both preconditions for listening and results of listening. A subset of this latter constellation, a focus on silence as both a precondition of listening and an expression to be heard, was taken up by the student in her own reflective writing. Through an oppositional constellation, she contrasted her past experiences in Afghanistan with her values and future ambitions, emphasizing silence and listening as something to give to others, even though she had been denied it herself. This generated a somewhat atypical text, which was nonetheless evaluated as successful. The emphasis on listening in the two texts revealed a cultivated gaze underpinning both texts, where people were specialized not by social characteristics, like race, gender or age, but by their behaviours, especially listening and staying silent. This cultivated gaze was also valued in the course; the instructor endeavoured to create inclusive pedagogy through self-regulated learning practices, access to valued forms of reflective writing without obligation, and incorporation of materials about First Nations-settler relations in order to represent multiple ways of being in Canada.

This study provides insight into a holistic understanding of reflective writing practices, including the final product by the student, the video viewed in class which was the stimulus activity reflected on by the student, and the overall pedagogy. Although limited to a single student product, this provides deeper insight into reflection as a practice, and different forms taken by texts. LCT was valuable for offering multiple dimensions with which to investigate reflection in this context, and multiple tools for conceptualizing that analysis. The dimension of Specialization enabled a focus on the people, values and behaviours present in these practices, while the methodology of constellation analysis granted insight into networks of values generated in the texts. This study formed and continues to form a challenge to the authors as instructors; this text was selected as it could be recognized as interesting and valuable without immediate understanding of how that was achieved, which formed

the impetus for the case study and eventual methodology. It therefore reveals new aspects of reflective writing practices and inclusive pedagogy for further development, application and investigation.

Our hope is to represent not only a shift in analytical lenses, but to advocate for more open-mindedness in engaging with both difficult topics and atypical student production. We acknowledge the efficacy of a somewhat functional prescriptivism in first year academic English instruction: showing students valued patterns of writing is cornerstone to our practice. Further, we can make these seemingly more accessible by transmitting them through safe, unchallenging topics. However, in the same way, while there may be discomfort in engaging with Indigenous-settler histories and the impact of colonization in settler states, there is also the risk of not recognizing genuine engagement with learning that does not fit typical patterns. The student reflection here did not represent transformation or redemption. It did not move through typical waves of abstraction and personal specificity in the same way exemplar texts might. Instead, it represented more empowered, personal connection to themes larger than specific learning outcomes. This chapter revealed both tacit framing of values within reflective texts and explicit framing of reflection through pedagogy, and advocates for reframing expectations to make room for more holistic and nuanced reflection.

Note

1 A sequence which involves a description of experience, a realization or confession of mistakes, and a resolution to improve and behave differently.

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11

FOOTBALL YADAYADA

Learning how to critically reflect about sport as a social field

Mark Brooke

Introduction

This chapter reports on a course which aims to foster undergraduate students' abilities to critically reflect on sport through engagement with the grand theories of the sociology of sport. Much of what students learn as critical reflection before they take the module is based on Paul's (1984) and Elder's (2005) work, with notions like "all reasoning is expressed through, and shaped by, concepts and ideas" and "all reasoning is done from some point of view" (as cited in Vink et al. 2017: 156). Teaching critical reflection also often draws on Facione's (2007) critical thinking dispositions such as demonstrating the ability to select, structure, analyze, and integrate information effectively. Albeit useful starts, this input is not related to learning critical reflection. Students are only exploring cognitive constructs in terms of knowing processes (Szenes et al. 2015: 574). Brookfield (2016) notes that true 'critical' reflection is the "uncovering of power and hegemony" and to engage in this form of reflection is to "demonstrate how ideological manipulation forces us to behave in ways that seem to make sense, but that actually keep us powerless" (Brookfield 2016: 11). For Brookfield (2016: 16), true critical reflection seeks out social justice, and uncovers power inequities. Similarly, in Legitimation Code Theory (Maton 2013, 2014a; Maton et al. 2016) the goal is to develop a gaze or "a mode of thinking, acting and being" (Dong et al. 2014: 8) through the explanatory power of the codes, that is making visible inequalities.

This chapter focuses on engaging with true 'critical theory' in Brookfield's (2016) terms so that students' understanding of sport shifts from common sense to un-common sense, and that ideological forces are uncovered and evaluated. Students tend to lack this critical gaze as they come from positivist backgrounds and do not have the knowledge to do this. Hence the title of the chapter referring to *yadayada*, a term used to depict very common, every day,

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and predictable perceptions and opinions on sport as a social field. Other challenges are teaching students how to engage in qualitative social science research and to write the theoretical framework of their Introduction-Method-Research-Discussion (IMRD) paper, which explains to the reader how they intend to operationalize the theories in the research design and data analysis. These challenges can be met by enacting the concept of *semantic gravity* from Legitimation Code Theory (Maton 2013, 2014a, 2020) which makes visible the dominant organizing principles needed to produce highly successful texts in the sociology of sport. Legitimation Code Theory (LCT) helps to build students critical orientations to text through a scaffolded approach drawing on semantic gravity. LCT can be used to teach students how to move away from everyday context-dependent knowledge or practices and to select the appropriate theory or more context-independent abstractions, that allow them great explanatory power to uncover struggles between unequal groups in society.

In order to build students' understanding of humanities and qualitative research, and to develop their capacity for critical reflection, the teaching introduces undergraduate students for the first time to the five grand theories in the Sociology of Sport: Functionalist; Conflict; Feminist; Interactionist; and Critical Theories (Beedie & Craig 2010), and in particular, by enacting semantic gravity profiles, how to link abstract knowledge from the grand theories to empirical contexts in the form of sports in practice. As in other disciplines, each theoretical framework functions as a toolbox of concepts that help to represent the current appropriate explanations of evidence of the nature of phenomena and their relationships (Beedie & Craig 2010: 44). In this way, LCT facilitates critical reflection which seeks out social justice, and uncovers power inequities (Brookfield 2016: 16) within the field of sports sociology.

The study

The module introduces students to principles and strategies that will help them produce scholarly research and writing throughout their academic careers and develop their understandings of what it really means to reflect critically by examining struggles between unequal groups in society. Many students on the course come from STEM, Business, Design, Economics, and Psychology backgrounds. Hence, they tend to start the module with a technical rationality or "epistemology of practice derived from positivist philosophy", which as Schon explains tends to concentrate on "rigorous application of well-formed instrumental problems by applying theory and technique derived from systematic preferably scientific knowledge" (Schon 1987 as cited in Kinsella 2007: 104). Students tend to be newcomers to the social sciences and qualitative research, which is the preferred paradigm of the module. Because of this, their understanding of critical reflection is more akin to 'practice reflectively', by thinking about the 'nuts and bolts of process' rather than exploring power dynamics and wider structures that frame sport in

society (Brookfield 2016: 13). As noted, embracing 'critical reflection' is to uncover the "struggles between unequal interests and groups that exist in the wider world" (Brookfield 2016: 13). Moreover, students tend to start with everyday experience and opinions rather than an academic interpretation. Helping students to adopt an academic and theoretically informed critical stance about social phenomena in sport is one of the main challenges in developing their critical reflection capabilities.

The research conducted was part of a collective case study approach over six 13-week semesters from 2018 to 2021. It involved several action research cycles of data gathering and observational experimentation in the classroom to establish best practices for facilitating student learning. Data gathering involved multiple sources and methods: teacher field notes from observations in the classroom as well as during sessions of one-to-one student-teacher consultations and student-student pair and group interactions; two surveys, one after the first two weeks, a critical moment for the research; and another at the end of the module; informal feedback from asynchronous email discussions with students; and the analysis of a student's written text at the end of the interventions. This data provides a thick description of the five stages taught to achieve the ultimate goal: demonstrating critical reflection through the writing of a successful theoretical framework section for an Introduction-Method-Research-Discussion (IMRD) paper. Ethical clearance was applied for and received for the study from the university.

Legitimation Code Theory: Semantic gravity

As noted, the concept of *semantic gravity* from LCT can be used to deal with the challenges students face by making visible the dominant organizing principles needed to produce highly successful texts in the sociology of sport. In this study, semantic gravity helps to reveal knowledge practices of critical reflection and can be used to show students how to engage with theory in terms of social practices. This is achieved by employing the analytic of *semantic gravity profiles* (see Maton 2013, 2014a, 2020). The profiles presented are related to what is termed *semantic gravity waves*, *semantic gravity flatlines*, *semantic gravity entry points*, *semantic gravity upshifts*, *semantic gravity downshifts*, and *semantic gravity ranges*. This section provides an overview of these concepts related to semantic gravity profiling.

Semantic gravity conceptualizes how meanings depend on context to make sense. It is defined as the:

> degree to which meaning relates to its context, whether that is social or symbolic. Semantic gravity may be relatively stronger (+) or weaker (–) along a continuum of strengths. The stronger the semantic gravity (SG+), the more closely meaning is related to its context; the weaker the gravity (SG–), the less dependent meaning is on its context (Maton 2013: 11).

Practices can range from more context-dependent or stronger semantic gravity (SG+) to less context-dependent or weaker semantic gravity (SG–), in as many gradations as required. For example, a term in the field of the sociology of sport such as 'hegemony' from Gramsci (1971) (as cited in Rowe 2004: 97–110) refers to how power is constituted for ideological means. Domination may exist in many forms, for example, in terms of socio-economic status, gender, or ethnicity. The concept 'hegemony' exhibits relatively weak semantic gravity (SG–) as it is relatively context-independent; exemplifying the term 'hegemony' within a specific context can strengthen its semantic gravity (SG+). Changes in the strengths of semantic gravity can be visualized by *semantic profiles* (Maton 2013), as shown in Figure 11.1. The meanings are commonly recorded as heuristic visual representations.

In Figure 11.1, 'A' represents a *high flatline* of meanings that are consistently weaker semantic gravity (abstract or general), such as those centring on theoretical subject matter. In contrast, the 'B' profile represents a *low flatline* of meanings that are consistently stronger semantic gravity (concrete or particular), such as focusing on empirical subject matter. 'C' represents a semantic gravity wave, which visualizes changes in context-dependence between more abstract or general meanings (SG–) and more concrete or particular meanings (SG+).

In order to demonstrate how a concept from a theoretical framework in the sociology of sport is going to be employed in research design, students need to produce a *semantic gravity downshift* or *upshift*, that is, a change in semantic gravity in one direction or the other. For example, writing that "hegemony theory can be employed to explore how black African Americans are socially channelled into basketball" is a downshift as the abstract concept is contextualized. In contrast, "Black African Americans being channelled into

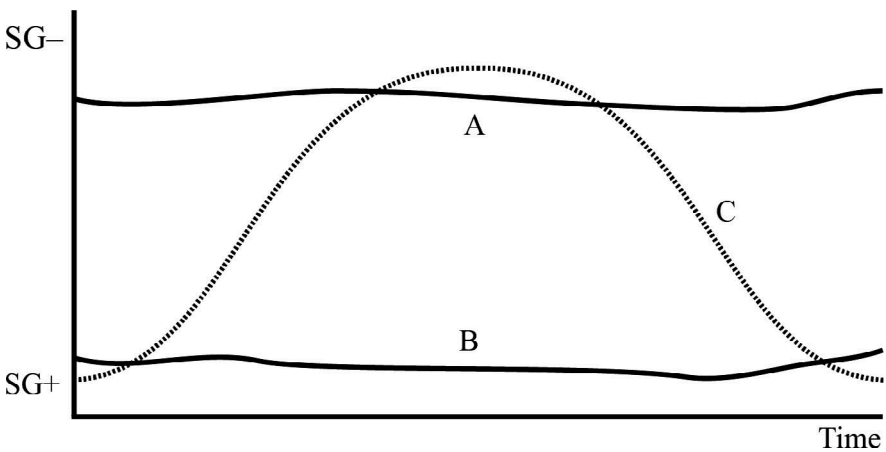

FIGURE 11.1 Illustrative profiles and semantic ranges
Source: Adapted from Maton (2013: 13)

basketball can be explained using hegemony theory" is an upshift in meaning as the case is generalized and abstracted to the theory. For both clauses it is possible to heuristically indicate the *entry point* as closer to SG– or SG+ and to follow the shifts to other levels of context-dependency on the semantic range. The semantic threshold or students' current levels of conceptual understanding (Georgiou et al. 2014) can be found in the middle level of the semantic gravity range. It is considered essential that the educator enables students' understandings to achieve higher SG– ranges toward more technical abstract meanings (Georgiou et al. 2014: 262). If the input commences too high on the SG– range, it might be too abstract for students. If this is the case, it may be beginning beyond students' semantic threshold in the field.

When clauses are strung together, it is possible to demonstrate semantic gravity ranges that produce waves or flatlines of semantic gravity because multiple meanings are related to each other across the text produced. High-achieving students demonstrate an ability to transit from abstract context-independent knowledge to context-dependent knowledge; in other words, from degrees of abstract to degrees of situated, empirical knowledge and vice-versa, a movement that forms semantic gravity waves. Szenes et al. (2015) demonstrate, by analyzing papers from different disciplines, that this waving is considered by lecturers as high-achieving work across multiple disciplines. This is also the case in this module. Successful critical thinking in this chapter is related to the ability to make these transitions in context-dependency meanings. These shifts count as evidence of the students' ability to demonstrate their capacity to be engaged with critical theory in the field. They also show how students have moved past technical rationalist orientations to understanding how sport sociologists challenge the power dynamics that exist within this field. Additionally, the shifts in meaning reveal how students analyze these dominant practices through their observation of empirical data collected through qualitative research.

The model presented in Figure 11.2 was developed over six 13-week semesters. It summarizes the activities facilitated to demonstrate to students how to achieve the capacity to engage in critical reflection in the field of sports sociology.

The first two stages relate predominantly to teacher input as students are guided to understand how their more common-sense meanings can be related to more complex theoretical ones. The third stage is also an input stage as students are guided to notice how semantic gravity waving is essential for coherence in a theoretical framework text. Stage four is a combination of both input and output as students are guided to first notice concepts in a complex published academic text, and how they are defined and exemplified. Students then add concepts from the text to complete a semantic gravity profile. The fifth stage is an output stage during which students produce their own

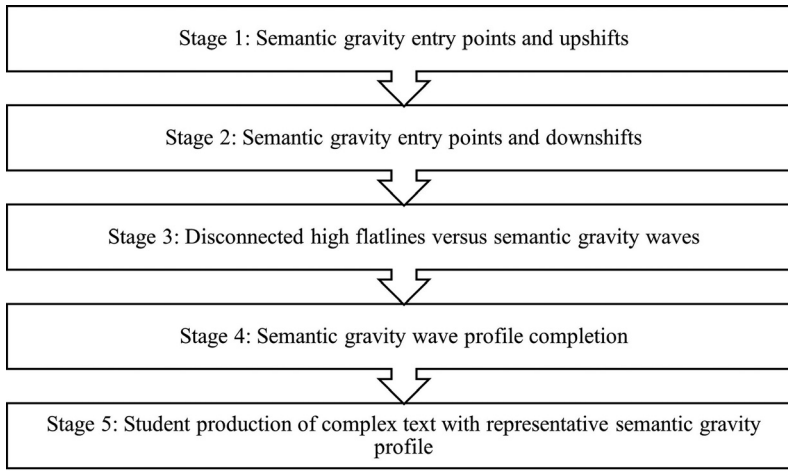

FIGURE 11.2 Five stages of teaching students how to produce a theoretical framework section of an Introduction-Method-Research-Discussion paper (IMRD) paper enacting sematic gravity profiling

theoretical framework text and provide a semantic gravity profile to represent conceptual meanings and how they are defined and exemplified to ensure a logical flow of ideas and facilitate comprehension. At the end of the process, students are producing effective critical reflection (Brookfield 2016).

Findings

In the following section, strategies enacting semantic gravity profiling over the five stages of the sociology of sport module described in Figure 11.3 are presented.

Stage 1: Entry points and upshifts to teach SG– meanings related to the grand theories

The first stage of the instructional cycle begins with assessing students' semantic threshold (Georgiou et al. 2014: 262). Typically, at the beginning of a semester, students are given a list of concepts related to the grand theories such as hegemonic masculinity; pariah femininity; and the male gaze which relate to Feminist theory and asked about their familiarity with these. They are also asked to read a chapter from a well-known sociology of sport book from Beedie & Craig (2010) that summarizes, for newcomers to the field, the types of research subjects that the grand theories explore. These theories are Functionalist; Conflict; Feminist; Interactionist; and Critical Theories (Beedie & Craig 2010).

Commonly, students have little if any prior knowledge of the concepts and, despite being adapted for non-specialists, students find the chapter challenging. They report difficulties "differentiating between the theories", "comprehending

the concepts related to theories", "being confused about how to frame the questions for the theories", and "finding an appropriate context to apply a theory". This feedback is collected from an initial anonymous survey in the first two weeks of the module after theories have been introduced.

To help students to increase their theoretical understanding in this area, teacher-prepared texts are presented supported with visuals. An example text is provided exploring how Functionalists consider the importance of social norms, and shared codes of conduct to produce a functioning society as well as how Functionalists view activity not following these norms, such as doping in sport, as deviant behaviour.

> A functionalist seeks social harmony. A phenomenon such as doping in sport can be seen to reflect *negative social values*, a win at all costs mentality, according to Coakley and Pike (2014), which *disrupts harmony*. For a functionalist, sport as a 'social institution', with its *own belief systems* and *codes of conduct*, functions to develop *positive core values* like fair play and healthy competition. So illicit steroid use is *cheating*; it produces distrust between athletes; it can also be dangerous. So, it negates these functions. Thus, the World Anti-Doping Agency (WADA) sets up *sanctioned behaviour* and if athletes *do not follow these rules*, this is wrong, it represents 'deviance'. If athletes cheat, they are breaking the *social contract*, that is, they are breaking *agreed codes of conduct to maintain social stability*. There is an issue with the 'organic solidarity'. Durkheim uses the term 'organic solidarity' (see for example, Pope 2008) to refer to complementary

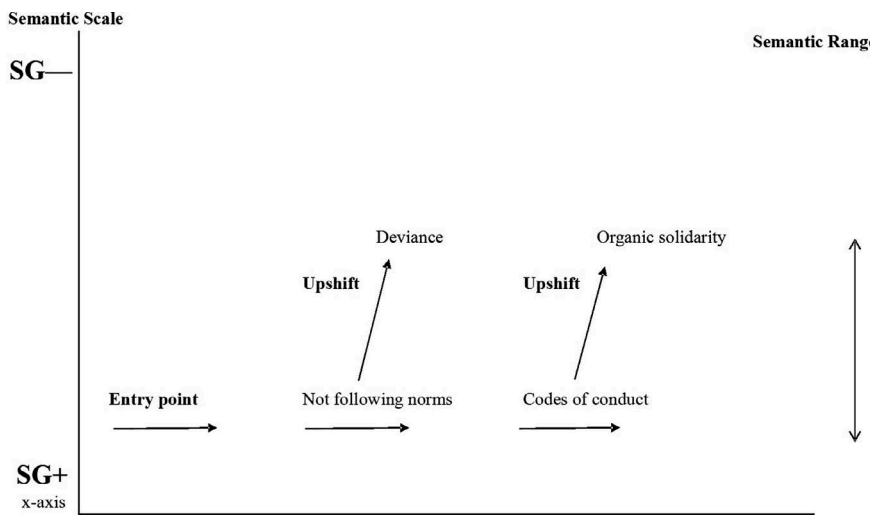

FIGURE 11.3 Semantic gravity entry points and upshifts for teaching how Functionalists might view doping in sport

interdependence between social actors. If everyone has a social role and abides by agreed codes of conduct, harmony can be maintained.

Discussion of sample teacher text in the classroom

Using the example figure and teacher text, the teacher explains that the highly conceptual abstract terms deviance and organic solidarity are underlined. As represented in the figure, these terms are towards SG– meanings. They are first foregrounded using less technical wording such as negative social values, disrupts harmony, do not follow these rules as well as codes of conduct. These are less abstract academic terms and are ideal as *entry points* for the presentation. What then occurs is a *semantic gravity upshift* as the SG– terms deviance and organic solidarity are introduced. At the beginning of the module, several input sessions of this nature focussing on *semantic gravity entry points and upshifts* are commonly provided to help students understand these theorists' interpretations of empirical contexts.

Evaluation of the classroom activity with students

The teacher-written text is closely prepared to link to students' levels of understanding, or semantic threshold (Georgiou et al. 2014) to scaffold comprehension. Semantic gravity profiling guides how to bring essential conceptual learning into the curriculum through *upshifts*, where theorizing is foregrounded. Aligning with research (Lindstrøm 2010; Conana et al. 2019; Georgiou 2020), enacting semantic gravity for *entry points* to facilitate conceptual understanding is effective as the content is linked to students' prior knowledge. One issue arising during this research focusing on *entry points and upshifts*, which has also been remarked by other studies (Georgiou et al. 2014; Conana et al. 2019), is taking for granted the social and cultural embeddedness of everyday examples. In the context of this research, students may have little knowledge of doping scandals in sport, and the World Anti-Doping Association's (WADA) (https://www.wada-ama.org/en) activities. Therefore, also providing some time for students to research the empirical contexts might be necessary.

Stage 2: Entry points and downshifts to demonstrate how context-dependent (SG+) meanings might be explored using the grand theories

Once the conceptual underpinnings of the theories have been presented in stage 1, students are guided to apply the theories to empirical contexts. Teacher-fronted presentations can be supported with visuals demonstrating *semantic gravity downshifts* as in Figure 11.4. This stage helps to show students how the grand theories analyze social contexts. A short, written example of how an Interactionist theorists might explore women's football, along with a figure representing the *semantic gravity downshift*, are provided below.

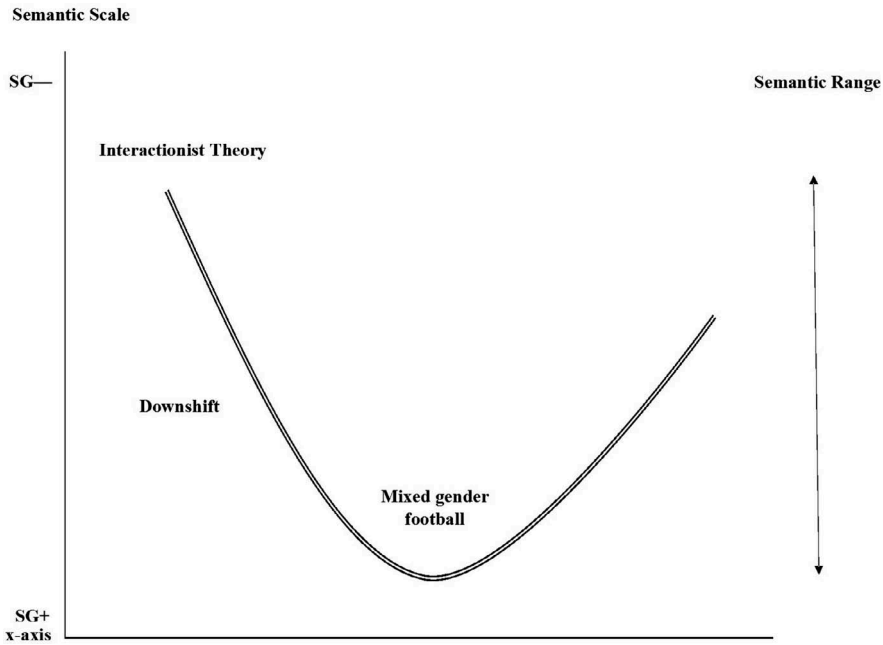

FIGURE 11.4 Entry points and downshifts representing how theoretical frameworks might be employed to analyze social contexts

Interactionist theorists might want to explore processes of *intersubjectivity* or what we imagine others might think of our *public self,* and *impression management.* Men's football dominates the global sport nexus and media coverage. This domination might impact gender dynamics in a social field such as mixed gender sport. Women may be exposed to *toxic masculinity* and *stigmatization.*

Discussion of sample teacher text in the classroom

Using the example figure and teacher text above, the teacher explains that Interactionist theories like Cooley's (1902) Looking Glass Self and Goffman's (1978) Dramaturgy commonly explore notions of intersubjectivity, the public self and impression management. These SG– terms are underlined in the sample text and have been taught in stage 1. The teacher text reveals how these concepts might be related to stigma, a predominant subject of interactionist research. A context is then provided for these theoretical concepts: *Are women in mixed gender teams stigmatized? Do they imagine what others think about them playing football? How do they deal with toxic masculinity if it exists?* As the context is introduced in this way, *semantic gravity downshifts* foreground application.

Evaluation of the classroom activity with students

The teacher written text and figure is carefully constructed to start at a higher level of conceptual understanding with abstract concepts (SG–) and then shifts to empirical contexts (SG+) for research purposes. Figure 11.4 can be used as a visual tool to explain *downshifting* to students. A caveat with *semantic gravity downshifting* is the potential for the 'Icarus effect' (Georgiou et al. 2014), which is when students' knowledge towards SG– is inappropriate (262). In other words, students may not have attained an appropriate conceptual understanding of a theory and so might endorse one without being ready to use it. An example from this action research is when a student expressed an interest in employing neo-Marxist Antonio Gramsci's Hegemony Theory and in particular what this theorist states about the 'manufacture of consent' (Gramsci 1971, as cited in Rowe 2004: 97–110) through ideology. The student drew on Gramsci's Hegemony Theory for corporate employee relations arguing that listening more to ideas from frontline staff would win the 'hearts and minds' of the personnel and lead to a consenting workforce. This context is clearly inappropriate for Gramsci's neo-Marxist ideas.

Stage 3: Semantic gravity ranges for developing students' theoretical frameworks for an IMRD

For the most part, students have a working understanding of the conceptual underpinning of their stances drawing on the 'grand' theories taught through stages 1 and 2 and can talk about how they might apply them to a chosen social context. However, at this stage, some students do still face challenges demonstrating how the concepts from the theories relate to each other. To deal with this, two different example student texts from a prior struggling and prior successful student are presented accompanied by semantic gravity profiles of the texts.

Text 1: Unsuccessful student text

> Boardley and Grix (2014) provide insight on female bodybuilders and show their socialization process through muscularity. Curry (1993) explains how one's body affects self-identity, particularly regarding discipline of the self and the normalization of pain. Wellard (2009) brings embodiment into a broader perspective as he illustrates how the media perpetuates the traditional notion of the female body. Moreover, Connell and Messerschmidt (2005) present hegemonic masculinity and the set of practices that maintain male dominance.

Discussion of unsuccessful student text for modelling IMRD in the classroom

Using the example text and Figure 11.5, the teacher explains that context-independent concepts such as the 'discipline of the self' and the 'normalization of

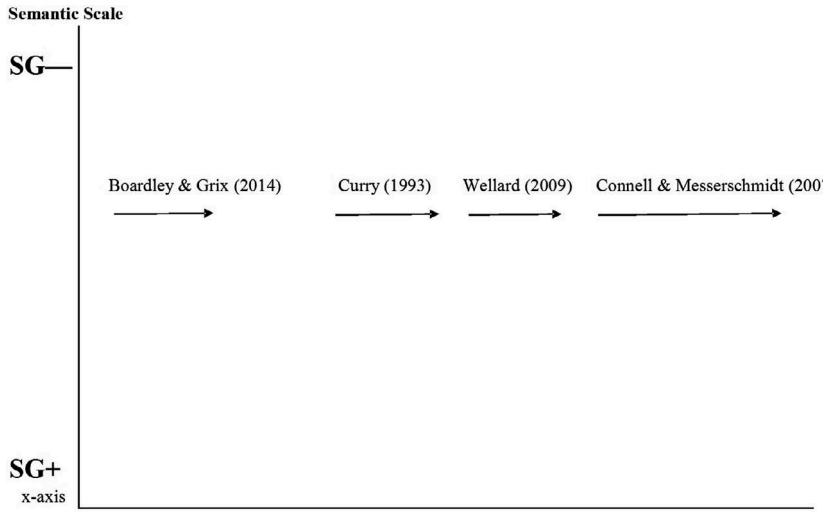

FIGURE 11.5 Disconnected high flatlines demonstrating issues in unpacking and not connecting abstract concepts for a theoretical framework section

pain' (SG–) are presented but not defined, nor are examples used to help convey meaning. This lack of unpacking produces a high flatline. For Foucault, self-discipline (as cited in Markula 2003) is a form of bio-power which regulates the behaviour of individuals in the social body. Through complex cultural concepts such as healthy living, individuals are nurtured into systems of self-surveillance, structuring their lifestyle. One of the consequences of this self-surveillance is a regime of pain that a bodybuilder may construct. The regime normalizes everyday pain through physical exercise and dietary control, sometimes to extreme levels. From this analysis, it is clear how the discipline of the self and the normalization of pain can be connected. However, these related meanings are not explained in the students' text. The result can be called *a disconnected high flatline,* as shown in Figure 11.6, because the meanings are towards SG– are not connected semantically.

Text 2: Successful student text

> This paper draws on a critical feminist approach to explore how sport can be empowering for women. Schippers (2007) demonstrates that a counter-hegemonic femininity is the muscular female, or as she coins her, the 'badass' feminine. This embodied form, the way society is written into the body, resists male domination or hegemonic masculinity, male practices that promote the superior social position of men. As such, the female bodybuilder can successfully transcend the physical boundaries set by men.

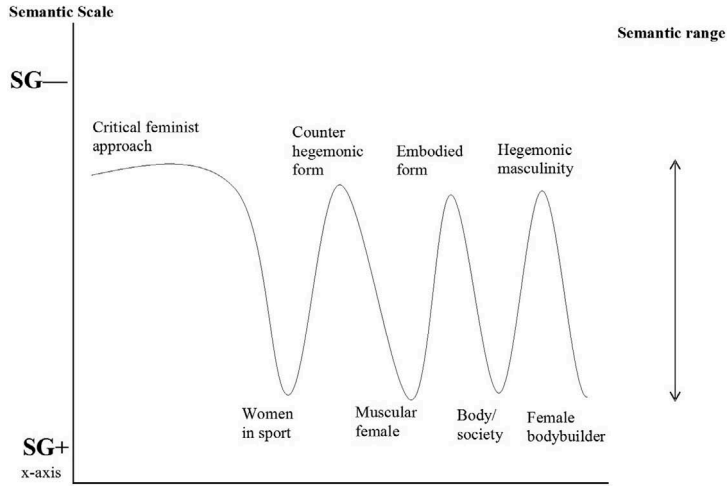

FIGURE 11.6 Semantic gravity waves demonstrating coherent use of Feminist Theory for a theoretical framework section

Discussion of successful student text for modelling IMRD in the classroom in the classroom

In the second text, meanings weave from SG– to SG+ throughout *creating semantic gravity waves* and produce a much more effective coherent flow of ideas. There are very densely packed, context-independent meanings underlined (e.g. "counter-hegemonic femininity"). Nonetheless, it is clear in the text through exemplification and definition such as "muscular female" and "male practices that promote the superior social position of men" what SG– terms like 'badass feminine' (Schippers 2007) and 'hegemonic masculinity' mean. The text enables students to notice that definition and exemplification are essential components of effective coherence in a theoretical framework section of an Introduction-Method-Research-Discussion paper (IMRD).

Evaluation of the classroom activity with two different example student texts

Students stated that the two texts were quite differently organized, and their visual representations demonstrated differences in "how to think and write". Students also reported that contrasting the two texts visually helped to "provide a structure" to follow. Other students reported: "it helps to make our writing clearer and flow better", and "by giving examples and definitions, it makes technical concepts easier to understand". Student feedback about the first text was that the writer "needed to explain" the key terms better and that there was "no help for the reader to connect the terms". What tends to be

seen in successful texts is not just one, but several *semantic gravity downshifts* followed by *semantic gravity upshifts*. This is produced through a process of unpacking of technicality into more familiar common-sense language, followed by upward movements and the repacking of knowledge into more densely packed conceptual terms. Assisting students to notice how concepts are unpacked and then repacked across the semantic range in this way is essential to demonstrate true 'critical' reflection as the "uncovering of power and hegemony" and to engage in this form of reflection is to "demonstrate how ideological manipulation forces us to behave in ways that seem to make sense, but that actually keep us powerless" (Brookfield 2016: 11). The student text uncovers discrimination against female bodybuilders.

Stage 4: Using semantic ranges to produce an effective theoretical framework for an Introduction-Method-Research-Discussion paper (IMRD) in a model academic text

At this stage, the course focus shifts to modelling how a theoretical framework is written in a published academic journal text. The model provided is by Mirjam Stuij (2015) entitled 'Habitus and social class: A case study on socialisation into sports and exercise' from the journal *Sport, Education and Society*. Stuij (2015) employs Bourdieu's (1984) theory of habitus. The aim of this activity is to guide students to notice how the theoretical framework is written and, similarly to the students' texts above, this can be deconstructed by producing a semantic gravity wave profile as presented in the example published text on habitus from Stuij (2015):

> The habitus produces practice in combination with capital and in a particular field (Bourdieu, 1984). Capital can be defined as *usable resources and powers*, the main forms being economic (income, monetary assets), cultural (skills, knowledge), social (connections) and symbolic (status). 'Sporting capital' can be seen as a form of cultural capital, which comprises *skills and knowledge necessary for successful participation in sports and exercise* (Nielsen et al. 2012). In a specific field, i.e. a relatively autonomous particular social arena with its own logic and social conditions, the combination of one's habitus or *embodied and lasting schemes of practice* and the specific volume and composition of capital results in certain behaviour. *For example, in the field of organized sports, this can result in participation in a certain sport at a specific club because one has a "sense of one's place" or no participation at all as one feels that "that's not for the likes of us"* (Bourdieu, 1984: 471). Therefore, "each person has a unique individual variant of the common matrix" (Wacquant, 1998: 221), but "people subject to similar experiences", e.g. members of the same social class, share a corresponding habitus (Wacquant, 1998: 221).

Students read the text and underline the important concepts in the first clause: 'habitus', 'practice', 'capital', 'sporting capital' and 'field'. They then follow how the terms are defined throughout the text and complete a semantic gravity wave profile by adding concepts in text boxes to the *upshifts* in meaning. This is illustrated by Figure 11.7, which was used to accompany the published text. The terms should be 'field', 'habitus' and 'specific volume and composition of capital'.

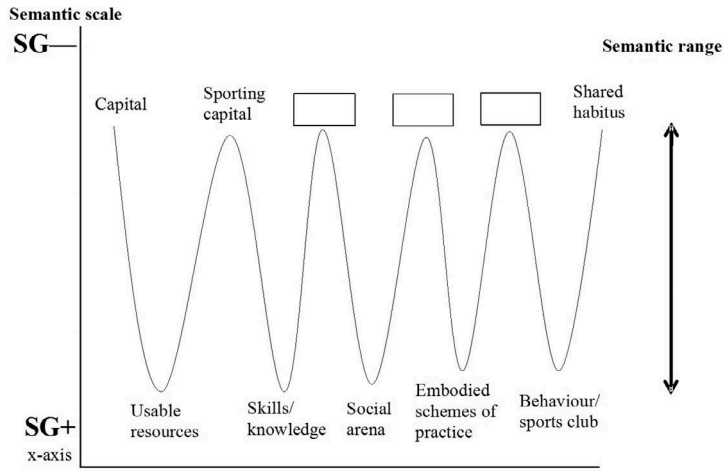

FIGURE 11.7 Semantic gravity wave profile of academic journal text for modelling

Discussion of sample academic model text used in the classroom

Following student analyses of the text above, the teacher discusses the example figure and teacher text by enacting semantic gravity. The teacher starts by explaining that the meaning of 'habitus' is provided in the first clause. This is the clause towards the weakest semantic gravity (SG–) point as it contains a great deal of conceptual context-independent meaning with the main terms of the theory: 'habitus', 'practice', 'capital' and 'field'. The rest adds context to these terms through definition and exemplification. The concept 'Capital' (SG–) is first defined as 'usable resources and powers' (SG+). Then particular capital types are presented giving further context to 'capital'. 'Field' is defined as 'a relatively autonomous particular social arena with its own logic and social conditions', which gives it context as it provides attributes to it related to consciousness and behaviour. These meanings are therefore stronger in semantic gravity (SG+). The concept 'habitus' is defined as "embodied and lasting schemes of practice" and "certain behaviour" in a certain social context. These meanings are towards SG+ as they help to relate it to behaviour. In Stuij's text, 'sporting capital' is also unpacked as "skills and knowledge at a

certain sport" (SG+). Stuij (2015) then exemplifies how 'habitus' relates to 'practice' by citing Bourdieu: "sense of one's place" and "that's not for the likes of us" (Bourdieu 1984: 471) giving context to 'habitus' by relating it to feelings. Stuij (2015) then rounds off her theoretical framework section by arguing that the combination of the concepts, 'habitus', 'practice', 'field' and 'capital' produces a 'common matrix', and she juxtaposes this with "a unique individual variant", citing Wacquant (1998: 221 as cited in Stuij 2015: 221). 'Common matrix' is given context as 'corresponding habitus' and "shared identity amongst social demographic groups (matrix)" as well as "members of the same social class" and "people subject to similar experiences". It is further contextualized by contrasting it with "a unique individual variant".

Evaluation of the classroom activity with the sample academic model text

The activity and discussion in class demonstrates to students that more complex published academic texts can also be explored by enacting semantic gravity profiling. Asking students to complete text boxes in Figure 11.7 is an effective strategy for scaffolding the deconstruction of the text. Students were mostly able to identify the essential conceptual terms related to Bourdieu's (1984) theory of 'habitus' in the text (e.g. 'capital') and notice how Stuij (2015) unpacks them (e.g. "usable resources and powers"). However, a caveat exploring *semantic ranges* is that this form of instruction may take for granted students' capacity to understand the complex meanings of technical terms related to a specific theory. Therefore, awareness of the complexity of *upshifting* is important. For example, several students after the presentation of Stuij's (2015) text reported that they were not exactly clear about the meaning of Bourdieu's (1984) term 'field' defined by Stuij as a "relatively autonomous particular social arena with its own logic and social conditions" (Stuij 2015: 781). Some students found this definition strongly SG– as it combines multiple abstract meanings. Therefore, definitions with more common-sense academic meanings to facilitate *upshifts* may be provided. For example, Wagg et al. (2009) talk about 'field' as "a social location and specific empirical context", which is comprised of particular "social agents' who tend to participate in "taken-for-granted ways".

Stage 5: Students produce their own theoretical framework accompanied with a semantic gravity profile representing it

Students now go on to produce their own theoretical framework texts for their Introduction-Method-Research-Discussion (IMRD) paper. These student texts are similar in word count to the Stuij (2015) example. Students are asked to describe complex concepts and to show how they relate to each other. Students also demonstrate how they intend to operationalize the theory as in the example provided exploring Serena Williams. Students are also asked to provide a semantic gravity profile of their texts as in Figure 11.8.

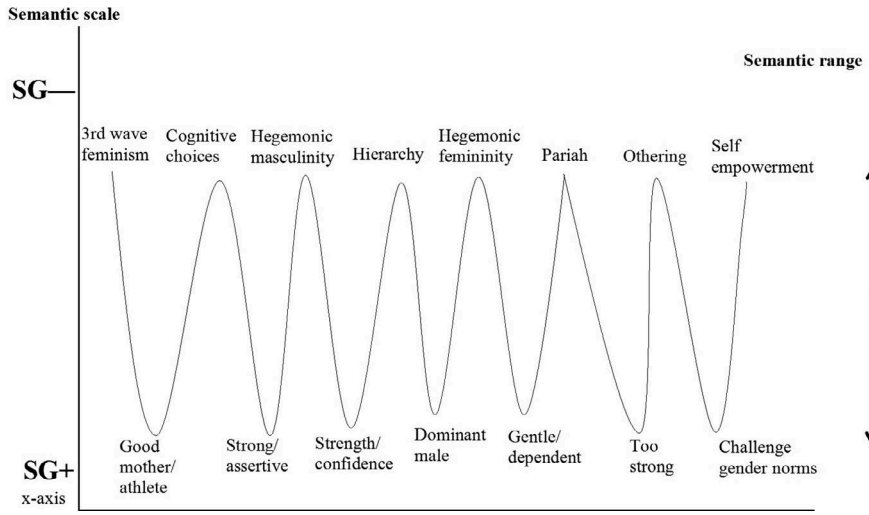

FIGURE 11.8 A student's own semantic wave profile of her theoretical framework section for her Introduction-Method-Research-Discussion paper (IMRD) paper

Example student theoretical framework text

This paper draws on Synder-Hall's interpretation of third wave feminism and choice feminism to analyze whether Serena Williams displays self-empowerment by transcending gender norms and being outspoken on social media. Third wave feminists argue that feminism is pluralistic and allows for multiple versions of feminism to co-exist e.g. one can be a good mother and a good athlete at the same time. Synder-Hall (2010) suggests that a woman displays empowerment by consciously making choices while being cognizant of the societal demands of femininity: for example, when a woman remains strong and assertive despite societal pressure for her to conform to being submissive. To understand how Serena Williams is subject to societal demands of femininity, this paper utilizes Connell's (2005) Hegemonic Masculinity and Schippers' (2007) Hegemonic Femininity. According to Connell (2005), hegemonic masculinity refers to a specific set of traits that are valued as masculine, including strength and confidence. This establishes a hierarchal relationship between masculinity and femininity, in which the male gender is dominant while the female gender is subordinate. Schippers (2007) further develops upon this idea by defining hegemonic femininity as a particular set of traits that are deemed as feminine, such as being gentle and dependent. Women who embody pariah femininity, i.e. forms of femininity that do not conform to hegemonic femininity, face marginalization by society because they threaten the dominant position of men. For example, Serena Williams is

subject to othering by the media because she is deemed too strong as a woman. On the one hand, Williams may consequently be seen as a pariah, or an outcast, from a patriarchal perspective. On the other hand, from a third wave feminist perspective, it can be argued that Williams achieves self-empowerment by challenging gender norms and being outspoken against discrimination and sexism.

Discussion of student's theoretical framework text

From the text and Figure 11.8 accompanying it, the student has considered carefully how to unpack and then connect complex conceptual meanings related to Feminist Theory. She builds these relations between meanings effectively through exemplification and definition. For example, she points out that "[t]hird wave and choice feminism is pluralistic", which is defined as "allows for multiple versions of feminism to co-exist" and exemplified using Serena Williams. Serena embodies 'empowerment' as she resists "societal demands of femininity" by being "a good mother and a good athlete at the same time". The student, more importantly, explores Serena Williams' case in terms of the discrimination she faces as an alternative feminine, and how she may empower women. In many sports cases, women have been discriminated against if they are too athletic or as they announce pregnancy. Serena reveals how women can embody complexity and transcend the hegemonic stereotypes and ideology of patriarchy in sport practices.

Evaluation of the semantic gravity profile activity

Students reported "thinking carefully" for the writing of the theoretical framework accompanied by a semantic gravity profile. The example reveals how they were able to be truly critically reflective (Brookfield 2016) by waving between SG– and SG+. Additionally, the student whose example is provided reported in interview that this was an effective strategy for "explaining how concepts relate to a study", as well as for "writing a coherent text", and that this was a sound way "to cater for a non-expert readership", something in her science faculty that is often highlighted. As Maton (2014b: 181) posits, mastery of semantic waving represents 'powerful knowledge'. Knowledge of waving can inform higher institute educators about how to approach their syllabus design and delivery.

Conclusion

In the introduction to this chapter, 'yadayada' was used to explain how students beginning the module tend to have common, every day, and predictable perceptions and opinions about sport as a social field. Students bring these common-sense understandings to the classroom and have no familiarity with

the grand theories. This is problematic as it is these theories that give them the capacity to critically reflect on the power dynamics that constitute the field. Therefore, a main aim of the course is to familiarize students with the theories and guide them to select one for their own research.

At the end of the series of five stages presented, students are asked to complete an anonymous survey about whether they have gained a theoretical understanding of sport as a social phenomenon and to evaluate why the theories might be useful to learn. Some sample survey responses are "I am much more confident talking about the theories now"; "the theories help to understand sport from different perspectives and how their view influences the way they write about a particular topic in sport and the theories provide frameworks of thinking to analyze a sport, giving us a better appreciation of its impacts instead of just looking at sports at a surface level". Students see value in the use of the theories as they realize that learning to apply concepts belonging to theories facilitates critical reflection (Brookfield 2016). Enacting theoretical concepts through semantic gravity profiles helps to demonstrate to students how the concepts are relatively context-independent and can integrate a large number of empirical phenomena (Maton 2009: 45). They guide the design and production of a research paper because the theory dictates the types of social contexts explored and questions asked.

Research in semantic gravity is illustrating "the capacity of the concepts to underpin research and praxis and how they are revealing the contours of powerful intellectual, curricular and pedagogic practices" (Maton 2014b: 195). The knowledge gained in the module can be linked to processes that Paul (1984) and Elder (2005) discuss such as "all reasoning is expressed through, and shaped by, concepts and ideas" and "all reasoning is done from some point of view" (as cited in Vink et al. 2017: 156) as well as Facione's (2011) 'critical thinking dispositions' of selecting, structuring, analysing and integrating information effectively. The semantic profiling presented in this case study not only shows students how to reason and what theoretical frameworks to use to support their reasoning but also how to express their reasoning appropriately through written text in order to demonstrate their mastery of concepts through relevant context dependant examples and unpacking.

Moreover, true critical reflection does more than invite students to participate in cognitive processes of reasoning. The five-stage model presented can be transforming for students in several ways. It exposes them to views removed from their comfort zone of the technical rationalist. It requires them to be critically reflective and understand that the social sciences deal with the unquantifiable non-positivistic phenomena that constitute human experience. Moreover, and perhaps more importantly, students can select a theory with its toolbox of concepts and critically reflect on a phenomenon that occupies their lives as lifestyle or simply as leisure activity and make it into an observable empirical phenomenon that they can critique. Therefore, the model engages students to employ critical theory to uncover assumptions about social fields

that are diffused with hegemony. Having more understanding of the importance of these theories to explore empirical contexts is an essential step for the development of students' critical reflection capacities in the true sense of the term, which is to help uncover 'power and hegemony' and to seek out social justice (Brookfield 2016). Similarly, in LCT, the goal is to develop a gaze that can make visible inequalities through the explanatory power of its concepts.

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12

UNDERSTANDING STUDENTS' REFLECTIVE ENGAGEMENT WITH ACADEMIC TEXTS

Laetitia Monbec

Introduction

Reflective writing encompasses a wide range of tasks which aim to develop and assess students' critical thinking. These tasks have proliferated in a range of disciplines such as social work, nursing, and teacher education where students are asked to reflect on their application of theory into their own practice. Reflection and display of critical thinking is also asked in more traditional academic writing tasks such as reflective summaries and critical responses to assigned core readings where students are asked to engage with the content and the values of the discipline. The abundance of definitions and conceptualization of critical thinking makes it difficult however to understand what these tasks entail (Bruce 2020). This chapter explores undergraduate students' reflective engagement with academic texts and stems from a teaching/learning problem observed in an assignment in a first-year Content and Language Integrated Learning (CLIL) module *Colour: Theory, meaning and practice*. The task, called a 'reflective summary response', aims to develop students' reflective skills about debates in the field and requires them to summarize a core reading and develop a reflective response to one of its themes. However, students' engagement with the core text differed in terms of target (who and what the students reflected on) and in terms of evaluation they assigned to these targets. Some students seemed to understand reflective response as a need to find flaws in the *field of research* (the research activity, the methodology, after Hood 2010) with negatively connotated evaluative terms, rather than as an engagement with the *field of study* (the knowledge domain) in an evidence-based dialogue. This difference highlighted a misunderstanding about what is entailed in this key academic skill as students transit from school to higher education discourses and knowledge practices.

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This chapter aims to understand the basis of achievement, i.e. what is valued in this common academic writing task. A key element, therefore, is to make visible the ways students engage with the core reading, through their evaluation of its authors, its knowledge claims and external sources. This will be done using the Legitimation Code Theory (LCT) concepts of *clusters* and *constellations* (Maton 2014: 148–170; Maton & Doran 2021). A second aim is to suggest reasons why students' approach to the task differ. This is done by relating the findings to the varied discourses surrounding critical thinking in the broader socio-political Singaporean context – the site of the study. The chapter first conceptualizes critical thinking in the Singaporean cultural and socio-political context, focusing on different framings in the educational discourse. It then introduces concepts from LCT. Finally, it reports on the analysis of two assignments at different achievement levels, in order to argue for the need to model context-specific (both disciplinary and broader social contexts) teaching and learning of critical reflection.

Literature review

The literature on critical thinking spans various fields and disciplines and encompasses diverse related notions such as reflective practice (Schon 1987), reflexivity (Taylor & White 2000), transformational learning (Mezirow & Associates 2000), criticality and emancipatory education (Boud et al. 2006; Schon 1995). Bruce (2020) traces the origins of the concept through the history of western philosophical argumentation, and shows that in many approaches to critical thinking, the evaluation of knowledge validity is an important thread. In western thought, critical thinking is often associated with the tradition of empiricism which views the scientific method, or an emphasis on empirical evidence as legitimate knowledge building. In addition, a more current construal of critical thinking stems from a neoliberal model that emphasizes the ability to evaluate source credibility, and to solve problems - skills which a member of the workforce should possess in order to find solutions to the issues facing our world. Finally, a more emancipatory conception of critical thinking seeks to unearth structural or systemic assumptions which are then either reaffirmed or contested to hinder or encourage societal change (Fook & Gardner 2007). These different emphases then lead to various pedagogical realizations (or recontextualization) in classrooms, as is shown below in relation to Singapore.

In Singapore, critical thinking and reflective skills are a key aim of education and a central tenet of the educational discourse (Lim 2014). In the Singaporean context, critical thinking skills are often framed within a human capital ideology (Koh 2002), where skills such as the ability to analyze and evaluate sources, and the ability to reflect and find solutions in a changing world are seen as crucial. The National Institute of Education (NIE) *Working Paper on Creative and Critical Thinking* (Chiam et al. 2014: 3) links these skills to the "country's capability and effectiveness to cope with the changes of a transient economy in the light of globalisation". In this conceptualization, the need to

adapt to change is presented as the fundamental way to address problems (Stiegler 2019) and critical thinking is the fundamental tool to enable this adaptation. Drawing on Dewey's (1910) definition, the Working Paper also defines critical thinking as the ability to hold judgment, "maintain a healthy scepticism and exercise an open mind" (Chiam et al. 2014: 7). Singaporean educational discourse around critical thinking is also characterized by a focus on the scientific method, the quest for knowledge that is value-free and objective, and a focus on rational technicality, what Giroux has called a culture of positivism in the US context (Giroux 2020). This understanding can translate differently in school curriculum. Lim (2016) found that in mainstream schools, critical thinking is recontextualized "as an instrumental skill to get at a 'right' answer – or the 'right' way of getting at the answer" (Lim 2016: 120) in English/humanities disciplines, while in the social science subjects, it is often conflated with evaluating knowledge claim credibility. In elite schools, however, he observed that critical thinking is taught as part of philosophy programmes and is equated with the ability to construct and evaluate arguments and logical analyses especially in relation to scientific methodology and rational enquiry. In lessons, students were encouraged to discuss and critique the scientific approach, while engaging with topics such as freedom of speech. Within these lessons, Lim noted a prioritization on argumentation analysis and on a positivist evaluation of knowledge claims. This stratified discourse around critical thinking then raises the question as to how students approach academic writing tasks that enact it. While research has investigated cultural, and disciplinary influences (see Ennis 1998; Moore 2011; Song 2016; Tan 2017; Tilakaratna et al. 2019), we know little about the ways students' understanding of critical thinking may be influenced by the broader social and schooling contexts and in turn how these different orientations may be realized in students' reflective assignments.

Research approaches into reflective writing are varied. While corpus-based studies have tended to look at single lexico-grammatical items (Hunston & Thompson 2000), Bruce (2020) has recently proposed a broader framework that links the expression of critical thinking in text to its overall staging and various textual elements that "mutually interrelate when employed in the communication of critical thinking" (Bruce 2020: 26). Concepts from Legitimation Code Theory (LCT) have also been deployed to explore knowledge practices linked to reflection in applied disciplines. *Specialization codes*, which explore how knowledge and knowers are articulated in practices, have been useful to reveal ways that cultural background impacts reflective writing (Tilakaratna et al. 2019). *Semantic gravity*, which explores the context-dependence of practices, has been used to reveal complex interactions between more concrete knowledge claims and more abstract and general theoretical concepts in business and social work (Szenes et al. 2015), in anthropology (Kirk 2017), and in nursing both for pedagogic and assessment purposes (Tilakaratna et al. 2020; Brooke 2019; Monbec et al. 2020). Expression of evaluative meanings have been analyzed to reveal how students

align with the values of their discipline (Szenes & Tilakaratna 2020; Tilakaratna & Szenes 2021; Brooke et al. 2019). In this chapter, LCT concepts of *clusters, constellations*, and *cosmologies* are used to reveal the ways students may align with the values associated with critical thinking in their broader social context.

Methodology

The context

The study was conducted in an undergraduate Content and Language Integrated Learning (CLIL) module at the National University of Singapore, titled *Colour: Theory, Meaning and Practice*. The module aims to develop students' academic language, multimodal literacy and critical thinking through the field of Colour Semiotics. Students analyze the socially constructed meanings of colour in various artefacts and various fields (arts, marketing, politics, communication, among others) and adopt a social semiotics/multimodal analytical lens to explore the meanings colour contributes to our world (van Leeuwen 2011; Kress & van Leeuwen 2002, 2020). Assessment takes the form of three assignments: a reflective summary response assignment (the subject of this chapter), a lens paper (see Monbec 2020), and an expository paper. Students come from disciplines ranging from Engineering, Computing, Sciences, Design, Business, or Psychology and are therefore exposed to and encouraged to engage with different ways of seeing the world in this module. In the Colour module, students are expected to develop a 'cultivated gaze' (Maton 2014: 99), a shared set of values and understandings, a common form of expression and intellectual engagement with core texts. This cultivated gaze involves an engagement with the debates and ideas of the field, an understanding of the contribution of colour to the construal of our social world, and an ability to analyze and interpret colour meaning in cultural artefacts.

The task and expectations: Developing a cultivated gaze

The first assignment where students are required to demonstrate critical thinking skills is a 600-word reflective summary response – a critical response to a core academic text – which students must first summarize and then respond to. The text in this study was the empirical research paper:

> LoBue, Vanessa & DeLoache, Judy S. 2011. Pretty in pink: The early development of gender-stereotyped colour preferences. *British Journal of Developmental Psychology* 29(3). 656–667.

Students were expected to engage with the debate surrounding gendered colour preference and whether this is a biological or a socially constructed phenomenon. Briefly, the LoBue & DeLoache study disproves the notion that

girls have an innate preference for pink. The paper explains that colour preference for pink occurs in girls at around age two and a half and progresses strongly until they start to reject the colour (at around age seven). The experiment also shows that boys express an increasingly strong dislike for pink from age three, which does not wane during childhood. The authors argue that this late opinion about pink is evidence that there is no biological element to colour preference (as is sometimes argued in the evolutionary biology literature) and suggest that because the age of two to three is that of growing gender awareness in children through socializing and schooling, their findings indicate that strong colour preference or rejection for pink is likely to be motivated by a child's gender identity construction and influenced by gender-stereotypical colour norms in the child's environment.

Students are expected to demonstrate the development of a cultivated gaze, which includes expressing judgement about and making connections between a set of knowledge claims and scholars. This is likely to occur through the evaluation of the original source's claims and the use of external sources to support the student's argumentation. In their engagement with this core academic text, students might reflect on the study's results and how they contribute to the debate, or they might reflect on a range of possible reasons for or consequences of this gender stereotyping. They might also relate to more introspective content and draw parallels with personal experiences with dominant discourses around gender norms. The expectations are demonstrated in class, through discussion of other core academic texts in small tutorial groups. The study, however, was prompted by a consistent challenge this assignment presented to a portion of the cohort, indicating that the pedagogical approach leading to it was not as effective as hoped.

The study aimed to explore the extent to which students are developing this cultivated gaze towards the issue of gender stereotyped colour preference, and more broadly towards the role of colour as a semiotics in our world. The following questions were asked:

1. How do students respond to a core academic reading in the reflective summary response in high and low achievement bands?
2. What does this tell us about students' understanding of what constitutes 'valued' reflection and critical thinking in the colour module?

Analytical frameworks

This study draws on the LCT concepts of *cosmologies, constellations* and *clusters* (Maton 2014; Maton & Doran 2021). *Cosmologies* refer to belief systems that underlie and legitimate practices in social fields. They constitute "a vision of the world embodied by activities within the social field" (Maton 2014: 152). These ideas are being enacted in a range of studies (Doran 2020; Jackson 2020; Szenes 2021; Tilakaratna & Szenes 2020). In this study, the focus

is on *axiological cosmologies* in which practices signal the "aesthetic, ethical, moral or political affiliations" of actors (Maton 2014: 152). Actors align their stances to these broader discourses more or less consciously and to different degree (Maton 2014: 168). *Clusters* and *constellations* refer to smaller and large collections of practices that have been selected from the much larger array of possible practices, related together in particular ways and assigned values. These concepts are useful to reveal the degree to which students develop and adopt the expected cultivated gaze or misalign with the valued way of engaging with a core reading in this module. An axiological analysis is also particularly useful when we aim to "unpack the ideological assumptions embedded in a notion like critical thinking and relate them to a set of social and political discourses" (Lim 2016: 33). This means that such analysis may also enable us to understand what cosmology students are aligning with. In this study, this is done through tracking *clusters* of axiological meanings charged positively or negatively, "the smallest unit of axiological meaning" as shown in Figure 12.1 (Tilakaratna & Szenes 2020: 108). Here, clusters will represent recurrent evaluative patterns of the same target of evaluation which contrast or align with others and build larger *constellation*s within the assignment, or across several texts.

FIGURE 12.1 An example of a negatively or positively charged cluster
Source: After Tilakaratna & Szenes (2020: 108)

Following Szenes (2021), Tilakaratna & Szenes (2020), Doran (2020) and Jackson (2020) the Systemic Functional Linguistic framework of APPRAISAL (Martin & White 2005) is used to operationalize these LCT concepts (Figure 12.2). APPRAISAL provides the tools to track evaluative meanings in texts, to understand what is valued in the context of a reflective summary and engaging with scholarly sources. The linguistic resources that create these meanings include the two sub-systems of ATTITUDE and ENGAGEMENT.

ATTITUDE reveals how values are built in a text, around emotions (AFFECT in Figure 12.2) and opinions (JUDGEMENT and APPRECIATION in Figure 12.2) and whether this evaluation is negatively (–) or positively (+) charged. An

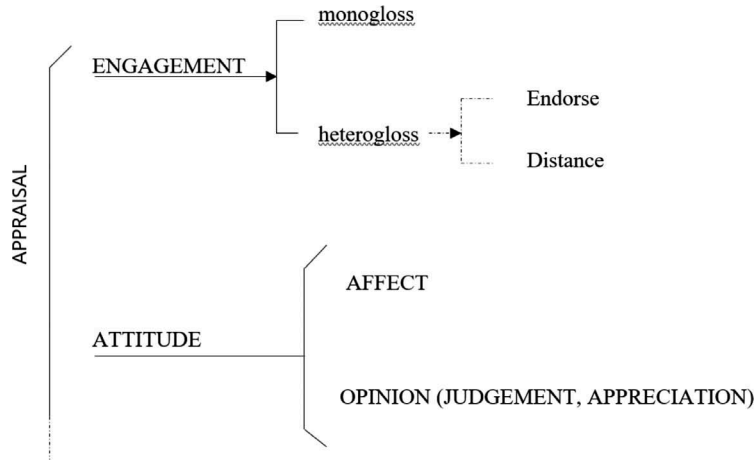

FIGURE 12.2 Appraisal resources used in this study
Source: Adapted from Martin & White (2005)

ATTITUDE analysis also tracks the targets of the evaluation (the evaluated item) which tells us who/what gets evaluated, and who/what is exempt. Over the course of a text, or several texts, recurring patterns of a target and its negative or positive charge form a stabilized axiological cluster (Tilakaratna & Szenes 2020). In the example below, following Tilakaratna & Szenes (2020), targets are underlined, instances of '**evaluation**' are indicated in bold font and the type of attitudinal resources and charging are indicated in square brackets with a '+' or '–' for positive and negative respectively. See full coding scheme in Table 12.1.

> Example: The methods **are not conclusive** [–opinion]
> Their study **is limited** [–opinion]

ENGAGEMENT is related to the concept of heteroglossia, the space given to different perspectives and the inclusion of external sources in a text. This study is focused on accounting for the broad types of alignments that are construed between external sources and the author's stance in the reflective summary response. To do this, the following selection of concepts from the framework were used: *endorse* (formulations that indicate authorial alignment with the external source, and exclude other views), and *distance* (formulations which indicate an explicit disalignment of the student from the core text). Alignment and disalignment are useful concepts to reveal the axiological meanings students assign to the value positions in the core article, through the external sources they are inviting in the dialogic space. In this way, students not only express judgement through attitudinal resources, but also alignments with

various positions through engagement resources. Note that other resources, such as graduation (strongly) play a role too but are left out of the analysis in this particular study. Following Doran (2020), alignment and disalignment are associated with positive and negative charging respectively.

As shown in the example below and in the coding scheme in Table 12.1, *engagement resources* are italicized, the types of heteroglossic engagement are indicated in square brackets and "the position being advanced" (Martin & White 2005: 113) is underlined.

> Example: There is substantial evidence from other sources that strongly reinforces the idea [endorse, +] that gender identification and colour preferences are closely intertwined.

TABLE 12.1 Coding scheme

ATTITUDE	
Targets (evaluated entities)	underlined
Attitude/evaluating item	**Black bold font**
Type of attitudinal meaning	Square brackets (e.g. [—opinion])
Charging	'+' sign for positive evaluation (e.g. [—opinion]) '–'sign for negative evaluation
ENGAGEMENT	
Positions	underlined
Engagement resource	*italics*
Type of engagement resource	Square brackets (e.g. [distance])
Charging	'+' for alignment '–' for disalignment

The data consisted of 20 reflective summary reflections which were divided into two achievement bands (ten high and ten low) to offer possibility for comparison. All assignments were collected from the author's students. Institutional research ethics approval was granted and student consent for using their assignment was sought after the end of the module. The texts were numbered, and all details anonymized. This chapter focusses mostly on two assignments: Text 1 exemplifies a low-achieving (LA) and Text 2, a high-achieving (HA) performance. Both texts were written by Engineering students. Examples from the other 18 assignments are also used to confirm the same patterns were found across the data set.

Findings

The evaluative linguistic resources which the students prioritized and the constellations that were constructed in the low-achieving (LA) scripts and the

high-achieving (HA) scripts are detailed below. A first initial finding was the difference in targets of evaluation, which were classified after Hood (2010) as *field of research* (methodology), and *field of study* (the subject matter). Types of attitudinal and ENGAGEMENT resources also proved to be a key differentiating element between low and high-achieving assignments. Overall, this reveals students' very different understanding of what reflecting on an academic text entails and raises the question as to what cosmology students' texts are aligning with.

Low-achieving assignments: Criticism as reflective response

Overwhelmingly students in the low-achieving group reflect mostly on the field of research to ascertain the article's validity, or credibility and the accuracy of the methodology employed. This is shown through a focus on targets such as 'experiment', 'methods', 'findings', 'generalisability', a generic lexis that belongs to the field of research, and a quantitative research paradigm. In these texts, these targets are consistently associated with negatively charged opinions. External sources are also related to the field of research rather than the field of study. Text 1 (Table 12.2) is a representative sample of LA scripts.

TABLE 12.2 Sample low-achieving assignment

[1] However, they might not have addressed important factors that **could introduce variability in their experiment** [–opinion].

[2] Firstly, the children involved in the authors' experiment could already develop similar colour preferences due to shared environmental influences attributed from a Caucasian background. *[3] Persaud (2017) argued [distance]* that English speakers in the United States exhibit **bias patterns** [–opinion] in colour memory that differs from individuals from a non-English speaking population.

[4] The bias [–opinion] could possibly **skew** [–opinion] the experimental findings as children from other racial and ethnic groups could exhibit different preference patterns between certain colours.

[5] Secondly, while the authors **justified their methodology** of utilizing identical objects that differed in colour, *Wilcox (2004) raised questions [distance]* about how colour priming works. [6] How can viewing one set of events increase infant's sensitivity to colour information in another, separate event?

Conclusion: [7] As a result, although the authors **may have demonstrated** that girls prefer pink and boys avoid pink, **the lack of sensitivity in their maladaptive** [–opinion] approach renders their claim**less persuasive and convincing** [–opinion].

Text 1 builds the reflective response around a main claim that the study is not valid because the authors have ignored 'important factors that could introduce variability in their experiment' [1]. This methodological flaw, the student concludes, invalidates the study [7]. This is supported by two

claims regarding a problematic sampling of participants in [3] and a flaw in the experimental procedure (namely the question of priming) in [5].

Table 12.3 shows the negative charging being built around targets which are all related to the field of research: the authors/researchers (cluster 1); their methods (cluster 2); the study (cluster 3). This pattern is confirmed in other LA assignments, which construct their reflective response around similar theses: '<u>The research</u> **is limited** and **cannot be generalized**', or '<u>The methods</u> **are not conclusive.**

TABLE 12.3 Evaluative attitude in low-achieving assignments

Target	Evaluation	Charging
cluster 1 Target: the authors		
<u>LoBue and Deloache</u> <u>The researchers</u> <u>The authors</u> <u>They</u>	**to a certain extent** have exemplified **might not have addressed** **could have further supported** **could elaborate more** **have not addressed**	negative
cluster 2 Target: field of research (methods)		
<u>methods</u> <u>experimental factors</u> <u>approach</u> <u>their experiment</u>	**not sufficiently conclusive** **could introduce variability** the **lack of sensitivity in their** **maladaptive** approach	negative
cluster 3 Target: field of research (results)		
<u>the authors' findings</u> <u>the research</u> <u>the findings</u> <u>the results</u>	**seem** convincing (while) **could have been better sub-** **stantiated** with explanations **lack** credibility are **skewed by bias** **less persuasive and convincing** **could be more robust** **could be more precise**	negative

Another key pattern in the LA text is the lack of reflection on *the field of study*. The core positions elaborated in the article, on colour preference and gender, are for the most part ignored. This is partly shown in the types and purpose of external sources used in the student assignment. Although students may hint at the issue of colour preference, and how these preferences are constructed, ENGAGEMENT resources tend to solely relate to the methodology of the paper to further disalign the student with the core article's positions. For example, in Text 1, the two external sources Persaud (2017) and Wilcox (2004) (see below in [3] and [5]) are used to distance from the position supported in the core reading by negatively charging the elements of the

methodology. Persaud is used to question the participant sampling but is not explicitly related to the findings. Wilcox is used to argue that participant priming has not been considered (which is incorrect, the authors explain priming had no incidence on the results).

> [3] *Persaud (2017) argued [distance]* that English speakers in the United States exhibits bias patterns in colour memory that differs from individuals from a non-English speaking population.
> [5] Secondly, while the authors justified their methodology of utilizing identical objects that differed in colour, *Wilcox (2004) raised questions [distance]* about how colour priming works.

In this study, a new type of cluster was identified which involves the resources of ENGAGEMENT. Table 12.4 includes the clusters that employed ENGAGEMENT resources.

TABLE 12.4 Engagement resources in low-achieving assignments

cluster 4 Field of research: position being advanced is related to methodological issues	Engagement resources	Charging
Participant sampling is faulty Colour priming is skewing the results	*Persaud argued [distance]* from participant sampling approach *Wilcox (2004) raised questions [distance]* about how colour priming works	disalign (negative charging)

These patterns of axiological meanings that associate ENGAGEMENT resources with value positions formed clusters within students' assignments and can be visualized as shown in Figure 12.3 below. They were recurrent in the data set.

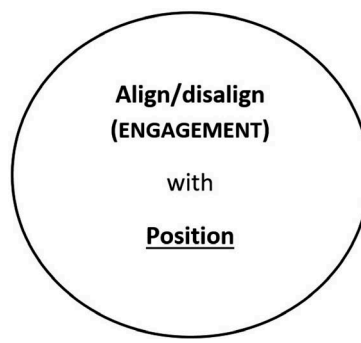

FIGURE 12.3 An axiological cluster composed of ENGAGEMENT + position

So far, the attitude and engagement analyses reveal that in LA assignments, students associate negative charging of methodological elements in the original article with an overall dismissal of its contribution to knowledge in the field. The attitudinal clusters and ENGAGEMENT clusters work together to build a negatively charged constellation around the field of research in the core text by LoBue & Deloache through these recurrent negative charging of elements of methodology, and disalignment patterns of engagement. This is visualized in Figure 12.4.

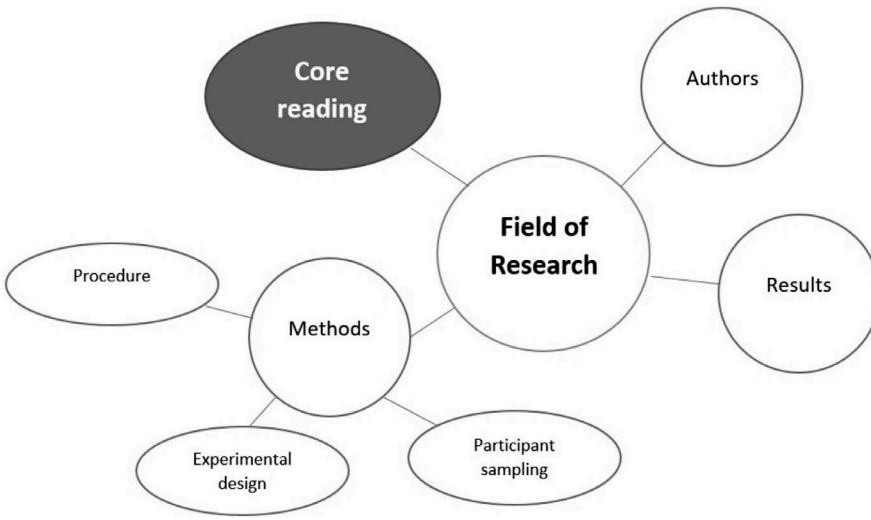

FIGURE 12.4 A negatively charged constellation of the LoBue and Deloache article
Source: Visualisation after Szenes (2021)

This visualization shows how LA reflective assignments on this core academic reading were characterized by a lack of reflection about the knowledge claims presented in the original article (field of study). The study methodology was charged negatively through resources of ATTITUDE and of ENGAGEMENT. Once the methodology is invalidated, the need to engage with the issue of gender and colour preference is made redundant. The negatively charged clusters built around the authors and their method allows the student to dismiss and ignore the results, the knowledge claims advanced in the paper. This type of reflective engagement evokes a generic, 'template' response which might apply to a range of empirical studies but does not align with the valued cultivated gaze expected of the student. The questions this raises in terms of student's conceptualization of critical thinking and engagement with academic discussions are discussed further below.

High-achieving assignments: Critical and intellectual engagement as reflective response

While the LA assignments reflect on the field of research, conversely, the high-achieving (HA) assignments reflect mostly on the *field of study* – namely the article's findings, the positions and claims made in the discussion, and the study's contribution to knowledge in the field. This is shown through the students' focus on positions related to gendered colour preference and gender identity, an emphasis on endorsing engagement patterns oriented towards the field of study, and a minimal use of opinion resources. Text 2 (Table 12.5) is a representative sample of HA assignments.

TABLE 12.5 Sample high-achieving assignment

[8] *There is* ***substantial evidence*** *from other sources that strongly reinforces [endorse]* the idea that gender identification and colour preferences **are closely intertwined**.
[9] In a paper cited by the authors, where eight different hues are investigated, the study ***further*** *concludes [endorse]* that *there is no evidence [endorse]* of different colour preference across the two genders during infancy, which contrasts starkly with older age groups *(Franklin, Bevis, Ling, & Hurlbert, 2010)*. [10] *Wong and Hines (2015)* ***further*** *endorse this idea* by *demonstrating [endorse]* how the stability of gender-related colour preference in children increases during the same time where gender stability is attained.
[11] In a separate work, *Wong and Hines (2014) also verify [endorse]* that young boys are more influenced by colour preference compared to young girls, *which they discover* to be **consistent** [+opinion] *with research which shows [endorse]* that young boys are more susceptible to social pressure from their gender group.
[12] The **high consistency of patterns** observed in children's development of colour preference and gender identification ***strongly suggests*** *[endorse]* that it **occurs not merely by chance,** but that children utilize colour preference as a means to identify gender.

In Text 2, the student's reflective summary response is built around an alignment with the core text's suggestion that the development of gendered colour preference is linked to gender identity (see the student's main thesis in sentence [8]). This thesis is then supported by external sources that confirm the original authors' claims (colour preference in infancy is not gendered) and that endorse the hypothesis formulated by the authors in the discussion section (that gendered colour preference emerges when gender identification forms). The second supporting element extends the original article to suggest that boys' long-lasting distaste for pink may be linked to their experiencing stronger levels of social pressure to conform to social norms [11].

This focus on the study's contribution to knowledge in the field of colour semiotics is clearly shown in the choice of targets, mostly related to the field of study, the lack of targets in the field of research, and in the low priority given to attitudinal resources (see Table 12.6). To note, the authors are evaluated positively for their heteroglossic engagement with the field ("In a paper cited by the authors"), not in relation to their research capabilities (as was done in LA assignments).

TABLE 12.6 Evaluative attitude in high-achieving assignments

Targets	Evaluation	Charging
cluster 1: the authors		
The authors	provide **reasonable** evidence **cite** other studies	positive
cluster 2: Original study's claim		
the idea that gender identification and colour preferences are closely intertwined	**substantial evidence** **strongly reinforced** are **closely intertwined** to be **consistent** **high consistency of patterns** **strongly suggest it occurs not merely by chance**	positive positive

The focus on the field of study in HA assignments is also shown in the selection of ENGAGEMENT resources. Text 2 starts with a thesis [8] which situates the whole reflective response in a heteroglossic space:

> [8] *There is **substantial evidence** from other sources that strongly reinforces [endorse]* the idea that gender identification and colour preferences **are closely intertwined.**

Table 12.7 lists the ENGAGEMENT resources and the positions they align the student with. The engagement resources are aimed at three positions in the field of study: the findings (cluster 1, the experimental results); position advanced in the discussion (cluster 2); the student's expanded discussion point (cluster 3), where the student proposes a potential explanation (boys are more susceptible to social pressure) for a finding in the core study (boys develop a strong dislike for pink) by citing an external source, thereby orchestrating external sources to enter into the academic discussion.

The shift from ATTITUDE to ENGAGEMENT is what characterizes these HA assignments. Specifically, *endorsing* resources are used to align the reader with the claims of the original paper through a selection of sources which echo, explain or develop them. In sentence [9] for example (see below), the student aligns with the original study's findings by using a source (Franklin et al. 2010) and heteroglossic engagement such as '*further concludes*' and *'there is no evidence'* that endorse the findings.

> [9] In a paper cited by the authors, where eight different hues are investigated, the study *further concludes* that *there is no evidence* of different colour preference across the two genders during infancy, which contrasts starkly with older age groups *(Franklin, Bevis, Ling & Hurlbert, 2010)*.

TABLE 12.7 Engagement resources in high-achieving assignments

Position being advanced	*Engagement resources*	*Charging*
cluster 3: field of study (experimental results; position being advanced in the results section: there is no gendered colour preference in infancy; gendered colour preference begins at 2- to 3-year-old).		
No gendered colour preference in infancy	The study *further concludes* that there is *no evidence [endorse]* Wong and Hynes (2015) *further endorse this idea by demonstrating [endorse]*	align (positive charging)
cluster 4: field of study (position being advanced in the discussion: gendered colour preference is likely due to gender awareness developing at 2- to 3-year-old).		
gender identification and colour preferences are closely intertwined	*There is substantial evidence from other sources [endorse]* *Wong and Hynes further endorse this idea by demonstrating [endorse]* *The high consistency of patterns… strongly suggests* that it occurs not merely by chance *[endorse]*	align (positive charging)
cluster 5: Field of study (position being advanced by the student as development of discussion point: the results support external studies about boys' increased susceptibility to social pressure).		
Boys being more susceptible to social pressure	Wong and Hynes (2014) *also verify* …which *they discover* to be *consistent with research which shows…[endorse]*	align (positive charging)

These clusters can be visualized as a positively charged constellation built around the field of study in the LoBue & Deloache article (Figure 12.5).

The bulk of the axiological constellation is built then around the study's position in the colour preference debate. For this assignment, this is done through charging positively the authors and various positions advanced in the study and external sources and contributing to the conversation by expanding on the original core text discussion points by connecting it to related literature (for example, that young boys' strong dislike for pink may confirm other studies' findings that they are more susceptible to social pressure). In doing so, the student demonstrates a deep engagement and reflection about the field of study. To note is that this valued engagement and reflection might also be displayed through a distancing that targets the study's positions.

In this section, the analysis showed how high-achieving students build axiological constellations which align with the expectations in the module regarding critical reflection. The next section summarizes what this analysis reveals about the basis of achievement in this task. It also suggests that

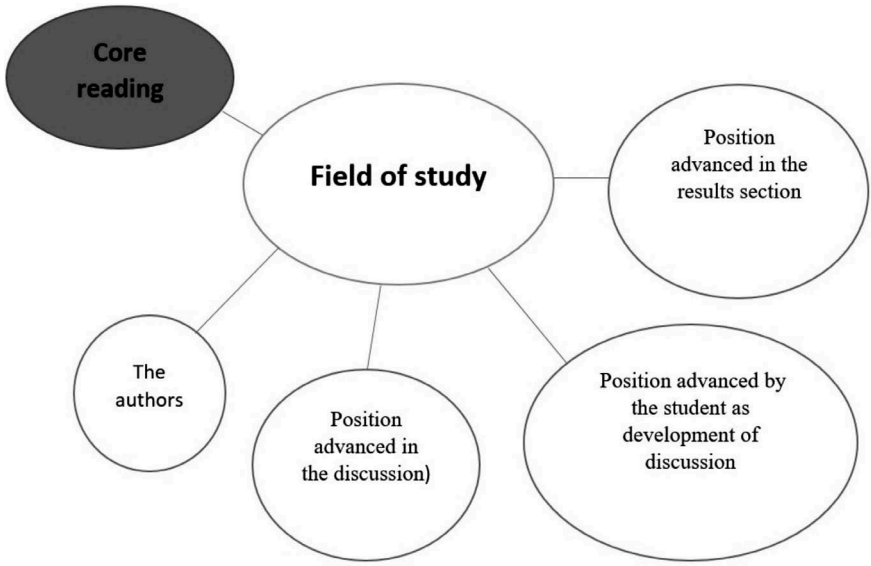

FIGURE 12.5 A positively charged constellation of the LoBue and Deloache article

students constructing less valued constellations are aligning with cosmologies that reflect their broader disciplinary and social backgrounds, but which prevents them from developing the expected cultivated gaze.

Discussion and implications

In this study the following questions were asked:

1. How do students respond to a core academic reading in the reflective summary response in high- and low-achievement bands?
2. What does this tell us about students' understanding of what constitutes 'valued' reflection and critical thinking in the colour module?

The analysis of attitudinal and engagement resources in LA and HA assignments reveals different axiological orientations and in turn provides a clearer description of the basis of achievement for the reflective summary response task. The expected cultivated gaze is also made more visible. In order to demonstrate the valued gaze in this task, students are required to reflect on and enter into a conversation with the field of study, i.e. the role of the visual world and social interactions in construing gender norms, through a range of heteroglossic resources that relate to positions on the debate in and outside of the original article. Advancing their own positions is also how students demonstrate critical thinking, by drawing connections between the original article, their own ideas, and the related literature.

Conversely, students, who focus on the field of research, deploying strongly negatively charged opinions about the researchers, the methods, and the validity of the findings, are less successful in the task. The consistency of these patterns in LA assignments indicates that this conception of the task as criticism of the field of research rather than as a critical conversation with the field of study might be a common 'default' approach which students adopt as they encounter diverse critical thinking requirements in this specific module and more generally in higher education.

The next part of the discussion aims to explore why students approach the reflective summary response assignment so differently and why some may struggle to develop the gaze which is valued in the module. The students' home discipline may play a part as they socialize students in different epistemic and ontological traditions and different discourses. However, in this study, the two students who wrote the LA and HA script sampled above are both Engineering students, and home discipline does not seem to be a factor in the rest of the data either. If, as Bourdieu wrote "the whole social structure is present in each interaction" (Bourdieu 1991: 67) and as Maton mirrors in "all practices reflect a cosmology" (Maton 2014: 169), then the difference in axiological meanings built in the students' assignments may reflect broader cosmologies, social and cultural understandings of critical thinking. Lim's study of critical thinking recontextualization in schooling in the city-state, cited at the beginning of the chapter, revealed a contested discourse and different understandings of critical thinking according to schooling experience. It might therefore be useful to consider the results above in relation to the Singapore schooling context and its discourse around critical thinking.

Axiological clusters and constellations underpin languages of legitimation which people deploy to express their stance, align with specific worldviews and persuade their readers. The way students deploy these meanings inform us on what they perceive to be a legitimate form of critical reflection. In particular, the constellations built in the LA assignments reveal two main characteristics of students' construal of critical thinking: first, critical thinking is equated to assessing knowledge validity, and second, knowledge validity is equated to 'methodological correctness'. The values expressed in these assignments echoed a positivist view of knowledge-building which is informed by the scientific method and a quantitative research paradigm. This may reflect the students' exposure in their schooling with axiological cosmologies related to broader conceptualization of knowledge building, reflection and critical thinking described in Lim's work. According to Lim (2014) the recontextualization of critical thinking in schooling curriculum includes a neoliberal, instrumental view aimed at problem solving, and an argumentation view which values analysis of claims and arguments within a positivist framework. In this discourse, the type of knowledge that emphasizes efficiency, logic, problem solving, and

healthy scepticism emerges as more legitimate than a more hermeneutic understanding which aims at revealing underlying power structures within a historical and social context (Feagin & Vera 2020). Students who wrote LA reflective assignments may align with the former worldview unquestioningly and regardless of the disciplinary context. Clearly, this link between ontological conceptions of critical thinking, the social and educational contexts, and individual student assignments needs further exploration, as many factors are at play in the complex ways students mediate these broader discourses in their individual texts. However, and following Bourdieu's advice not to miss the social reality because "it lies in structures transcending the interaction which they inform" (Bourdieu 1991: 68), the chapter suggests that these links, while needing to be determined in future research, should not be ignored. A first implication derives from this: it is important to address students' (and educators') conceptualization of critical thinking, conceptualizations which may be shaped not only by disciplinary background but also by various recontextualizations of official discourse about critical thinking in students' schooling experience. In particular, it is important to make visible the nature of critical thinking valued in a given module. In the teaching/learning problem which motivated this study, it became clear that the reasons students struggled to provide the valued gaze on the core text did not stem from a simple misunderstanding of the task.

By identifying an axiological engagement cluster, which involves a position and aligning/disaligning resources, this study complements previous research (Doran 2020; Jackson 2020; Szenes 2021; Szenes & Tilakaratna 2021; Tilakaratna & Szenes 2020), showing that axiological clusters can be realized through different linguistic resources. These are both theoretical concepts and analytical tools which can help us make visible the broadest social structures and ideologies in educational practices and discourse, and in the way they are realized in our students' texts. In this way, this chapter is exploring a methodological and theoretical amplitude which allows us to keep in sight both the social structure and its expression in our object of study. This has an important pedagogical implication as it points to the need to prepare students for reflective writing and critical engagement with expertise. This is especially true in an interdisciplinary module such as the module on Colour semiotics. A discussion of the types of language resources which enable a student to construct these sophisticated meanings should also be part of the pedagogical intervention. The theoretical concepts used in this study, such as axiological clusters and constellations, enable us to make these orientations and these alignments or misalignments with the values of the module more visible, and as a teaching tool, they can serve as a basis for discussion with students as to what is entailed in critically responding to literature in the field.

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