Diligent student, caring practitioner or expert scientist? How context and identity influence writing practices on a postgraduate health sciences programme.

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Submitted for the degree of PhD

'This thesis was submitted for a posthumous award. I, Professor Lesley Gourlay (principal supervisor) confirm that the work presented in this thesis is the work of Sarah Gartland. Where information has been derived from other sources, I confirm that this has been indicated in the thesis.'

Abstract

The expansion of the UK higher education sector over recent decades has led to greater diversity in terms of educational and linguistic backgrounds, resulting in a 'deficit' view of some students in terms of academic writing. However, this view has been challenged by work in New Literacy Studies which regards literacy as socially-situated practice. Research into Academic Literacies has taken an ethnographic view of writers' identities and life experiences, focused predominantly on the undergraduate experience. However, somewhat less attention has been paid to Masters students, particularly those from professional or vocational backgrounds. This thesis presents a small-scale qualitative study exploring how students on a Health Sciences master's programme at a post-1992 university in the South-East of England approached the writing of a critical scientific review article for a named journal as part of their module assessment. This study investigates factors in the participants' context which influence their approach to writing a review article, leading to the following research questions:

- How does context influence the student participants' approach to the writing of a critical review article, particularly their expression of critical evaluation?
- How do participants negotiate the tension between writing (in theory) for an academic journal whilst (in practice) producing an assessed piece of work for their lecturer?
- What identity positions do participants construct for themselves in the interviews and in their writing?
- What are the lecturers' perspectives on the students' execution of the review article assignment?

An ethnographically oriented approach was employed, using observations, collection of documents, including the module handbook, Powerpoint presentations, and assignment drafts, and semi-structured interviews with students and Health Sciences lecturers. The conclusions explore the complexities of students' identities, previous practitioner contexts, and how these influence the writing process. The conclusions raise critical questions about writing task 'authenticity', genre, and audience, ending with recommendations for practice.

Acknowledgements

In her PhD journey, Sarah was grateful for the support of her family and friends, in particular the encouragement and friendship of Pauline Barrie and Debbie Williams.

Impact Statement

(Adapted from the Examiners' Report)

We consider that the thesis constitutes a contribution to the field of writing studies/writing in higher education in a number of ways. It provides original research by contributing an empirical study on Master's level writing in Health Sciences, including an in-depth literature review which carefully draws together a number of traditions thus offering a nuanced framework from which to explore the phenomenon of the writing of the review article in Health Sciences education. It also provides a thought-provoking account of the problematics of 'authenticity' in the writing of a review article in a specific educational context, and a nuanced discussion of the ways in which student-professional-writers work between between aspects of 'sub genres' (drawn from their existing experience and developing knowledges) and 'genres' (principally as recognised institutionally). It also uncovers the significant potential for 'misrecognition' by tutors of the voices students are attempting to construct in their writing. We considered this a particularly powerful empirically grounded contribution to the field. Overall the text is beautifully articulated and crafted, reflecting the significant amount of time, energy and intellectual and creative labour invested by the candidate. We would like to send our warm congratulations to Sarah Gartland's family in recognition of her academic work and achievement.

Table of Contents

1 Introduction

The past three decades have seen a huge expansion in UK Higher Education with undergraduate numbers almost doubling between 1987 and 1992 (Ganobcsik-Williams, 2006). As a result, more and more students who have not followed the traditional 'A' level route are entering universities, leading to increased linguistic, cultural and social diversity, and a blurring of the lines between 'home' and 'international' students, and between native and non-native speakers of English, since some 'home' students may be bilingual and may have completed some or all of their previous education elsewhere (see for example Preece's (2009) study of multi-lingual undergraduates). An area which seems to have received less attention than the expansion of undergraduate education is the parallel increase in the range of taught Masters' programmes on offer and in the numbers of students taking them. According to HESA statistics (2015/16), the number of students gaining a higher degree (not including doctoral degrees) almost quadrupled in ten years, from just under 20,000 in 1996 to almost 78,000 in 2006. By the academic year 2014-15, this had more than doubled again to nearly 170,000 students, with over half coming from outside the UK.

This expansion of higher education and the resulting diversity of the student population has led to increasing discourses of deficit around student writing, particularly at undergraduate level, a perception held by many academics that 'students can't write' and that this problem can be 'fixed' by sending students to some kind of study skills support service (Street *et al.*, 2015). Students who fail to

fully grasp and reproduce the conventions of their academic discipline are often perceived as 'intellectually inferior' (Lillis, 2001: 40) or cognitively deficient (Turner, 2004: 25). This is particularly true for international students whose first language is not English. There is a tendency for such students to be perceived as a problem, both in the literature (Morrison et al, 2005; Tran, 2013) and in practice, with lecturers, classmates and even the students themselves viewing them as in some way deficient, particularly with regard to written assignments (Chang and Strauss, 2010). In addition, international students from East and South-East Asia are often perceived to lack the ability to think and write critically (Ryan & Louie, 2007), an ability which is often considered to be a central tenet of Western higher education (Barnett, 1997).

However, in recent years, prompted by Lea and Street's (1998) paper on academic literacies in higher education, a new strand of research has emerged which questions this deficit view of student writing. This strand builds on previous work in New Literacy Studies, which focusses on literacy as practice rather than as an autonomous skill, which, once acquired, can be easily transferred to new contexts and genres (Street, 1984). According to Baynham (1995: 39), 'investigating literacy as practice is investigating "concrete human activity" involving not just what people do with literacy but also what they make of what they do, how they construct its value, the ideologies that surround it.'

In this vein, academic literacies research takes a critical ethnographic gaze (Lillis & Scott, 2007) to socially situated writing practices, recognising the importance of writers' identities and life experiences, and aiming to develop a transformative approach to academic writing (Lillis *et al.*, 2015). Much of the early academic

literacies research focussed on undergraduate students, particularly those from 'non-traditional' backgrounds (e.g. working class, ethnic minority, and mature students), uncovering issues such as the disconnect between lecturers' and students' understandings of academic assignments, the lack of clarity in tutor feedback on students' work, and the difficulties that students encounter with writing as they switch between academic disciplines (Lea & Street, 1998; Lillis, 2001).

Since most Master's students already have experience of academic writing in higher education, they might be expected to encounter fewer difficulties with writing than undergraduates and therefore be of less interest to academic literacies researchers. However, not all Master's students are recent graduates making a smooth transition to a higher level of study in the same discipline as their undergraduate degree. They may be returning to study after a long gap, taking a course which has little relation to their undergraduate degree and/or adjusting to a new educational culture in a foreign country (O'Donnell *et al.*, 2009; Scott *et al.*, 2014). Therefore, several ethnographically oriented studies have investigated the writing experiences of Master's students in various academic disciplines including TESOL (Casanave, 2002), Education (Stierer, 1998), Computer Science (Tardy, 2005), and Environmental Science (Pardoe, 1997; 2000). These studies highlight students' struggles to balance the need to understand and comply with their lecturers' requirements whilst also pursuing their own interests and developing an authoritative voice as well as the identity conflicts that some students undergo when required to write in ways which are not in tune with their sense of self.

In many cases, students take a Master's degree in order to advance professionally. For instance, it is almost impossible for teachers to progress to management positions without a master's degree (Stierer, 1998). Master's students might therefore expect their professional experience to be relevant to their studies and recognised by their tutors, and for their studies to be directly relevant to their professional goals. This link between academic theory and professional experience is often recognised on vocational Master's programmes. For example, Stierer (1998) found that at least some of the modules on the Master's degree in Education at the Open University included assignments which required students to include references to their professional experience or reflect on links between theory and practice, and that his student participants generally preferred this type of assignment over more purely theoretical writing. Another particularly interesting example is Pardoe's (1997) study of an optional module on an MSc in Environmental Science, for which students were required to produce an Environmental Impact Assessment, a genre which they might need to write in their profession. Pardoe observed that in the introduction to the module, the lecturer made frequent comments about the ways in which the module and the assignment replicated the reality of professional practice. Pardoe argues that these comments functioned almost as a marketing device. In other words, the lecturer was 'selling' the module to the students, attempting to convince them of its value for their future professional life.

In these studies by Stierer and Pardoe, assignments appear to be constructed in ways which acknowledge students' identities as practitioners rather than academics. However, a common problem in academia highlighted by Haggis (2003) is lecturers' tendency to assume that students are simply novice academics with a desire to be

inducted into the conventions of their academic disciplines. As Haggis aptly expresses it, lecturers 'construct images of themselves'. This problem is illustrated by Scollon (2002) in his discussion of a study which investigated the high drop-out rates of Alaska native undergraduates on a Sociology degree course. Scollon found that while academics viewed students as novice academics, the students simply wanted to gain practical knowledge and skills for the business careers to which they aspired. This study is interesting because it highlights how a mismatch between staff and student identities and expectations can lead to students to resist or even abandon their studies. However, there appears to be little research which investigates how this issue plays out at post-graduate level with students who may have a strong sense of professional identity, although several studies (e.g. Boyd, 2010; Findlow, 2011; Gourlay 2011a & b; Shreeve 2011) have found that practitioners such as nurses or artists making a transition to an academic career experience identity conflicts as they struggle to adjust to their new context.

Taking an academic literacies perspective, this thesis presents a small-scale qualitative study exploring how students on a Health Sciences master's programme at a post-1992 university in the South-East of England approached the writing of a critical scientific review article for a named journal as part of the assessment for one of their modules. Although students do not generally send their article to their chosen journal, they are told that they should aim to write something of publishable standard. Most of the students on the course are practising or aspiring health professionals, including doctors, nurses and dieticians, but this task requires them to adopt the persona of academic experts because, as Salager-Meyer (2001: 72) points out, review article authors are usually 'expert knowledge holders' writing for an

expert audience in a tone which is likely to be 'authoritative, categorical and assured'.

The impetus for this research arose from my own experiences of teaching academic writing to Health Sciences students in introductory sessions on the Communications module, on a separate academic writing module for international post-graduates, and in one-to-one tutorials. As a result of my conversations with Health Sciences lecturers and students, and my efforts to learn more about review articles, I became aware that the identity of an expert research scientist either engaged in a conversation with equally expert peers or conveying information to less expert practitioners, which the review article assignment required students to take on, was likely to be unfamiliar and possibly uncomfortable for them. Students on the Health Sciences programme are usually either recent graduates or health practitioners such as doctors, nurses, dieticians and physiotherapists with varying amounts of professional experience. They generally have little experience of scientific research aside from, in some cases, their undergraduate dissertation.

Since the review article is a well-known genre in science, the standard approach to teaching and learning this genre would most likely be to analyse sample review articles and to practise reproducing the key features. This approach is typical of instruction on English for Academic Purposes (EAP) courses, which are often based on findings from corpus studies. Numerous studies have investigated particular features of specific genres (e.g. Hyland, 2006a; Samraj, 2013; Vold, 2006). In addition, perhaps because of the widespread deficit view of student writing practices in general and L2 student writing practices in particular, a common approach to

research on writing is comparison of corpora. In some cases, student writing (L1, L2 or both) is compared with expert writing and in others L2 student writing is compared with L1 student writing. In most cases, the aim of such research seems to be to identify deficiencies in the less expert group and to suggest ways to teach them to write more like 'experts'. Recent examples of this type of research published in journals such as *English for Academic Purposes* and *English for Specific Purposes* include 'Nominal stance construction in L1 and L2 students' writing' (Jiang, 2015), 'Form and function of citations in discussion sections of master's theses and journal articles' (Samraj, 2013), and 'Plain English and legal writing: Comparing expert and novice writers' (Hartig and Lu, 2013). Such studies rarely include interviews with the writers themselves or consider why students might write differently from experts, perhaps because they are based on the underlying assumption that students simply lack the necessary linguistic repertoire and/or genre-based proficiency to produce 'expert' texts.

The solution to this 'problem' is often considered to be genre-based pedagogy. This approach is advocated by Wingate (2012) and Wingate and Tribble (2012) in their discussions of EAP/genre versus an academic literacies approach to writing instruction. They argue that students *want* to learn how best to conform to academic conventions in order to achieve good grades, and that therefore genre-based pedagogy is more appropriate to meet students' needs than an academic literacies approach to writing instruction. However, these authors seem to misrepresent academic literacies theorists as being against the use exemplar texts and as focussing only on facilitating student resistance to academic conventions. They thus

ignore the academic literacies argument for a transformational approach to academic writing, which, as Street *et al.* (2015) point out, involves recognising the experience, knowledge and identities that students bring to academia and considering how these can mesh with lecturers' expectations. This might involve lecturers making adjustments in the types of assignments they set and the ways in which they provide writing instruction, rather than placing the onus for adjustment entirely on the students.

I have also observed that even when students have spent time analysing and practising genre conventions in writing classes, they do not always reproduce them in their assignments. Health Sciences students, for example, often omit to present their assignment in the form of a review article compliant with the formatting guidelines of a specific journal although the assignment instructions clearly state that they should do this. In addition, despite class time spent analysing the conventions of review articles, such as common moves found in introductions and conclusions and approaches to critical evaluation, the students would often not adhere to many of these conventions in their own article. This suggests that genre-based pedagogy is not a fail-safe solution to the complex problem of helping students to produce professional genres.

One reason for this may be the socially constructed nature of genres (Miller, 1984) and the dialogic relationship between genres and the community that produces them. Koutsantoni (2007), who investigated writing by experts and students in Engineering, points out that texts are influenced by the behaviours, attitudes and strategies of the community members who produce them but then the texts in turn

come to define the community in which they are produced, and students usually produce their texts in and for a different community from that in which an expert is working. This notion of dialogicity combined with the fact that genres are flexible and open to manipulation to suit the individual writer's rhetorical goals (Bakhtin, 1986) suggests that in producing review articles, MSc student writers may be influenced in their writing by their reading of review articles and other genres in their discipline, but they may also bring other influences to their writing apart from a simple lack of proficiency, perhaps resulting in a form of review article which does not exactly conform to the conventions of the professional published genre. Such influences might include the student's personal and/or professional concerns regarding the topic of the review article, a desire to meet tutor expectations, which may differ from those of a journal editor, or perhaps simply a misunderstanding of the aims of the review article.

In addition, as Pardoe (1997) points out, student writers may draw on media discourses as well as academic discourses in their writing, particularly when their writing concerns issues which are frequently reported in the media, such as the environment in the case of Pardoe's participants and the causes and consequences of health problems, which are the subject of participants' review articles in this study. On the question of obesity for example, Lawrence (2004) notes that while scientists tend to frame obesity as a biological disorder which can potentially be cured as a result of advances in science, in the media it is framed in two competing ways: as a behavioural problem for which individuals can be blamed if they do not make responsible choices, and as an environmental problem resulting from, on the one

hand, the increased availability of cheap, unhealthy food, and on the other hand, reduced opportunities for physical exercise.

It is clear from the above that the students in this study are writing in very different context from normal review article authors. Unlike most such authors, they are not engaged in research related to the topic of their review article, and they are writing for a different target audience: although the students on the Communications module are in theory writing for an audience of research scientists and/or health professionals, in reality they are writing for their supervisor. I therefore became interested in how context influences these types of assessed writing practices. In this study, I am using van Dijk's (2008) concept of context as a mental model which includes the identity, knowledge, goals and intentions of discourse participants. Van Dijk argues that each individual has a unique, subjective mental model of any given context, and analysis of this mental model through the use of discourse analysis can help explain why individuals who appear to be operating in the same context produce different discourse. This concept facilitates an emic, or insider, perspective on the data because rather than forming pre-conceptions about which aspects of the participants' context might be significant, the researcher can allow these aspects to emerge from the data.

In addition, Pardoe (1997), who conducted a case study of MSc Environmental Science students writing an environmental impact report, suggests that rather than asking how 'real' a classroom task or a piece of student work is, which is likely to lead to the conclusion that the student work is in some way 'deficient' compared with

professional writing, researchers need to examine the ways in which tutors and students 'construct the event and the text, and their relation to other events and texts, through their discourse and action' (p.123). Therefore, I do not intend to compare my student participants' writing with published work by counting the occurrences of particular features such as hedges or negative criticisms, as this would most likely suggest that most participants are producing poor imitations of professional review articles. Rather, this study investigates the factors in the participants' context which influence their approach to writing a review article, particularly their expression of critical evaluation, and whether their attempts are regarded as successful in the context for which they are writing, thus leading to the following research questions:

- How does context influence the student participants' approach to the writing of a critical review article, particularly their expression of critical evaluation?

- How do participants negotiate the tension between writing (in theory) for an academic journal whilst (in practice) producing an assessed piece of work for their lecturer?

- What identity positions do participants construct for themselves in the interviews and in their writing?

- What are the lecturers' perspectives on the students' execution of the review article assignment?

In order to answer these questions, I employed an ethnographically oriented approach which included the following data collection methods: observations of the introductory lecture for the Communications module; the collection of a range of documents, including the module handbook, lecturers' Powerpoint presentations, and drafts of participants' assignments; and semi-structured interviews with students and Health Sciences lecturers. Through analysis of this data, this research aims to investigate how MSc Health Sciences students, who may regard themselves primarily as practitioners and as novice academic writers, negotiate the writing of this expert genre, in which, according to Hyland and Diani (2009) evaluation is a central feature. In particular, this study focuses on how context, including the writer's sense of identity, influences writing decisions, particularly the expression of critical evaluation.

Chapters Two and Three present the theoretical background to this study. Since this research focuses on students writing a review article, Chapter Two examines some key conceptual categories related to academic writing in general and scientific review articles in particular, including genre, argument and critical evaluation. The chapter considers how these categories have been conceptualised in different research traditions and the difficulties that they might pose for students. Chapter 3, on the other hand, examines theory and research on academic writing, based mainly on Lea and Street's (1998) model of three approaches to the teaching of writing in higher education: study skills, socialisation and academic literacies, considering how these relate to the literature on writing in science. The chapter then goes on to consider two key concepts in this study: context and identity. Following this literature

review, Chapter 4 outlines the methodology of this study, including the philosophical perspectives which informed it, the ethical issues taken into account, and a description of the participants as well as the data collection and analysis methods.

The remaining chapters of the thesis (Chapters 5 – 8) present the data analysis and discuss the findings of this study. Chapter 5 begins with an account of the context in which the review article assignment is set and written. This includes the ways in which the assignment is framed for the students in the module handbook and by the module lecturer in the first class of the academic year. The chapter then presents an analysis of the student participants' accounts of their transitions to post-graduate study and the problems they encountered with academic writing in English, particularly the expression of critical evaluation. Chapter 6 continues to examine the academic context, considering the contextual factors which participants indexed in their discourse as influential in their writing practices. Chapter 7, on the other hand, presents the data related to participants' personal and professional contexts, particularly focussing on how their identities as practitioners influenced their approach to the review article assignment. Finally, Chapter 8 discusses the findings of this study in relation to the research questions set out above and the literature examined in Chapters 2 and 3. The chapter ends with a discussion of the implications for further research and for writing pedagogy in the Health Sciences.

2 The Scientific Review Article and Critical Evaluation

2.1 Introduction

The ability to critically analyse or critically evaluate ideas and information is highly valued in UK higher education. Indeed, Barnett (2007: 2) states that critical thinking is 'a defining concept of the Western university'. Therefore, QAA descriptors and universities' assessment criteria for both undergraduate and post-graduate work contain frequent references to critical analysis or critical evaluation (Scott *et al.*, 2014). In addition, students on master's degree programmes are often required to produce critical reviews of the literature on a particular topic. Such assignments range from a review of one journal article or book to comprehensive literature reviews. These types of assignments appear to have various aims, including developing students' ability to engage in critical thinking, which is considered an important graduate attribute (Barrie, 2006; Jones, 2009), allowing students to demonstrate that they have read, understood and evaluated key texts in their field, and preparing students to write a dissertation literature review. However, several studies (e.g. Teramoto & Mickan, 2008; Westwood & Westwood, 2002; Woodward-Kron, 2003) have found that at least some students find this type of assignment difficult and confusing, not least because they struggle to understand what is meant

exactly by terms such as critical evaluation. The possible reasons for these difficulties will be considered in this literature review.

As explained in Chapter 1, on the MSc Health Sciences module which is the focus of this thesis, students are required to write a review article for a named academic journal. Therefore, in theory, they need to take a step beyond writing a simple assignment involving critical engagement with relevant research literature for their lecturer, and engage instead with a different target reader. Although students do not generally send their article to their chosen journal, they are told that they should aim to write something of publishable standard. In order to do this successfully, it seems likely that students who may regard themselves primarily as students or as practitioners will need to adopt a new identity – that of disciplinary expert. This is because the scientific review article (sometimes also referred to as 'review essay', 'review', 'report article', or 'state of the art survey') is 'a very important genre in science that is used to synthesise and evaluate knowledge in a field' (Noguchi, 2006: 81) and which tends to be produced by 'expert knowledge holders' writing for an expert audience in a tone which is likely to be 'authoritative, categorical and assured' (Salager-Meyer, 2001: 72). However, the review article has been little studied by discourse and genre analysts (Swales, 2004). This may be because much of this type of analysis aims to inform the teaching of English for Specific Purposes to students or those in the early stages of a research career, and as Swales (2004) points out, the review article is not a genre that is often produced by novices. Therefore, it is interesting to consider how MSc students, who may regard themselves as novices, approach the writing of this expert genre, in which, according to Hyland and Diani (2009) evaluation is a central feature.

In order to address the question of what a scientific review article is and the role that evaluation plays in this type of article, this chapter examines important conceptual categories related to academic writing, including genre, argument and critical evaluation. Much of what we know about genre and discourse in science is the result of research in three different traditions: Systemic Functional Linguistics/Australian Genre Studies (SFL), English for Specific Purposes (ESP) and its sub-discipline English for Academic Purposes (EAP), and New Rhetoric. Therefore, I will begin this chapter with a brief overview of these approaches to text and genre analysis. Drawing on literature from these three schools, I will then examine the role of the review article in science and what students need to be able to do in order to produce a successful review article. In particular, I will consider the ways in which persuasion, argument and critical evaluation are linked as well as the role of critical evaluation/analysis/thinking in higher education and the difficulties which it poses for students. Following this, I will outline the ways in which critical evaluation is expressed in scientific writing in general and review articles in particular.

2.2   Three approaches to text and genre analysis

In the literature on academic discourse, three main approaches to text and genre analysis are commonly identified: English for Specific Purposes (ESP) and its sub-discipline English for Academic Purposes (EAP), Australian Genre Studies, sometimes referred to as the Sydney School, and New Rhetoric, which has been

pioneered mainly by scholars working in North America (Hyland, 2002; Hyon, 1996).

In all three approaches, scientific texts are regarded as products of human social

activity (Bazerman, 1998), but they vary in the extent to which they focus mainly on

the features of the text itself or take into account the context surrounding the

production of the text.

2.2.1   Systemic Functional Linguistics and Australian Genre Studies

One approach which has been very influential in the study of genres is Australian

Genre Studies. This is linked to the wider field of systemic functional linguistics

(SFL), which originated with Halliday's (1978) *Language as Social Semiotic*. In this

work Halliday puts forward the theory that in recurring situation types or 'contexts of

situation', linguistic interaction becomes typified, and he defines this 'clustering of

semantic features according to situation types' (p.68) as register. For Halliday

'genre' is a lower order concept subsumed under register (Noguchi, 2006), but SFL

theorists cited in Hyon (1996) later defined genres as 'staged, goal-oriented, social

processes'. Martin and White (2005) explain that genres are *staged* because they

usually consist of more than one step, *goal-oriented* because they are used to get

things done, and *social* because participation in genres involves communication with

a community. This definition reflects Halliday's linking of form, function and social

context.

A key feature of the Australian SFL approach to genre, according to Hyon (1996), is

its foundation on the ideological view that non-mainstream groups need to be

equipped to access 'powerful' school genres. Therefore, the Australian approach to

genre has a political as well as a pedagogical dimension. In this it differs from both the ESP and New Rhetoric approaches, which place little emphasis on the need to empower or liberate students because their target audiences (non-native speaker undergraduate and postgraduate students and mainstream university students respectively) are often considered to belong to elite groups and therefore not to be in need of empowerment or liberation.

Despite its laudable aim to empower marginalised groups, Australian Genre Studies are not without criticism. Ivanič (1997), for example, is critical of Halliday's concept of 'register', and his view that it can be predicted by a set of regularly occurring contextual characteristics. Ivanič suggests that the relationship between language and context is less prescriptive and more indeterminate and fluid than this view suggests. Therefore, she proposes that Fairclough's distinction between 'genre' and 'discourse' is more useful, with genre conventions being dependent on the social context and purpose for which the language is being used, and discourse conventions being related to what is being written about. In addition, Lillis (1998) argues that power and the nature of change are insufficiently theorised in SFL, pointing out that even when the inaccessibility of scientific discourse is acknowledged (in, for example, Halliday & Martin, 1993) the role of human agency in developing such discourse is not. Similarly, Freedman and Medway (1994) point out that although Australian genre scholars recognise the political dimensions of genres, they fail to take a critical approach to the genres themselves, instead 'placing them at the centre of a prescriptivist pedagogy which locates possibilities for enfranchisement simply in extending *access* to the genres and not in subverting the power of existing genres and/or legitimizing new ones' (p.13). In fact, Halliday and

Martin (1993) argue against using more accessible language for the teaching and learning of science in schools and in favour of finding ways to help children to gain access to scientific discourse which they might otherwise find inaccessible. Their approach is criticised by Bazerman (1998: 22) who argues that:

> When just looking at lexical and grammatical processes, we see a unified view of the sciences as uniformly engaged in precisely the same discursive practices of object creation, abstraction, and relation-building. It also presents the sciences much on the terms that science itself would like to consider itself with attention to the cognitive objects it creates in representation of natural objects and processes. The fissure-laden and contentious social and material processes by which phenomena are construed into widely accepted symbolic form are hidden from Halliday and Martin's view.

Finally, whilst acknowledging the valuable contributions made by SFL theorists to the study of language and discourse, van Dijk (2008) offers a number of criticisms of the SFL theory of context in particular, some of which, he argues, are also applicable to the SFL framework more generally. These criticisms include on the one hand SFL's excessive use of esoteric terminology and its focus on mainly sentence level grammar, and on the other hand its general lack of theoretical dynamism and specific lack of engagement with social theory along with its rejection of any notion that cognition may have a role to play in language use.

2.2.2   English for Specific Purposes

The second school of thought which has theorised genre is English for Specific Purposes. ESP is defined by Dudley-Evans and St John (1998: 4-5) as having the following core characteristics: '[it] is designed to meet specific needs of the learner; [it] makes use of the underlying methodology and activities of the disciplines it serves; [it] is centred on the language (grammar, lexis, register), skills, discourse and genres appropriate to these activities. Similarly, Hyland and Hamp-Lyons (2002: 2) define EAP, a sub-discipline of ESP, as 'language research and instruction that focuses on the specific communicative needs and practices of particular groups in academic contexts', and they note that EAP instruction is grounded in 'an understanding of the cognitive, social and linguistic demands of specific academic disciplines'. This seems to be a rather idealised view of EAP, particularly with regard to how it is translated into classroom practice in many contexts as English for general academic purposes rather than English for specific academic disciplines. However, a substantial amount of research has been conducted on the features of discourse and genres in a range of academic disciplines (e.g. Hyland, 2006a; Samraj, 2013; Vold, 2006).

ESP and EAP are influenced by the work of Swales, particularly his (1990) book *Genre Analysis*, in which he defined genre as 'a class of communicative events, the members of which share some set of communicative purposes' (p.58). In his discussion of the concept of genre, Swales (1990) draws on both SFL and New Rhetoric to argue that 'it is indeed possible to use genres for teaching purposes without reducing courses to narrow prescriptivism or formalism and without denying students opportunities for reflecting upon rhetorical or linguistic choices' (p.45). Thus,

in its original conception, the ESP approach to teaching genre was not intended to be prescriptive.

However, rather than paying detailed attention to the specialised functions of texts and the social contexts in which they operate, ESP and EAP genre analysts have tended to focus mainly on the formal characteristics of genres, including some work on sentence level grammatical features but with a particular emphasis on structural move analyses (Hyland, 2002), such as Swales's well known CARS (creating a research space) model for research article introductions. In addition, much corpus-based research has been conducted on specific features of academic writing such as citation, hedging and the use of personal pronouns (Flowerdew, 2005).

Although this work in ESP has offered useful insights into the features of different genres and made valuable contributions to pedagogy, a number of weaknesses have been identified, including a tendency to overlook the complexity of writers' purposes and assume blocks of text are mono-functional, the danger that without appropriate validation, analyses may simply be the result of the analyst's intuitions, and the difficulty in identifying convincing evidence of links between move shifts and particular lexico-grammatical patterns (Hyland, 2002; Hood, 2010). In relation to the first of these points, there is a tendency for research in ESP to take published expert writing such as research articles as a model and to view student writing which does not conform to the expert model as deficient without taking into account the very different contexts in which experts and students are working (e.g. Atkas & Cortes, 2008; Cotton, 2010; Samraj, 2013).

2.2.3   New Rhetoric

While ESP and SFL approaches to genre have tended to focus on the formal characteristics of genres, scholars working in New Rhetoric tradition have examined genre from rhetorical and sociological perspectives, analysing writers' strategies of argument and persuasion. The study of rhetoric can be traced back to Ancient Greece, with one of the earliest definitions provided by Aristotle:

> Rhetoric then may be defined as the faculty of discovering the possible means of persuasion in reference to any subject whatever. (This is a function of no other of the arts, each of which is able to instruct and persuade in its own special subject; thus medicine deals with health and sickness)…But Rhetoric so to [speak] appears to be able to discover the means of persuasion in reference to any given subject. That is why we say as an art its rules are not applied to any particular definite class of things. (Aristotle, 1926: 15)

As Lillis (2013) argues, a concern with persuasion in writing inevitably involves an interest in factors outside the text, such as readers and the role of texts in particular contexts. New Rhetoric scholars have therefore moved away from the purely text focussed analyses of classical rhetoric towards approaches which take greater account of context.

Scholars who have produced work on the rhetoric of science, either wholly or partly in the New Rhetoric tradition, include Bazerman (1988), Fahnestock (1993), Gross (1990), and Myers (1989; 1990; 1991; 1993). Their work is influenced by Miller's

(1984) paper on genre, by sociological studies of science, such as Latour and Woolgar's (1979) *Laboratory Life* (Freedman and Medway, 1994), and by Bakhtin's notions of intertextuality, dialogism and heteroglossia (Hyland, 2002). Since concepts put forward by these theorists are relevant to the thesis, I will briefly outline key aspects of their work below.

A key influence on the work of New Rhetoric scholars is Miller's (1984) paper, in which she argues that 'a rhetorically sound definition of genre must be centred not on the substance or the form of discourse but on the action it is used to accomplish' (p.151). She ends her paper with the assertion that 'for the student, genres serve as keys to understanding how to participate in the actions of a community' (p.165). This is supported by Berkenkotter and Huckin (1995) who identify situatedness as one of the key features of genres: genre knowledge is located in and hence learned from participation in communicative activities. These authors (1995: 3) define genres as 'inherently dynamic rhetorical structures that can be manipulated according to the conditions of use'. The notion of dynamism refers to the fact that genres change over time, as evidenced by, for example, Bazerman's (1988) research on the evolution of scientific research articles over 300 years, and Berkenkotter and Huckin's own analysis of more recent changes in scientific publishing, including the increased status of the short report in scientific journals. In addition, Noguchi's (2006) analysis of the review article genre indicates that it is more open to alternative forms of rhetoric than the more frozen (but perhaps more familiar) genre of the research article.

Other key features of genres identified by Berkenkotter and Huckin are form and content (to produce a particular genre it is necessary to understand what is considered appropriate in terms of overall structure and language as well as content), duality of structure (genres are social structures which are both constituted and reconstituted by those who participate in them), and community ownership (the conventions of a particular genre reflect the ideology, epistemology and social ontology of the community that produces it). Similarly, Koutsantoni (2007) argues that the relationship between genres and the community that produces them is dialogic – the texts are influenced by the behaviours, attitudes and strategies of the community members who produce them but then the texts in turn come to define the community in which they are produced. Thus, Tardy (2005) points out that an understanding of a disciplinary community's ideology and epistemology is an important aspect of rhetorical knowledge and key to the ability of a writer to make successful rhetorical appeals.

Another study which is frequently cited by New Rhetoric scholars is the ethnographic research conducted by Latour and Woolgar (1979). This research, which is based on Latour's observations of scientists at work in a laboratory at the Salk Institute in California, examines the rhetorical constraints on scientists' construction of knowledge. Latour and Woolgar trace the trajectory of scientific claims from their beginnings in the findings of laboratory experiments through research and review articles to their acceptance as facts by the scientific community. Some of their findings on the use of attribution, metadiscourse and hedging in different types of scientific texts are discussed in the relevant sections below.

Finally, the work of Bakhtin, particularly his notions of intertextuality, heteroglossia and dialogism, has been an important influence for New Rhetoric approaches to genre. Bakhtin (1986: 63) defines genres as 'typical forms of utterances', which are 'changeable, flexible and plastic' (p.80) in nature, and which need to be examined in the context in which they are used in order to understand how users manipulate them to achieve their rhetorical goals. Context is important because genres constitute sites of struggle between, on the one hand, the centripetal, or unifying, forces of the genre's conventions, and on the other hand, the centrifugal forces of the writer's experiences, assumptions and viewpoints (Holquist, 1990).

Commenting on Bakhtin's theory, Kristeva (1986: 37), who originally coined the term 'intertextuality', argues that 'any text is constructed as a mosaic of quotations; any text is the absorption and transformation of another'. Thus, meaning in texts is mediated by other texts rather than being conveyed directly from the writer to the reader. As Halasek (1999: 7) explains, 'like Bakhtin, Kristeva posits that all texts are constructed from preceding and anticipated texts. Every utterance encounters and negotiates the discourses of its listeners and of those who have already contributed to the subject at hand.' This is particularly true of academic writing, where writers draw directly on other texts, summarising, paraphrasing and quoting other writers words and perhaps also reproducing their tone, authoritative or cautious, for example. Someone (Bakhtin?) talks about voices – I think not only using others' words but also tone/style e.g. authoritative when writing for practitioners, more cautious when writing for other researchers.

The other two concepts, heteroglossia and dialogism, are closely linked. Holquist (1990: 69) defines heteroglossia as 'the situation of a subject surrounded by the myriad responses he or she might make at any particular point, but any one of which must be framed in a specific discourse selected from the teeming thousands available'. He argues that 'all utterances are heteroglot in that they are shaped by forces whose particularity and variety are practically beyond systematization', with the result that a word or utterance in any given situation will have a different meaning from any other situation. Holquist goes on to state that 'the idea of heteroglossia comes as close as possible to conceptualising a locus where the great centripetal and centrifugal forces that shape discourse can meaningfully come together' to form recognisable genres (p.68). Dialogism, on the other hand is 'the characteristic epistemological mode of a world dominated by heteroglossia. Everything means, is understood, as part of a greater whole – there is a constant interaction between meanings, all of which have the potential of conditioning others' (Holquist, 1981: 426). According to Holquist (1981), dialogism assumes that, as a result of powerful but highly unstable conditions operating in any given context, a word uttered at a particular time and place will have a different meaning from any other situation

This notion of dialogism combined with the fact that genres are flexible and open to manipulation to suit the individual writer's rhetorical goals (Bakhtin, 1986) suggests that in producing review articles, MSc student writers may be influenced in their writing by their reading of review articles (a centripetal force), but they may also bring other influences (centrifugal forces) to their writing, perhaps resulting in a form of review article which does not exactly conform to the conventions of the professional published genre. Such influences might include other discourses such as media

discourse, the student's personal and/or professional concerns regarding the topic of the review article, a desire to meet tutor expectations, which may differ from those of a journal editor, or perhaps simply a misunderstanding of the aims of the review article.

Although research in the New Rhetoric tradition appears to take greater account of writers' identities and contexts than work in EAP and Australian genre studies, Freedman and Medway (1994) have criticised American genre scholars for their failure to address questions of power and inequality in their studies. The authors suggest that New Rhetoric researchers need to examine, for example, which genres are most valued and why, who is excluded from particular genres and how texts position the writer, the reader and those represented within the text. The first two questions seem to link with an academic literacies approach to academic writing (see chapter 3), while the last one has been considered by researchers such as Hyland (e.g. 2004) as well as Martin and White (2005) with their Appraisal framework for analysing the expression of evaluation in discourse, which is further discussed in section 2.5 below.

In this section, I have briefly outlined three approaches to genre analysis which have all contributed to understandings of academic and scientific discourse in general and to review articles in particular. Research in all three traditions offers useful insights into the nature of academic discourse in science, the review article and the expression of critical evaluation. However, work in SFL and ESP with its detailed attention to categorising and labelling linguistic features and textual moves and steps often seems to miss important aspects of the wider context in which the text is

produced. In addition, it might be argued that such work sometimes results in taxonomies of terminology so complex that they appear to be of little use to students and teachers of writing. New Rhetoric, on the other hand, with its view of genres as situated, flexible, dynamic structures used to accomplish actions, and its ethnographic approach to contexts, including the relationship between the writer and the audience, appears to offer a more productive basis for considering why student writing might differ from professional writing.

In the following sections I will draw on relevant research in the three traditions discussed above to examine what a scientific review article is and how critical evaluation is expressed in published scientific writing. Although I do not intend to directly compare the texts produced by my student participants with those produced by professional researchers, an understanding of professional writing may offer insights into how contextual factors influence students to write differently from professionals.

2.3   Review Articles in Science

Unlike the research article with its standard structure of Introduction, Methods, Results and Discussion, which has received extensive attention from genre analysts, the scientific review article appears to have been little studied despite its importance. The main exceptions to this are an article by Myers (1991) and Noguchi's (2006) book on the subject although some researchers (e.g. Salager-Meyer, 2001; Piqué-Angordans & Posteguillo, 2006) have examined review articles alongside other genres in wider studies of criticism and evaluation in academic writing. Swales

(2004) suggests that the reason for this lack of attention lies in the fact that review articles are usually commissioned by journal editors from experts in the field, and therefore the genre is not taught to novice researchers who may be working to gain mastery of other written genres in their field. In addition, as Swales points out, the review article is basically a literature review, a genre which does not lend itself to the relatively easy division into the type of 'moves' which have been identified in other texts and part texts, such as research article introductions and methods sections. This is supported by Noguchi (2006), whose specialist informants struggled to identify a series of moves which could usefully be applied to review papers in general.

Although the review article has received relatively little attention, it is an important genre in science and its main function is to synthesise and evaluate recent research findings on a particular topic. The status of the review article is reflected in its position in scientific journals. In *Clinical Nutrition* and *Clinical Neuroscience Research*, for example, reviews appear at the beginning of the journal before empirical research articles. In addition, there are also a number of journals devoted entirely to review articles, such as *Critical Reviews in Food Science and Nutrition* and *Critical Reviews in Clinical Laboratory Sciences*. According to Noguchi's specialist informants (academics in various university science departments) the review can serve as a "bridge" genre, or a kind of text that functions in more than one discourse community. It is also 'a means by which what is to be considered a "fact" can be presented to a wider community' (Noguchi, 2006: 35)

. This reflects Myers's (1990: 102-3) argument that scientific discoveries become recognised as facts 'as they are retold in news articles, review articles, textbooks and popularizations.' Writers of review articles assess the research evidence for scientific claims, which can lead to these claims becoming more widely accepted in the scientific community.

In addition, according to several of Noguchi's (2006) specialist informants, review articles also offer an opportunity for scientists to promote their own research and therefore enhance their reputation. A brief perusal of recent review articles in *Clinical Nutrition* reveals that it is indeed common for writers of review articles to include their own research in the review. Most simply refer to their own studies alongside those of other researchers, but some actively promote their own work, situating it at the cutting edge of their field and emphasising its value. For example, in a review paper on the use of androgens to treat muscle loss in elderly patients, Dillon *et al.* (2010: 698) first highlight a problem identified by other researchers and then show how their own current research is addressing the problem and the potential benefits of this research if successful:

> Several investigators have observed that physiological testosterone administration in healthy older men results in a peak increase in muscle protein synthesis within the first month of treatment but that this anabolic effect wanes if treatment is continued over several months.[20, 31] This has led our group and colleagues to examine alternate testosterone dosing regimens in an attempt to avoid negative feedback of exogenous testosterone to the

HPG (hypothalamic pituitary gonadal) axis. We are examining whether weekly administration of testosterone for a month, alternated with a month without treatment for five months will improve muscle mass and strength in healthy men with low normal testosterone concentrations (200–400 ng/dL). If such monthly on–off cycled testosterone treatments retain the acute anabolic effects on skeletal muscle protein over longer periods than continuous administration this would have both physiological and financial benefits by reducing the total amount of drug needed over the length of treatment.

Since most MSc students in my study are not researchers but practitioners or recent graduates who aspire to a career in health and social care, they are unlikely to be able to use their review article in this way as a self-promotional tool. This raises the question of how valid it is to require students to produce a genre for which they appear to lack a key qualification: experience in researching the subject they are writing about. Although one aspect of the rationale for the review article assignment is to help students develop the necessary skills for writing a dissertation literature review, the requirement to adopt an expert researcher persona may be the result of an assumption that students resemble lecturers in their aspirations for a career as research scientists. This issue of conflicting expectations and identities will be further discussed in the next chapter.

2.3.1 Classifying review articles

In addition to the problem of a lack of research expertise, students also need to be aware that the review article is not a single monolithic genre aimed at one type of audience. In fact, review articles can be classified in various ways. Perhaps the most common distinction is between systematic reviews and what Lang (2010) defines as narrative review articles. Most of the literature discussed in this section refers to the latter type, which is similar to a standard literature review, and this is the type of review that MSc Health Sciences students usually aim to produce. Lang (2010) suggests that systematic reviews are in fact a more accessible genre for novice researchers who need to publish but lack the resources to conduct original research. According to Lang (2010: 16) systematic reviews are

> Compiled through a formal reproducible procedure specified in advance of data collection; it is a specific research method. Researchers systematically identify and collect all the articles that test the same hypothesis, systematically abstract the same data from these articles, systematically display the data in one or more evidence tables and then interpret the evidence.

This seems to suggest that, in comparison with a narrative review, a systematic review may be a more structured and hence less linguistically and rhetorically challenging project for a Master's student to undertake.

Noguchi (2006) identifies four types of scientific review article: 'history' reviews, which summarise a field of research, possibly correcting misunderstandings, in order to indicate future directions for research; 'status quo' articles, which experts read regularly in order to keep up to date with developments in their field or in closely related fields; 'theory' reviews, which present a theory or model which may offer new avenues for research or practice; and finally 'issue' reviews. Noguchi is not very clear on the features of this last type of review article but she seems to suggest that it is likely to highlight problems and controversies in a very narrow aspect of a particular field. She argues that reviews can be categorised as a single genre despite this variation because they are recognised as such by the scientific community including her specialist informants.

Rather than attempting to classify review articles, Greg Myers (1991) considers the genre from the rhetorical perspective of their individual writers. In his analysis of two scientific review articles on the topic of split genes and RNA splicing, he argues that 'the writer of a review shapes the literature of a field into a story in order to enlist the support of readers to continue that story' (p.45). Thus, like Noguchi, he notes that one purpose of a review article is to highlight avenues for further research. However, unlike Noguchi, he emphasises the writer's role in persuading readers to view the field of research under review in a certain way. One of the papers which Myers considers is written by a scientist (James E. Darnell, Jr) actively engaged in research related to the topic in question, while the other is written by a well-known biologist, Francis Crick, who is, in this case, writing from a theoretical perspective. Myers explains that the two writers face different rhetorical problems: Darnell must avoid appearing to promote his own laboratory's research findings over those of other

scientists working in the same field while Crick must analyse, evaluate and write authoritatively on research in which he himself has not been engaged. Myers argues that although the two reviews are quite different from each other in style due to the difference in the rhetorical problems faced by the writers, they share the same purpose, which is to recount past events in such a way that they can influence the direction of future research.

Another possible way of classifying review articles, in the Health Sciences at least, is by intended audience: while some review articles are clearly aimed at practitioners, others appear to be written with researchers in mind. This might explain the apparent contradiction between Salager-Meyer's (2001) finding, based on analysis of review articles in journals aimed at doctors, such as the British Medical Journal and the Lancet, that the tone of review articles tends to be 'very authoritative, categorical and assured' (p.72), and research by Latour and Woolgar (1979), which found that review articles generally contained information on factors which might affect the status of the research claims in question, such as the impact of methods, and statements containing modality and attribution. Latour and Woolgar (1979) also found that publications written for outsider audiences, including, according to them, practitioners, were more likely to contain unmodalised claims in the present tense and widely accepted truths which are rarely mentioned in discussions amongst insiders. Evidence for this disparity between review articles written for fellow researchers and those written for a practitioner audience can be found in two articles on the topic of gluten-free diet. These two articles have one co-author in common, yet their tone is very different. The first article by See and Murray (2009) is an invited review paper entitled 'Gluten-Free Diet: The Medical and Nutrition Management of

Celiac Disease' and published in *Nutrition in Clinical Practice*. It is clearly aimed at practitioners since its main aim seems to be to give advice on treating patients with coeliac disease. Therefore, it contains little hedging and numerous statements with 'should'. On the other hand, the second review article by Rashtak and Murray (2012) was published in *Alimentary Pharmacology and Therapeutics* and appears to be discussing cutting edge research. It contains more instances of hedging than the first article and only one instance of should.

It is evident from the above that the term 'review article' actually covers a range of sub-genres with different aims, structures and audiences. Whether tutors are aware of these differences and able to point them out to students, or whether students themselves distinguish between the various subtypes is unclear. However, despite the differences between the various types of review article, they generally all appear to be written by research scientists writing as experts for other researchers in their field, for researchers in related fields, or for practitioners who are considered to be less expert than the review article writers. Therefore, MSc Health Sciences students, who tend to be either recent graduates or experienced practitioners, are required to take on what is likely to be an unfamiliar role of expert researcher confidently critiquing and evaluating previous research on a particular topic. In the following sections I will examine the role of critical evaluation in review articles, including its linguistic expression, and consider what problems this might pose for student writers.

2.4 Rhetoric, argument and critical evaluation

Lecturers often tell students that they need to include argument and critical evaluation in their writing. However, in science there is often a tension between the need to evaluate and argue and the need to be objective, which may cause confusion for students. This is because despite thirty years or more of sociological and linguistic study of the sciences, the view of 'ideal' scientific discourse as 'straightforward, objective and dispassionate' (Charney, 1993: 203) remains widespread. In this view, scientific prose presents a plain, theory neutral view of the world, uncontaminated by the art of persuasive rhetoric. Barron (2003) offers an interesting explanation for why so many scientists hold this view. According to Barron, science justifies the reifying of science above all other disciplines by reference to the ontological principle. This states that 'science (as the pursuit of pure reason) is a concept that is so unlikely to emerge in *any* culture that if it does, it must be the genuine article' (Fuller, 2000, cited in Barron, 2003: 301). Barron says that this notion that scientists have a privileged view of the world because the basis of their knowledge lies in pure reason can cause scientists to deny any role for social factors in science and therefore in scientific language. By extension, according to Barron, scientists also believe scientific language to be different from everyday language, and indeed from the language taught by writing teachers or produced by science students for writing classes. If lecturers on MSc Health Sciences programmes hold this view of scientific language, then this may affect the way that they talk to students about academic writing. Finally, as Charney (1993) points out, in this view of scientific discourse, the reader's role is simply to understand the text, assess its technical accuracy and integrate the information into his/her existing

knowledge. This is another factor which may influence students' ability to engage critically with the texts they read.

Pardoe (1997) discusses this problem in his study of Master's students writing an environmental impact assessment. He suggests that students' tendency to make categorical assertations in their writing may have been influenced by several factors, including a belief that science is categorical, which may in turn have been reinforced by the tutor's discursive construction of environmental impact statements as 'objective' and 'scientific' without any unpacking of what those terms might mean. Pardoe adds that the students appeared to lack the discursive resources for discussing the rhetorical functions of an environmental impact assessment. As a result, 'the subtle process of informing the reader of the issues to be considered in a planning decision, and why they are important, is replaced by brief, unsupported and categorical assertions' (p.344). One participant even eliminated the details, evidence, argument and discussion which he had written to support his claims because his contribution to the group report was much longer than the others. Pardoe notes that for the students, the arguments for cutting the text appeared more powerful than the arguments for retaining the detail because as far as they were concerned, 'the content is still there' (p.344).

Pardoe's study demonstrates that students who perceive scientific texts to be pure, neutral descriptions of reality are likely to be relatively unsuccessful in their written assignments. This is because, as noted in the previous section, the scientific writer is always attempting to persuade the reader of something, and in the case of the review article this is likely to be the writer's evaluation of a particular field of research

and how that research should be taken forward. Hence, the concepts of rhetoric, argument and critical evaluation are closely linked in the analysis of scientific discourse in general and review articles in particular. A simple definition of rhetoric is 'the study of persuasion' (Osborne, 2001: 274). Making the link between rhetoric and argument, Harris (1997: xii) states that 'rhetoric is the study of suasion, per or dis-, and suasion is the meat of all arguments.' Beaufort (2004) identifies five domains of knowledge upon which expert writers draw: discourse community knowledge, subject matter knowledge, genre knowledge, rhetorical knowledge and writing process knowledge. She argues that although critical thinking and hence critical evaluation might be seen to be most closely linked with subject matter knowledge, it is a necessary component of all five domains. The role of evaluation in rhetoric is also highlighted by Cockcroft and Cockcroft (2005), who point out that the rhetor (speaker or writer) needs to evaluate audience, stance, emotional engagement and choice of arguments before embarking on an attempt to persuade. They add that 'evaluation is integral to the persuasive process and to persuasive ordering' (p.144).

Similarly, Nesi and Gardner (2012) argue that it is through the devising of sustained arguments along with critical evaluation that students develop their independent reasoning skills. They point to the explicit links made between these three in the Quality Assurance Agency (QAA) frameworks, which state that students awarded Bachelor degrees with honours are expected to have demonstrated:

> Conceptual understanding that enables the student to devise and sustain arguments, […] and comment upon particular aspects of current research, or equivalent advanced scholarship, in the discipline […] Typically, [honours

graduates] will be able to: […] critically evaluate arguments, assumptions, abstract concepts and data.

Moon (2008), however, points out that in the Dublin Descriptors, which were developed as part of the Bologna Process and which have now been incorporated into the Qualifications Framework of the European Higher Education Area (European Consortium for Accreditation, 2012), critical analysis features only at Doctoral level. She therefore suggests that the QAA's (2008) descriptors for level 7 (master's degrees), which were still in force when I was collecting data for this study, may be over-ambitious. These descriptors include the need for students awarded master's degrees to have demonstrated 'a systematic understanding of knowledge and a critical awareness of current problems' (p.20) as well as an ability to critically evaluate both current research and methodologies.

2.4.1   Argument

As noted above, argument is an important concept in academic writing and in scientific review articles where writers need to construct a coherent argument in order to persuade the reader to take a particular view of the research field in question. Andrews (2010) distinguishes between argument and argumentation. He defines the former as an overarching term that 'refers largely to the products or manifestations of argumentation, like debates, essays, position papers, research papers and dissertations' (p.2). For argumentation, on the other hand, Andrews provides two definitions. He gives a simple working definition of argumentation as 'a

logical or quasi-logical sequence of ideas that is supported by evidence' (p.3), and a longer more complex definition as follows:

> Argumentation is seen as part of argument and suggests a sequence or exchange of arguments. It refers to something more technical. It is the process of arguing in educational, political, business, legal and other contexts. Argumentation in HE, therefore, will refer to how argument takes place in colleges and universities, how it operates in subjects and disciplines, and how best to nurture it.
>
> (Andrews, 2010: 2)

Andrews (2010) points out that argument and argumentation are deeply embedded in individual disciplines and differ across disciplines. Therefore, in order for students to be successful it is essential for them to understand how argumentation operates in their field. However, in science classrooms there may be very little overt focus on argumentation. For example, in their study of argumentation in school science, Duschl and Osborne (2002) highlight the tendency for classroom interaction between teachers and students to focus on the 'facts' of science. They argue that the rhetorical aim of such discourse appears to be to persuade the students of the validity of the scientific world-view, what Schwab (1962: 24 cited in Osborne, 2001: 273) described as the 'rhetoric of conclusions'. Osborne (2001) suggests that students who learn in this way do not gain a full understanding of the social nature of science with its rhetoric of argument involving claims, counterclaims and criticism.

Perhaps surprisingly, Andrews (2010) found that the emphasis on learning facts as well as discipline-specific research procedures continues in university biology courses. The biology lecturers and students that he interviewed seem to take a rather narrow view of argument, perceiving it to be related mainly to essay writing and debates concerning controversial applications of biological knowledge in society rather than an integral aspect of all scientific writing including laboratory reports. As Coffin *et al.* (2003) point out, science students need to understand the persuasive nature of laboratory reports: such texts are not neutral accounts of how results were achieved; rather, they attempt to convince readers of the worthwhile nature of the research and the validity of the method and results. This is supported by sociological studies of science (e.g. Gilbert and Mulkay, 1984; Latour and Woolgar, 1979) which demonstrate that actual events in the laboratory are carefully recontextualised for persuasive effect in published research articles. Similarly, in a paper on persuasion in scientific arguments, Yearley (1981: 410) argues that 'formal scientific papers should be regarded primarily as contributions to scientific debates. They take the form of arguments, aimed at persuading the reader of the correctness of a specific point of view'. The students and lecturers interviewed by Andrews seem to take the theory-neutral view of scientific discourse (Charney, 1993; Barron, 2003) discussed in section 2.4 above and to lack awareness of the role of argument in seemingly 'objective' accounts of research.

Mitchell (1994), who researched argumentation in a range of disciplines in both sixth form colleges and higher education, offers an interesting explanation for the foregrounding of content and knowledge at the expense of attention to discourse and argumentation. She suggests that this is partly to do with power and assessment:

To be within the discourse, to be able to exercise effective arguments within it,

was to be in a position of power. Since teachers, as 'experts' had internalised

the discourse, their tendency was to let students know 'things' rather than to

put them in charge of the process of knowing (p.196).

Several researchers have investigated how the content and structure of arguments

in student work is influenced by the extent to which their training is oriented towards

practice or research. For example, Parkinson and Adendorff (1997) identified two

different modes in first-year undergraduate laboratory manuals: a 'cookbook' mode,

emphasising ways of acting and hence preparing students for practical roles in

industry; and an 'investigative' mode, which stressed ways of thinking, thus orienting

students more towards research careers.

Similarly, in an ethnographic study of literacy practices in a veterinary college

Catherine Schryer (1994) considers how training as either an 'intellectual' researcher

or as a 'practical' clinician might influence students' approaches to persuasion and

argument in their academic work. For those training or trained to be researchers, the

key written genre was the research article, which was generally considered a more

prestigious genre than the Problem-Oriented Veterinary Medical Record (POVMR)

produced by the clinicians. Schryer explains that the POVMR is a recording genre

based on the Problem-Oriented Medical Record system which was developed in the

1960s in order to facilitate standardisation, monitoring and evaluation of human

medical records. Since the POVMR is a record of events and decisions written only

for practitioners involved in the case, the recursive, sometimes messy nature of problem solving is very much in evidence, while at the same time the notes can be rather elliptical. On the other hand, Schryer found that writers of research articles were very much aware of the need to argue their case for a critical audience and therefore of the need to be selective regarding which points to include. When she observed post-graduate students presenting their research, Schryer noted that the work of those trained as clinicians was more likely to be evaluated as weak and invalid because they tended to base their presentations on the POVMR format and did not make connections with the wider research field. This suggests that post-graduate students who have trained as clinicians may be unfamiliar with genres such as research articles and review articles. Schryer rightly highlights the need for explicit awareness-raising amongst academic staff and students so that all are aware of the existence as well as the strengths and weaknesses of both genres.

The tension between 'practical' and 'intellectual' is also highlighted by Baynham (2000), who investigated lecturer and student attitudes to practice oriented and more academic professionalised concepts on a Nursing degree course. He found that it was not just the extent to which students made use of practical experience or references to academic texts to 'authorize their statements' (p.25) which determined their final grade, but the way in which they structured their argument and appear to 'take up a confident summative voice' (p. 29). Baynham states that some students were receiving positive feedback even though their work included statements that might appear to an outsider to be weakly authorized by reference to practical experiences rather than strongly authorized with academic references. He suggests that the reason for this might lie in the discipline's roots as a field of practice, which

has only recently become a theorised, academic discipline. Since many students on Health Sciences programmes are qualified health practitioners, this question of the relevance of practical experience to academic writing at post-graduate level is relevant in my research. However, Baynham's participants were undergraduate students on a degree course which involved a significant amount of practice-based training, whereas the students in my study are post-graduates on degree programmes where the content is almost exclusively theoretical. Therefore, there is likely to be less tolerance for arguments supported by references to the writer's professional experience.

It is clear from the above that argument is a complex phenomenon, and that what constitutes a 'good' argument is likely to vary from one academic discipline to another. In addition, students beginning master's degrees in the Health Sciences may limited experience and/or understanding of argument in scientific discourse. An important aspect of argument, and one which often causes particular difficulty for student writers, is critical evaluation. This is discussed in the next section.

2.5   Evaluation

2.5.1   Defining evaluation

Evaluation is central to both argument (Andrews, 2010) and a group of academic text types which Hyland and Diani (2009: 1) refer to as *review genres.* This group includes review articles, along with book reviews, literature reviews and book blurbs, Hyland and Diani go so far as to say that 'among all the activities of the academy, what academics mainly do is evaluate. Their research and publishing is a continual

round of comparing methods, assessing sources, weighing up outcomes, contrasting claims and considering data' (p.1). According to Hyland (2004: 5) 'the ability of writers to offer a credible representation of themselves and their work by claiming solidarity with readers, evaluating their material and acknowledging alternative views is a defining feature of successful academic writing'. Although most Health Sciences students are not aspiring academics, they do need to adopt a credible academic persona through their use of evaluation in order to write a successful review paper.

Despite its importance in academia, evaluation appears to be a difficult concept to define even for those engaged in studying it. Maurenen and Bondi (2003) describe it as 'elusive', Hunston and Thompson (2000) as 'slippery' and Hyland and Diani (2009) as 'elusive and complex'. In addition, a wide range of terms seems to be in use to describe the same or at least very closely related phenomena, including 'appraisal' (Martin, 2000), 'stance' (Conrad and Biber, 2000), 'hedging' (Hyland, 1998) and 'metadiscourse'. Hunston and Thompson's (2000: 5) definition of evaluation as 'the broad cover term for the expression of the speaker or writer's attitude or stance towards, viewpoint on or feelings about the entities or propositions that he or she is talking about' is frequently cited and appears to enjoy wide acceptance.

Hunston and Thompson (2000) suggest that broadly speaking, there are two types of evaluation: good/bad and certain/uncertain. While some theorists, notably Halliday, prefer two separate labels, for example 'attitude' for the first type of evaluation and 'modality' for the second, Hunston and Thompson use the term 'evaluation' to cover both types. They justify this decision by pointing out that 'evaluation' has the

particular advantage of 'syntactic and morphological flexibility' because it 'allows us to talk about the *values* ascribed to the entities and propositions which are *evaluated* (p.5 emphasis in original). They add that although the term has sometimes been used by linguists in the restricted sense of 'attitude' uses 'modality' to refer to an author's commitment to 'what is true and what is necessary' and 'evaluation' for 'an author's commitment to 'what is desirable and undesirable, good or bad'), there is no more potential for confusion than with other similar terms. Since the terms 'evaluation' and 'critical evaluation' are commonly used by lecturers in higher education, and since there seems to be a trend in the literature towards viewing evaluation as a fairly broad concept, it seems to be the most appropriate choice.

A particularly broad definition of evaluation can be found in the introduction to book Martin and White's (2005) book entitled *The language of evaluation: appraisal in English*:

> [The book] is concerned with the interpersonal in language, with the subjective presence of writers/speakers in texts as they adopt stances towards both the material they present and those with whom they communicate. It is concerned with how writers/speakers approve and disapprove, enthuse and abhor, applaud and criticise, and with how they position their readers/listeners to do likewise. It is concerned with the construction by texts of communities of shared feelings and values, and with the linguistic mechanisms for the sharing of emotions, tastes and normative assessments. It is concerned with how writers/speakers construe for themselves particular authorial identities or personae, with how they align or

disalign themselves with actual or potential respondents, and with how they

construct for their texts an intended or ideal audience.

(Martin and White, 2005: 1)

This suggests that evaluation is much more complex than simply identifying entities

as good/bad or certain/uncertain, and in fact the authors explain that their approach

goes beyond examining overt expression of attitude to consider the ways in which

evaluative stances are more indirectly activated and readers are positioned to

provide their own evaluations. Similarly, Thompson and Ye (1991) point out that

evaluation in writing often works at the discourse level of text, exerting a cumulative

effect over one or more paragraphs, rather than being explicitly signalled at the level

of the individual clause. It seems likely then that most students will find evaluation

somewhat challenging. Thompson and Ye, whose research involved students whose

first language was not English, found that their participants either had difficulty in

clearly signalling evaluation in their writing or tended to express it in rather

unsophisticated ways. The following sections will consider what critical evaluation

involves for the student and how it is signalled in written academic discourse.

2.5.2   What is involved in critical evaluation?

Evaluation is closely linked to critical thinking, which, according to Barnett (1997: 2),

is 'a defining concept of the Western university'. As Moon (2008) points out, a key

aspect of critical thinking in higher education is the assessment of evidence in order

to make a judgment. In the case of scientific review papers, the evidence to be

assessed consists of the findings from previous research along with the methods

employed by the researchers. Although it might be expected that Master's students should already be familiar with the concept of critical evaluation and have experience of expressing it in academic writing, Turner (2000) points out that this is not necessarily the case. In a paper on helping post-graduate students to make better arguments, Davies (2008) goes so far as to say that demonstrating critical thinking is the greatest challenge that students face in their academic writing. As noted above, various studies (e.g. Andrews, 2010; Cheng, 2006; O'Donnell *et al.*, 2009; Tardy, 2005) have found that post-graduate students may not have experienced an overt focus on argumentation and evaluation during their undergraduate years, and may therefore be unfamiliar with and even uncomfortable with critiquing the work of those considered to be experts in their field. In addition, Andrews (2010) suggests several reasons why students may be uncritical in their reading of academic texts and hence in their writing, including the fact that if students are struggling to make sense of difficult texts then criticism may be a step too far for them and the fact that some students underestimate the effort required for critical reading and writing.

Turner (2000) identifies four processes which he regards as being inherent to critical evaluation: dissecting, comparing, arguing and appraising. The first of these, dissection, involves breaking something down into its component parts. In evaluating scientific research, this could involve identifying the key findings or the impact of the research design on the findings. Regarding comparison, Turner notes that 'critical analysis is inherently comparative' (p.88). In a scientific review paper, writers need to compare the designs and findings of different studies on the same topic. Concerning argument, Turner highlights the need for students to understand the provisional nature of knowledge. As Deanna Kuhn (1991: 202) contends:

Only if knowledge is seen as the product of a continuing process of examination, comparison, evaluation, and judgement of different, sometimes competing explanations and perspectives does argument become the foundation upon which knowing rests. Knowledge is never complete or finished, but rather remains open to further argument.

Thus, students' conceptions of the nature of knowledge are likely to influence their approaches to critical analysis. Their views may be influenced by their prior education, including the kinds of texts they were required to read. If they view knowledge as something to be absorbed from lectures and textbooks and repeated in exams, knowledge telling rather than knowledge transforming in Bereiter and Scardamalia's (1987) terms, they may misunderstand the purpose of the review paper. As Latour and Woolgar (1979) found through their work on the trajectory of scientific claims, scientific textbooks tend to contain many unhedged, categorical statements of the type often considered to be typical of scientific discourse but according to their findings, relatively rare in research and review papers. In fact, they found that review papers tend to contain what they refer to as modalities, or statements about other statements, such as 'It is still largely unknown which factors cause the hypothalamus to withhold stimuli to the gonads' (Scharrer & Scharrer, 1963 cited in Latour and Woolgar, 1979) and 'Oxytocin is generally assumed to be produced by the neurosecretory cells of the paraventricular nuclei'. Students who have been exposed only or mainly to textbook discourse may need some guidance towards conceptions of knowledge and forms of written expression that will enable them to produce a successful review paper.

The fourth process which Turner (2000) identifies in critical evaluation is appraisal, particularly positive and negative appreciation. The Appraisal framework, developed by Martin and White (2005), is a model of the resources for expressing evaluation in both spoken and written communication. The model consists of three interacting domains which together constitute appraisal: attitude, engagement and graduation. Appreciation, which consists of 'resources for construing the value of things, including natural phenomena and semiosis' (Martin & White, 2005: 36),is a sub-category of Attitude, along with 'affect' - 'resources for construing emotional reactions' (p.35), and 'judgement' – 'resources for assessing behaviour according to various normative principles' (p.35). Of these three elements, Hood (2010), who applied Martin and White's framework to an analysis of evaluation in research article introductions, found appreciation to be more common than affect or judgement in written academic discourse. The two other domains of the framework are Engagement, in which resources enable speakers/writers to 'adjust and negotiate the arguability of their propositions and proposals' (White, 2001), and Graduation, in which resources of force, including words such as 'quite', 'very', and 'somewhat' enable the writer to strengthen or weaken the degree of an evaluation, while resources of focus sharpen or soften it. Turner (2000: 89) suggests that the categories and examples in Martin and White's initial (1997) articulation of the framework may be 'a tentative step towards identifying a common academic language that students need in their role as critical analysts'. However, this model is located within the theoretical framework of Systemic Functional Linguistics, and as such it suffers from the problems with SFL which were discussed in section 2.2.1 above, and which will be illustrated below. Nevertheless, Appraisal does also have

some useful insights to offer into the expression of critical evaluation in written academic discourse, and in order to identify relevant concepts for my study, these will be considered in the following sections alongside research from ESP and New Rhetoric on the expression of critical evaluation in scientific discourse.

2.5.3   The expression of evaluation

Evaluation may be expressed directly through the use of lexis which has clear positive or negative connotations or indirectly in ways which may sometimes be understood only by insider expert readers. In the Appraisal framework, direct evaluation falls under the domain of Attitude. Hood (2010) suggests that in academic writing in the sciences, Appreciation is more common than the other two Attitude resource types due to the focus on entities rather than people. Hood illustrates this with the following extract from the introduction to an article by Younsi et al (2006) published in the Journal of Building Physics:

> Hygrothermal analysis has become *more* **important** [app: + valuation] in building design as moisture **damages** [app: -valuation] have become one of the **main** [app: +valuation] causes of building envelope **deterioration** [app: - valuation]. Water and moisture can cause structural **damage** [app: -valuation], **reduce** the thermal **resistance** [app: - valuation] of building materials, change the physical properties of materials, and **deform** [app: -valuation] materials.

This example is useful in that it shows how appreciation tends to dominate in scientific texts. However, simply labelling lexical items as appreciation:

positive/negative valuation and so on does not seem to be the most helpful way of analysing the rhetorical function of the text and it is difficult to see how this approach could help students improve their writing. It is interesting to note that the phrase 'change the physical properties of materials' has no label, yet in this context it seems likely that it is also an instance of appreciation: negative evaluation, since it appears in the middle of a list of problems caused by moisture. Hood does point out that these types of analyses are subjective and a researcher who is not familiar with a particular academic discipline might miss something that would be interpreted as evaluative by an insider. However, other examples in the book also suggest that the intense focus on labelling details can cause the researcher to miss the bigger picture. For instance, in discussing the following extract from an article by Shildrick (2005) on disability, Hood focuses on what is evaluated: the concept of physical difference at the beginning of the extract and disabled people at the end. In doing so, she almost seems to miss the point that Shildrick is criticising attitudes to disability, not invoking a negative attitude towards disabled people, although she does note the absence of any reference to human appraisers.

> Against the dominant standard, the construction of physical difference as a **failing** [-app], **incomplete** [-app], and **inferior** [-app] marks disabled embodiment as *deeply* **devalued** [-app], not so much for what it is, but for what it **fails** [-app] to be. Its status and meaning are from the start relational, rather than having autonomous standing. Regardless of whether the focus is on the body itself or on the socio-political context, there is broad agreement that far from being a bio-scientific fact, disability is a category constituted, given meaning and expressed through an endless set of cultural, historical,

political and mythological parameters that **ambiguously** [-app] define

disabled people as **excessive** [-jud], as **contaminatory** [-jud], as at once

malign [-jud] and **helpless** [-jud]

(Shildrick, 2005 cited in Hood, 2010: 83)

Here it seems that the writer's actual evaluation is a criticism of society for the way in which it has treated disabled people, but this is implied rather than directly stated. It might be argued that her most directly evaluative statement is 'Its status is from the start relational, rather than having autonomous standing' but since the words 'relational' and 'autonomous' do not carry overt evaluative meaning, it is up to the reader to deduce that Shildrick considers relational to be negative and autonomous to be positive, and again Hood has not given these words a label.

Similarly, in scientific writing, writers often convey evaluation indirectly. For example, when discussing previous research studies, writers often give details about the research design so that readers can judge the strength of the evidence for themselves rather than the writer making an explicitly evaluative comment. In the following extract from a review paper on putative contributors to the obesity epidemic (McAllister *et al.*, 2009), for instance, information about the sample size (8, 000) and the fact that a multivariable model accounting for multiple covariates was used is likely to cause the expert reader to judge the study positively.

In a study of more than 8000 five- to eleven-year-old children, Duran-Tauleria and colleagues found a positive correlation of maternal age at the time of childbirth with both triceps and subscapular skinfold thickness in the offspring.

In a multivariable model accounting for multiple covariates, maternal age independently explained 8% of the variability in these measurements and the rate of obesity (Duran-Tauleria et al., 1995).

In Appraisal terms this would be classified as Graduation: quantifying a process as an extent. Hood states (p.96) that 'the elaboration of steps in a methodology functions to imply an appreciation of the complexity of the research design, even though no single process is itself inscribed with appreciation'. However, a detailed description of a research design may also be used to indirectly criticise a study. For example a small number of participants or the lack of a control group in a scientific study would be understood by expert readers as weaknesses.

Hood (2010) also notes that attitude can be graded in intensity through repetition, as in the example text on disability above: 'defined…as excessive, as contaminatory, as at once malign and helpless. This issue of repetition is considered by Fahnestock (1993) from a rhetorical perspective. She argues that lists can have two basic effects either opening up or shutting down possibilities. If a complete list is given, the latter is achieved. However, 'a list may be given in such a way as to suggest that the enumerated set is large or incomplete, and the list itself a mere random handful scooped from an unnamed many' (p. 170). In her analysis of the article by Gould and Lewontin, she suggests that this list, rather than being taken by the reader as definitive, will convey the impression that the adaptationists have failed to consider numerous competing themes:

And for its failure to consider adequately such competing themes as random

fixation of alleles, production of non-adaptive structures by developmental

correlation with selected features (allometry, pleitrophy, material

compensation, mechanically forced correlation), the separability of adaptation

and selection, multiple adaptive peaks and current utility as an epi-

phenomenon of non-adaptive structures.

(Gould and Lewontin, 1979: 147, cited in Fahnestock, 1993: 170)

In this extract, it seems to be the words 'such…as' which create the impression of an

incomplete list. This example illustrates how it may be more useful to consider a

writer's purpose in using a list rather than labelling as many lexical items as possible

in the list. For instance, in Hood's hygrothermal analysis text above, the list of the

different types of damage caused by moisture might serve to convince the reader

that this is a serious problem for which a solution is urgently needed, and this may

increase the reader's interest in the article.

The discussion above highlights the complex, subtle and varied repertoires which

professional writers to use to express evaluation in scientific writing. In making

decisions about the expression of evaluation, these writers may, as Myers (1989)

suggests, be motivated by a desire not to offend readers who may have conducted

the research or put forward the theories which are now being critiqued. Whether

students supposedly writing for publication but actually writing for their tutor are

aware of and feel the same need for subtlety in their critiques of previous research,

or whether they regard negative criticism as the most appropriate strategy is a question that this research will explore.

2.5.4 Negative Criticism

Critical evaluation can be both positive and negative, but as Turner (2000) notes, it tends to be associated with negative judgments, and even when used in the more academic sense of identifying both positive and negative qualities, it is often assumed that there will be more focus on the negative. This may lead to students including direct negative evaluations of other scientists' research in their review papers. However, as Cheng (2006) points out, criticism in many science and engineering fields tends to be expressed indirectly. It may therefore be difficult for some students to identify instances of criticism in their reading and to enact it in their writing without some guidance on what 'being critical' means. In the case of the MSc Health Sciences students, many seem to begin the course with a very simplistic understanding of the meaning of 'criticism' in academic writing: as one student recently put it, 'being critical means saying what is wrong with research studies'.

In contrast, Duron (2006: 160) defines critical thinking as simply the ability to analyse and evaluate information. He states that 'critical thinkers raise vital problems and questions, formulate them clearly, gather and assess relevant information, use abstract ideas, think open-mindedly and communicate effectively with others'. Cheng (2006: 279-280), whose study seems to focus mainly on negative criticism, cites Salager-Meyer *et al.*'s (2003) definition of academic criticism as 'a statement which reflects a discrepancy between the stance of a researcher/author, on the one hand,

and that of another researcher or the discourse community as a whole, on the other'. He highlights the fact that engaging in such criticism may represent a conflict of identity for some students who feel uncomfortable assuming the unfamiliar persona of a disciplinary authority. Interestingly, the student in Cheng's (2006) case study deliberately chose to communicate his critical comments in a more direct way than was considered the norm in his discipline, Electrical Engineering. This student argued that the use of direct negative criticism enabled him to clearly highlight the gap in research to the reader. It is possible that he lacked the linguistic resources to do this in a subtler way. In addition, the student claimed that readers would not be offended by his use of direct criticism because it was aimed at theories at protocols rather than at individual researchers. This might be a useful strategy for post-graduate students to adopt as they begin to experiment with a critical voice, but it may not reflect what professional scientific writers actually do.

 In his paper on politeness in scientific articles, Myers (1989: 5) argues that 'scientific discourse consists of interactions among scientists in which the maintenance of face is crucial.' In a later paper (Myers, 1993), he explains that this is because the audience for scientific research articles often consists, on the one hand, of a relatively small number of scientists who are engaged in similar work and who therefore 'may have reason to feel annoyance or solidarity' (p.257), and on the other hand, of the wider scientific community, who will judge the writers on the extent to which their article conforms to the norms of the genre. Myers (1989) goes on to say that 'outright criticism in print is so threatening that it is usually avoided, and rival claims are usually briefly denied or even ignored. Since scientific claims only survive by being used and cited in later research, to ignore a claim is to kill it' (p.6). Myers

(1989) adds that direct criticism of a claim may be a face threatening act, not only for its original proponents but also for those who have based their own work on that claim. This may be why many scientists tend to use omission rather than overt criticism in cases where their research challenges the claims of other scientists.

In relation to this, Jeanne Fahnestock raises an interesting point in her discussion of a paper by Gould and Leowontin on evolutionary theory, which she examines from a rhetorical perspective. She points out that these authors, rather than referring directly to a well-known theorist, British evolutionary biologist John Maynard Smith, who made significant contributions to the theory against which they are arguing, coin a new term for the theory 'the adaptationist programme', which, they state, 'has dominated evolutionary thought in England and the United States in the last forty years' (Gould and Leowontin, 1979, cited in Fahnestock, 1993: 162). Fahnestock suggests that by not referring directly to Maynard Smith, Gould and Leowontin avoid giving 'presence' to his writing. Hence, they avoid referring readers directly to a refutation of their own theory. In this case, then, the avoidance of direct criticism of an individual may not be a politeness strategy but a rhetorical strategy to strengthen the authors' own case.

On the other hand, Salager-Meyer and colleagues (Salager-Meyer, 2001; Salager-Meyer *et al.*, 2003; Salager-Meyer & Alcaraz Ariza, 2011) have found that direct negative criticism does occur in medical journal genres, and that it is more common in editorials, book reviews and review articles than in research articles. Using the definition of criticism cited above (Salager-Meyer *et al.*, 2003), they distinguish between overt and covert criticism, stating that the former is 'a direct/unhedged

criticism' and the latter is 'a criticism hedged by means of epistemic devices or by the "responsibility-shifting" strategy (Salager-Meyer, 2001) whereby an inanimate entity (e.g. a result, a conclusion) stands for the authors of a study' (p.179). They also make a distinction between personal criticism, where the researchers at whom the criticism is aimed are clearly identified by an integral citation, and impersonal criticism, where the researchers may be identified by a superscript number or which may be aimed at the scientific community as a whole. In their quantitative study, which examined 93 articles (including 10 review articles) all written by native speakers of English and from a range of respected medical journals, Salager-Meyer & Alcaraz Ariza (2011) found that review articles fell in the middle range for frequency of criticism with 40.5 criticisms per 10, 000 words, compared with 118.5 for book reviews, 42 for editorials and 8.5 for research papers. This finding is echoed by Piqué-Angordans and Posteguillo (2006), who looked specifically at negative and positive reporting verbs in a range of scientific genres. Across all the genres they examined they found far more positive than negative reporting verbs. Book reviews contained the greatest number of negatives (just over 20%), followed by editorials and then review articles (approx 15%). The most common negative reporting verb in the review article subcorpus was 'fail', followed by 'lack' and 'assume'.

Salager-Meyer & Alcaraz Ariza (2011) also found that overt criticism was significantly more frequent than covert criticism in all the genres they examined but the gap was particularly noticeable in case reports and review articles, with over 90% of criticisms being overt. The difference in frequency between personal and impersonal criticism varied considerably across the genres with personal criticisms outweighing impersonal ones by approximately 60: 40 in review articles. Concerning

69

the targets of writers' criticism, the researchers found that review articles mainly focus on methods (70% of criticisms), followed by results and conclusions.

These quantitative findings support Salager-Meyer's (2001) earlier qualitative research involving 50 articles from medical journals, including 10 reviews/meta-analyses. In this earlier work, she also found that negative criticism was more frequent in review articles than in research articles and that the tone of review articles tended to be 'very authoritative, categorical and assured' (p.72), perhaps because review article writers have the status of 'expert knowledge holders' (p.72), whose work is solicited by journal editors. She provides the following two examples (pp. 72-3, underlining in original):

> These studies present either several flaws in research methods (small sample sizes or incomplete reporting of study design or methods) or multiple flaws in research methods of unsubstantiated opinion.

> We analysed 80 randomised trials of antibiotic treatment of acute sinusitis. Most were ineligible for our meta-analysis: 48 did not use the reference drugs pertinent to this analysis, 3 inextricably combined patients with sinusitis with those with other infections and inextricably combined patients with acute, chronic and recurrent sinusitis.

In the first example, the criticisms are very direct but they are also impersonal in that groups of studies are criticised rather than individual studies with named researchers, and the focus is on flaws in methods. However, in the second example,

it is difficult for an outsider to say whether the authors are actually negatively criticising the studies under discussion or whether they are simply evaluating the studies against their own criteria for inclusion in the meta-analysis. The fact that a study does not meet these criteria does not necessarily mean it was a poorly designed study. This may simply be a rhetorical strategy to convince the reader of the researchers' thorough approach to finding and evaluating relevant studies for their analysis.

Salager-Meyer (2001) suggests that a possible reason for the focus on methods in negative criticism lies in one of the communicative purposes of this particular genre: medical review articles and meta-analyses summarise and critically evaluate recent research to enable busy practitioners to make decisions about diagnostic procedures, treatments or preventive approaches. Therefore, according to Salager-Meyer and Alcaraz Ariza (2011), it is essential that they should justify in some detail the flaws in the studies whose findings they regard as invalid or unreliable. In addition, it is possible that the writers of the review articles examined by Salager-Meyer and colleagues do not feel the need to express their negative criticism in indirect terms since these readers are 'outsider' practitioners rather than the 'insider' researchers whose work is being criticised.

Based on the discussion above it is clear that an analysis of critical evaluation in student review articles needs to take into account what is evaluated (individual studies or groups of studies, researchers, methods, findings or something else), whether the evaluation is positive or negative, direct or indirect and how the evaluation is expressed. However, an approach which involves counting and

labelling every instance of evaluation using complex terminology does not seem helpful for a small-scale qualitative study because, as discussed above, such an approach tends to draw attention away from the complex relationship between the text and the context. Instead, interview data will be used to shed light on the contextual factors influencing the participants' choices.

2.5.5   Indirect critical evaluation

As discussed above, critical evaluation in academic writing may be expressed directly or indirectly, but in contexts where the target readership may include those who conducted the research or advanced the theories under scrutiny, indirect expression of evaluation may be more common. Many writers have examined the ways in which indirect evaluation is expressed in academic writing. Although I do not intend to apply Martin and White's Appraisal framework to my analysis for reasons discussed above, their notion of Engagement, which constitutes the second of the three domains in their framework offers some useful insights into indirect evaluation. In this section, I will consider Engagement in some detail, linking it to other work on indirect critical evaluation.

Engagement is concerned with the ways in which the speaker/writer is positioned by linguistic resources in relation to the value position s/he is advancing and in relation to potential responses. As Dressen (2003: 274) argues, 'evaluation in academic discourse is a communicative act, which is facilitated and necessitated by *prior* speech. It is the dialogical exchange between different instances of interaction', for

which Dressen coins the term 'evaluative dialogue'. Thus, Martin and White (2005) explain that the concept of Engagement is based on Bakhtin's (1986) notions of dialogism and heteroglossia: both spoken and written communication are 'dialogistic' in that the speaker or writer is always taking up in some way what has been said/written before, while at the same time anticipating the responses of an actual, potential or imagined audience. With regard to the former, Bakhtin (1986) points out the importance of the role of earlier utterances, arising out of oral and literate 'conversations', which provide speakers with a rich store to draw on as they shape their own utterance:

> Each utterance is filled with echoes and reverberations of other utterances to which it is related by the communality of the sphere of speech communication. Each utterance refutes, affirms, supplements and relies on the others, presupposes them to be known, and somehow takes them into account. (Bakhtin, 1986: 91)

Bakhtin (1986) also highlighted a general awareness of 'the other' in language as well as the more specific awareness of a partner in a communicative situation:

> From the very beginning, the utterance is constructed while taking into account possible responsive reactions, for whose sake, in essence, it is actually created. As we know, the role of the *others* for whom the utterance is constructed is extremely great…. From the very beginning, the speaker expects a response from them, an active responsive understanding. The

entire utterance is constructed, as it were, in anticipation of encountering this response (p.94, emphasis in the original).

Because speakers and writers anticipate a response, their texts are shaped by an awareness (however tacit) of the addressivity of speech. Lillis (2001) points out the central role that addressivity plays in student writing, arguing that the addressee is as important as the addressor in the construction of meaning. In other words, meaning is not transmitted by the student writer to the tutor reader but 'comes into being between participants' (Lillis, 2001: 75). Lillis argues that in a predominantly monologic socio-discursive space, one in which the tutor's voice dominates and where there is little dialogue or negotiation between tutors and students regarding expectations for particular assignment tasks, students' understandings of what is required, as well as the range of meanings which can be made, may remain limited.

Engagement includes resources dealt with by other researchers under headings such as 'hedging', 'attribution', 'stance', 'epistemic modality' and 'concession'. Hyland (2009) for example, defines engagement slightly differently from Martin and White. He says their definition is closer to what he would call stance: 'the locutions writers use to position themselves to other voices – the resources for conceding, averring, attributing, hedging, boosting and otherwise modalising the status of an utterance' (p.111). Hyland is more concerned with 'exploring the ways that language is used to anticipate possible reader objections, acknowledge their interpersonal concerns and bring readers into a text'. He defines engagement as 'the ways writers pull readers along with the unfolding discourse: recognising their uncertainties, including them as discourse participants and guiding them to interpretations' (p.111)

and argues that the most obviously dialogic engagement occurs where the writer overtly addresses readers by, for example, asking questions or making suggestions.

Hyland defines stance, on the other hand, as:

> The ways that writers explicitly intrude into the discourse to stamp their personal authority onto their arguments. Stance is a writer's community-recognised persona as expressed through his or her rhetorical choices, conveying epistemic and affective judgements, opinions and degrees of commitment to what they say. It therefore suggests something of how authors construct a credible academic identity (p.111).

Despite these differences in definitions, it seems that Hyland's concepts of 'stance' and 'engagement' still fit under the broad umbrella of Martin and White's Engagement.

2.5.5.1 Referencing sources

According to Martin and White (2005), Engagement resources can be either dialogically expansive or dialogically contractive. Expansive resources open up space for other views or interpretations by recognising the possibility of alternatives while contractive resources close down alternatives. For example, by using reporting verbs to discuss the research findings of other scholars, writers introduce heteroglossic engagement by bringing other voices into their text and at the same time this attribution, or extra-vocalisation in White's (2003) terms, can be used to position the writer dialogically by indicating the extent to which s/he endorses the

proposition. Thus, according to White (2003) the phrase 'X demonstrates that…' is dialogically contractive as it indicates the writer's endorsement of X's findings and thus to some extent closes down alternative interpretations. On the other hand, 'X claims that…' may indicate the writer's disendorsement of X and is therefore dialogically expansive. This reflects Turner's contention, discussed above, that in order to engage in argument and evaluation, student writers first need to recognise the contested nature of knowledge. Groom (2000) found that less successful post-graduate students may (mis)represent themselves as lacking awareness of alternative views or positions through an inability to achieve a balance between attribution, which distances the writer from a proposition, and averral, which indicates the writer's own attitude to the proposition. This is supported by Woodward-Kron's (2002) study, which looked at how critical analysis was enacted in highly graded assignments by undergraduate education students. She found that even in assignment sections which might be defined as descriptive 'knowledge telling' rather than analytic 'knowledge transforming', successful students made effective use of reporting verbs to highlight the constructed, contested nature of disciplinary knowledge and hence to set the scene for critical analysis to follow.

On a similar note, Martin and White (2005) argue that if communication is seen in terms of Bakhtin's notions of dialogism and heteroglossia, categorical or 'bare' assertions should not be viewed as neutral, objective or factual. Rather, by making a categorical assertion, and hence not recognising alternative positions,

> the speaker/writer presents the current proposition as one which has no
>
> dialogistic alternatives which need to be recognised, or engaged with, in the

current communicative context – as dialogistically inert and hence capable of being declared categorically.

(Martin & White, 2005: 99)

In relation to heteroglossia, it is also interesting to consider the differences in attitude conveyed by integral and non-integral citations as the latter seem to eliminate reference to human agency. Many students, especially science students, seem to prefer non-integral citations (where the reference is given in brackets at the end of a summary or paraphrase, rather than at the beginning with a reporting verb), which can convey a rather uncritical attitude towards the ideas and information being presented. However, Latour and Woolgar found that statements indicating the source of a claim were a common feature in review articles, perhaps because writers of review articles are often considering recent claims which have yet to be fully accepted by members of the scientific community or which require further research evidence to support them. As Hyland (2004) points out, reporting verbs can be used to indicate both the status of the information and the writer's attitude to it. In addition, Hyland (2002: 115) argues that '[t]he ability to handle citations to rhetorically construct a community consensus, and at the same time ensure that criticism stays within accepted bounds, is a central means of constructing one's insider status'. Therefore, students who fail to conform to the citation conventions of their professional community may construct an inexpert or novice status for themselves.

2.5.5.2 Hedging

Indirect critical evaluation may also be expressed through hedging, which is defined

by Hyland (1996a: 434) as 'the expression of tentativeness and possibility' and 'the

means by which writers can present a proposition as an opinion rather than a fact',

has a key role in academic writing because of the need for cautious and precise

expression when presenting unproven propositions. As discussed in the section on

criticism in scientific writing, Myers (1989) identifies politeness as a key function of

hedging. However, Hyland (1996a) argues that this analysis does not fully take into

account the multi-functional nature of hedges in guiding the reader towards

acceptance of claims. Several writers distinguish between two kinds of hedges. On

the one hand, hedging is used to convey politeness, modesty and caution as well as

to anticipate criticism (Vold, 2006). This type of hedging is referred to variously as

reader-oriented (Hyland, 1996a), interpersonal (Maurenen, 1997) and

communicative interpersonal (Varttala, 1999). On the other hand, writers use

hedging to express degrees of certainty (Vold, 2006), and this has been termed as

content-oriented (Hyland, 1996a), epistemic (Mauranen, 1997), and communicative

textual (Varttala, 1999). As Vold (2006) points out, these distinctions are to some

extent theoretical, since the two different types of hedge may be expressed using the

same lexical and grammatical forms, so it can be (perhaps at times intentionally on

the part of the writer) unclear as to which type of hedging is intended.

Hence, in a dialogistic framing of evaluation, use of hedging is seen not as

representing the writer's uncertainty but as the writer taking into account the reader's

concerns, anticipating a critical response and showing awareness of the existence of

alternative views. This awareness of the reader is evident in the findings from Latour

and Woolgar's (1979) study of scientists at work. They found that texts presenting new contributions to scientific knowledge and aimed at specialist insiders contain a lot of metadiscourse, including speculations and conjectures, particularly at the end of research articles, information on the circumstances, such as the impact of methods, affecting the status of claims, and statements containing modality and attribution, particularly in review articles. On the other hand, publications written for outsider audiences, including specialists in other fields, non-specialists and practitioners, were more likely to contain unmodalised claims in the present tense and widely accepted truths which are rarely mentioned in discussions amongst insiders. Similarly, in a study of two articles on the same topic written for two different audiences, Fahnestock (1986) also found evidence that scientific texts for specialist audiences contain considerably more hedging metadiscourse than those written for lay audiences. Latour and Woolgar found that scientists hoped their claims would eventually be transformed from the more modalised, hedged end of the metadiscourse continuum, close to the contingencies of the laboratory, to stand-alone statements representing a pattern in nature. Geisler (1994) argues that since such statements do not highlight uncertainty, or invoke writers' attitudes and beliefs, or engage readers in interpretation, scientists appear to seek to reduce their acknowledgements of context as they disseminate their knowledge claims to readers more and more removed from the laboratory context. In addition, these findings suggest that experts writing for other experts express their opinions more cautiously than when writing for non-experts. Post-graduate Health Sciences students who are accustomed to reading texts written for non-experts, either as undergraduates or as practitioners, may either not be aware of this need to exercise caution or not feel the

need to be cautious since the context in which they are writing is different from that of a researcher writing for publication.

Interestingly, in a comparison of the use of epistemic modality (EM) markers in applied linguistics and medical articles, Vold (2006) found that the two most frequent EM markers in the medical articles were 'could' and 'possibly', in contrast to the linguistics articles, where 'seem', 'appear', 'assume' and 'perhaps' were more likely to occur. Vold suggests that modal verbs such as 'could' and 'may' might be preferred by medical writers because they include the notion of possibility as well as epistemic modality and thus they allow the writer to appear more objective. She also found that in the linguistics articles, 'suggest' often occurred with a human subject, but in the medical articles, it was generally used with impersonal subjects such as 'data' and 'studies', even when referring to other researchers' claims. This reflects Salager-Meyer's findings on impersonal criticism in medical articles, but it may be more typical of research articles than review articles, which according to Latour and Woolgar (1979) are more likely to contain direct attribution.

In addition, Vold (2006) notes that hedges have to some extent become conventionalised in academic discourse. She gives the example of a commonly occurring pattern used by writers of medical articles in presenting their conclusions: inanimate subject + 'suggest' + 'that' clause containing 'may' or 'might', such as 'our study suggests that a diet high in fruit and vegetables containing carotenoids, including raw carrots and tomato products, may be important in the prevention of a very lethal form of cancer in women' (p.239). This may mean that EM markers have lost some of their pragmatic value. She concludes that the choices made by the

medical article writers indicate that they are part of a disciplinary culture where linguistic choices serve to create an impression of objectivity by hiding the writers' rhetorical identities and personal responsibility for interpretation of the data.

It is evident from the discussion above that as with other aspects of critical evaluation, choices regarding references to sources and hedging are complex, influenced by considerations of audience and significant in positioning both reader and writer.

2.6 Conclusion

In this chapter, I have discussed approaches to text and genre analysis, review articles in science and the linguistic expression of critical evaluation in academic scientific discourse. Much of the work discussed above has focussed on professional writing. It demonstrates that scientists writing review articles have particular goals to achieve, most notably to promote their own research and to influence the direction of future research. Since professional writers of review articles are engaged in a conversation with colleagues, they generally take care to express negative criticism indirectly and hedge their claims appropriately, taking into account likely reactions. It is clear that taught MSc Health Sciences students are working in a very different context from professional scientists. Researchers who have examined student writing have often either compared students' writing to that of professionals and found the student work to be deficient because it does not conform to professional standards, or they have analysed student work without interviewing the student writers about the reasons behind their decisions to express themselves in particular

ways. Therefore, much although not all of the work discussed above has failed to address questions of context, power and identity. These issues are taken into consideration in an academic literacies approach to academic writing, which will be discussed in the following chapter.

3 Chapter 3 – Approaches to Academic Writing

UK higher education has expanded over the past thirty years mainly as a result of 'widening participation' initiatives to increase the numbers of working class and ethnic minority students but also partly due to a drive to increase the number of international students (Ganobcsik-Williams, 2006). As noted in the introduction, it is not only undergraduate student numbers which have risen; there has also been a huge increase in the numbers of students on taught Master's programmes, with over fifty per cent of these students coming from outside the UK (Scott *et al.*, 2014). Accompanying this expansion are public discourses on falling standards, particularly of literacy (Lillis and Scott, 2007), with the implication, rarely explicitly stated, that these problems are the result of the increasing numbers of 'non-traditional' students in the academy (Lillis, 2001).

According to Gee (2004a: 91) 'reading and writing practices that incorporate "academic language" serve as the most significant gate to economic success and socio-political power in our society'. Certainly, students who learn to write in ways which are deemed acceptable in their disciplinary community tend to be perceived as more intelligent and to achieve greater success in terms of higher grades than those who do not. Lillis (2001) notes that students who are unfamiliar with academic literacy practices are often construed as 'intellectually inferior' (p.40), while Joan Turner (2004: 25) argues that "the imbrication of language use and rationality is such that the deficit assumption does not only relate to deficiency in knowledge of English

but to cognitive deficiency *per se.*" Although certain groups, such as working class

and overseas students tend to be problematised more than others (Lillis, 2001),

students from all backgrounds can at times struggle with academic writing even at

post-graduate level. Studies of Master's students in Education (Stierer, 1998) and

Tesol (Casanave, 2002) highlight the fact that since students are often required to

produce a wide range of written assignment genres, in many cases all students are

at an almost equal disadvantage. This is supported by Street (2005), who notes that

from an academic literacies perspective, the majority of students are understood to

encounter some difficulties when faced with new sets of literacy practices.

Furthermore, Mann (2008) cites numerous recent qualitative studies from various

countries and involving undergraduate, post-graduate, traditional and non-traditional

students, which show how students' experience of university in general and

academic writing in particular can be alienating and confusing. Indeed, Clughen and

Connell (2012) go so far as to describe the situation faced by new students

struggling to make sense of the 'rules' around academic writing as 'Kafkaesque'.

Studies which have investigated writing in higher education from a social practices

perspective offer some insights into how a lack of clarity on concepts such as

argumentation and critical evaluation as well as complex issues of identity, power

and resistance serve to shape this experience and how the teaching of academic

writing might be improved.

Having considered the ways in which texts can be analysed in the previous chapter,

this chapter moves on to discuss theory and research on approaches to teaching

and learning writing in higher education. I will base the discussion on the model

proposed by Lea and Street (1998) and consider how the three approaches to

writing identified by Lea and Street (study skills, academic socialisation and academic literacies) relate to writing in science in general and, where possible, biological and health sciences in particular, I will also consider the relevance of the research into academic literacies for the context of my own study, which will explore how students on MSc Health Sciences programmes approach the review paper assignment, including the ways in which they choose to express critical evaluation in their reviews and the factors which appear to influence their choices.

3.1   Three approaches to academic writing

In a paper which has had significant influence on research into academic writing, at least in the UK, and on some aspects of student learning, Lea and Street (1998) discuss three models of student writing in higher education, study skills, academic socialisation and academic literacies and present findings from their interview research on staff and student views of academic writing. As a result of this study, they suggest that more research is required on student experiences, student-tutor interactions and institutional practices, particularly in light of the changing nature of higher education. The three models of academic writing which Lea and Street discuss are a useful starting point for considering approaches to academic writing in higher education since they offer a critique of current practices and a possible way forward.

3.1.1 Study Skills

Lea and Street define the study skills model, which has its roots in behavioural psychology, as an approach which views writing in terms of student deficit: literacy skills are perceived as technical skills, including the surface features of writing, such as spelling, punctuation and grammar, which can be learnt and transferred to other contexts. Students who are perceived to have problems with academic literacy may be advised by their course tutors to seek help from the university's study skills or writing centre. Such centres often offer a range of generic study skills classes to students from a wide range of disciplines, so even if the tutors are familiar with differences in writing conventions across academic subjects they may not have the resources to help individual students.

This approach has been much criticised in recent years. For example, a major problem with the study skills approach to academic writing is its tendency to ignore the discipline-based specificity of writing requirements (Baynham, 2000). Another criticism of the study skills approach, as Burke (2008: 204) points out, is that "complex processes of selection and regulation are rendered invisible through hegemonic discourses of writing as 'skill' or 'technique'". She gives the example of the way in which the academic practice of referencing, which is in fact a social practice and varies from one discipline to another, is generally taught as a method. This means that the emphasis is on ensuring that references are included and correctly formatted, rather than on the rhetorical effects of selecting one reporting verb over another or of using what Hyland (2004) refers to as 'integral citations' (where the name of the cited author is included within the sentence), rather than 'non-integral citations' (where the reference is simply given in brackets at the end of

a sentence or paragraph with no reporting phrase). Paul (2000) points out the persuasive role that citations in general play in scientific writing while a study by Martinez (2008) revealed that in biology research articles, writers were more likely to use integral citations in argumentative moves.

In a further criticism of study skills programmes, Preece (2009) suggests that they pathologise the students themselves, rather than just their difficulties with learning and writing, by positioning them as 'incompetent' and 'failing'. This is likely to be demoralising for any student, but it might be particularly shocking for those who have previously been extremely successful in their education, perhaps in another culture where different skills are valued, which, as Ryan and Carroll (2005) point out, is often the case with international students, especially at post-graduate level. Students on MSc Health Sciences courses, for example, are often highly qualified professionals with a wealth of professional experience.

The findings from Lea and Street's (1998) interview research seem to indicate that many lecturers take a study skills approach to feedback on student writing, which they tend to discuss in terms of surface features. This may be because, as Lea and Street also found, lecturers are not always able to articulate exactly what they mean by commonly used terms such as 'critical analysis' and 'argument'; issues of punctuation and grammar are more easily dealt with. An alternative reading of such situations, however, is that some lecturers may regard certain students as, in Norton's (2000: 113) terms, 'not worthy to speak'. As noted earlier in this chapter, Joan Turner (2004) argues that a deficit in language in academic writing is often perceived as a cognitive deficit. By commenting only on language, a tutor may be

sending the message that a student's ideas are not worthy of engagement, or perhaps even that although the ideas may be valid the tutor refuses to engage with them unless they are expressed in a way which s/he deems appropriate.

The focus on surface features seems particularly prevalent in guides to scientific writing, many of which appear to be based on a traditional view of scientific discourse. Van Emden, (2001), for example, provides detailed guidelines on the technical aspects of formatting reports and advises readers to 'use the passive in your writing unless you see a good reason for changing' (p. 60), 'choose your words with care and spell them correctly' (p. 61) and 'keep your sentence length under control'. However, she includes no extensive examples of real scientific discourse to highlight either these or the less obvious features of particular text types. Montgomery (2003) is highly critical of such guides, arguing that writing conventions in fact vary considerably from one scientific discipline to another. He also points out that far from being a pure, neutral form of discourse, 'scientific expression is full of strategies whose goal is to persuade the wary or unwary reader' (p.5).

To sum up, the study skills approach to academic writing is inadequate to help students develop an understanding of writing practices in particular disciplines because it fails to distinguish between academic disciplines. Lea and Street clearly demonstrate the limitations of this approach with the findings from their interviews with students who were struggling to cope with the demands of switching between writing practices in different disciplines. These students were unable to usefully apply decontextualised advice on aspects of writing such as 'essay structure', for example, to real assignments in different academic disciplines.

3.1.2 Academic Socialisation

It should be noted that the term 'academic socialisation' is used in different ways by different writers. Patricia Duff (2010) argues that North American scholars including herself, Berkenkotter and Huckin (1995), Casanave (2002) and Prior (1998), who use the terms 'socialisation' and/or 'enculturation' in their research on student writing, in fact take a very similar perspective to that of British academic literacies scholars in that questions of identity, power, and institutional practices are at the centre of their research. There is certainly some truth in this. However, as can be seen from the Berkenkotter and Huckin quotation below, some of these scholars appear to view academic socialisation in much the same way as Lea and Street describe it.

In Lea and Street's model, 'academic socialisation' refers to an approach to   the teaching and learning of academic writing which is based on social psychology and constructivist approaches to education. They argue that from this perspective, the lecturer's main task is perceived to be the induction of students into the new culture of their academic discipline. Ganobscik-Williams (2006) expands on this, stating that in academic socialisation terms, writing proficiency is viewed as a skill which can be absorbed by students through their exposure to disciplinary practices and modes of knowledge, with lecturers perhaps offering a little supplementary guidance. This reflects Berkenkotter and Huckin's (1995: 7) contention that

from a socio-cognitive perspective, genre knowledge of academic discourse entails an understanding of both oral and written forms of appropriate communicative behaviours. This knowledge, rather than being explicitly taught, is transmitted through enculturation as apprentices become socialised to the ways of speaking of particular disciplinary communities.

This is perhaps a somewhat extreme view of academic socialisation, since it seems to parallel notions of total immersion in language education and assume a huge amount of comprehensible input in Krashen's (1981) terms, more than most students, certainly at undergraduate level could be expected to achieve. This approach may have functioned reasonably well in some academic disciplines in the past when the majority of students in higher education had just completed A levels in academic subjects closely linked to their chosen degree discipline (Bowl, 2003). Nowadays, however, students reach university through a variety of routes, not all of which involve substantial amounts of academic writing. Lea and Street note that the socialisation approach to academic writing is linked to notions of student orientations to learning, particularly the notion that university students take either a 'deep' (focussed on meaning, understanding and making links between existing and new knowledge), 'surface' (focused on memorising for exams and reproducing information) or 'strategic' approach to their learning (focussed on fulfilling requirements in order to obtain good grades) (Marton and Saljo, 1976 cited in Marton and Saljo, 1997).

Haggis (2009) is highly critical of this model of student learning as well as of the wide, unquestioning acceptance of it within UK higher education. She argues that it

is underpinned by a number of assumptions which are rooted in the former elite

university system, and which are entirely inappropriate for the current mass system,

which aims to prepare 50% of young adults for employment. These assumptions

include the following: that students arrive at university having been prepared by their

A level or Access courses to engage with texts and ideas in ways which meet the

expectations of their tutors; that students have the ability to make sense of the

institution's aims and requirements as they are currently presented; and that

students resemble academics in their desire to engage with their subject.

Similarly, Hermerschmidt (1999) points out that educational institutions set

expectations and construct identities for students which may be in conflict with the

students' own expectations and sense of self. This notion of mismatch between

student and staff expectations is illustrated in a study by Scollon and Scollon (cited in

Scollon, 2002), which investigated the reasons for the low retention rates of Alaska

Native students at the University of Alaska. These researchers found that while

academics were operating with a socialisation model of academic performance, the

students were working with a client model, so rather than aiming to become

sociologists, for example, the students wanted to gain relevant knowledge and skills

for the business careers to which they aspired.

A key criticism that Lea and Street (1998) make of the academic socialisation

approach is that it fails to recognise the disciplinary diversity that exists in the

academy. However, in a useful expansion of their model, Lillis (2003: 194) draws on

Ivanic (1998) to divide the socialisation approach into two perspectives, socialisation

as '(implicit) induction into established discourse practices' and socialisation as

'explicit teaching of features of academic genres'. This latter approach has its roots in notions of discourse communities and genre analysis and is typical of much teaching of English for Academic Purposes (EAP) aimed at students whose first language is not English. Lillis views this as moving towards a more dialogic approach, by which she means an approach aimed at making visible and challenging official discourse in ways appropriate for a diverse student population although she does not regard even more explicit approaches to academic socialisation as achieving this. In addition, Lillis and Scott (2007) are critical of EAP for taking a normative rather than a transformative approach to academic literacy.

Another problem which Lea and Street point out is the failure of the socialisation approach to address both questions of power and 'the deep language, literacy and discourse issues involved in the institutional production and representation of meaning' (p159). As a result of this failure, students' socialisation into an academic discipline tends to be viewed as a natural, unproblematic process.

Lea and Street also suggest that the study skills model has to some extent been replaced by the academic socialisation model with its broader understanding of skills and attention to the wider social context in which writing takes place. However, Ganobscik-Williams (2006) points out that the former approach remains prevalent in 'new' universities: former polytechnics and institutes of higher education, which were granted university status in or after 1992. These institutions are perhaps more likely to have large numbers of first-generation university students from working class and ethnic minority backgrounds. Such students are often referred to as 'widening participation' students and are perceived to require study skills support. In contrast,

the academic socialisation approach has always been more typical of traditional universities, which cater largely to students from middle class backgrounds. However, both the study skills model and the academic socialisation approach have proven inadequate to meet the needs of an expanded HE sector (Ivanic and Lea, 2006). As a result, an alternative model has emerged, defined by Lea and Street as the academic literacies approach. This will be discussed in the next section.

3.1.3 Academic Literacies

The academic literacies approach has its roots in a number of different fields (Lea & Street, 1998). The first of these is the new literacy studies, which has challenged the 'autonomous' view of literacy as a neutral set of cognitive skills, presenting it instead as an 'ideological' concept, a set of social practices which vary from one culture or setting to another (Street, 1984). This recognition of the heterogeneous nature of literacy practices has led to the pluralisation of the term from literacy to literacies (see for example Barton and Hamilton, 1998; Street, 1995). Another influence is critical discourse analysis, with its focus on the meaning-making role of discourse in social relations, and on the critiquing of a society with the aim of considering how "'wrongs' might be 'righted' or mitigated" (Fairclough, 2010: 7). Also influential on the academic literacies approach are systemic functional linguistics, in which language is regarded as a social phenomenon offering meaning potential (Halliday 1978, 1985, cited in Luuka, 2002), and cultural anthropology, specifically ethnography, which Heath and Street (2008: 29) define as 'a theory building enterprise, constructed through detailed systematic observing, recording and analyzing of human behaviour'.

As a result of these theoretical underpinnings, the academic literacies perspective views literacies as social practices which differ from one academic discipline to another, while universities are perceived as 'constituted in, and as sites of, discourse and power' (Lea and Street, 1998: 159). Ganobcsik-Williams (2006) suggests that the key difference between the academic literacies approach and the other two approaches to academic writing discussed here is that the former highlights the need for universities to adapt to meet the needs of a more diverse student population rather than simply identifying certain students as 'deficient' and expecting them to adapt to the institution. Thus, academic literacies researchers argue for a transformative approach to academic writing, in which assessment might be adjusted to take into account the experience, knowledge and identities that students bring to academia (Street *et al.*, 2015).

Lea and Street argue that the study skills, academic socialisation and academic literacies models are not mutually exclusive; rather, the study skills approach is incorporated into the socialisation model and both are in turn encompassed by the academic literacies approach. They add that the teaching of particular writing-related skills takes on completely different meanings depending on which of the three approaches is used. In a later article (Lea and Street, 2006) they attempt to show how the academic literacies model can be said to go further than the academic socialisation model. They argue that it does this by moving the focus beyond just the relationship between epistemology and writing in individual disciplines to cover wider institutional policies and practices on plagiarism and feedback as well as more specific contexts such as differences in requirements amongst individual faculty members and variations in writing across assignments by the same student.

With the findings from their interviews, Lea and Street (1998) show how an academic literacies approach to research can highlight the mismatch between staff and student understandings of academic writing tasks and the difficulties experienced by students as they switch between disciplines. They offer a particularly telling example of a student whose writing was well received in the History department, but when he used the same writing strategies for an Anthropology essay, he was advised to seek remedial study skills support. Lea and Street suggest that this is because individual academics' understandings of terms such as 'structure' and 'argument' are influenced by the epistemology of their own discipline. A particular strength of the academic literacies perspective is its intention to highlight such issues, which remain hidden in the study skills and academic socialisation models, through the use of ethnographic research methods.

For example, Lea and Street found that staff feedback is frequently expressed both in terms that are simply not comprehensible to students and in a 'categorical modality' in that it consists mainly of imperatives and assertions. This is echoed by other writers, such as Carroll (2005), who points out that feedback comments such as 'Are these your own words?', which imply there is a problem rather than directly stating how the work can be improved, are not helpful because they assume the student knows the preferred behaviour, can decode the comment and change their writing accordingly.

Lillis (2001) argues that tutors need to take a more dialogic approach in their feedback by giving students the opportunity to discuss and question feedback

comments. This is clearly desirable, but with increasing student numbers, academics might argue that they do not have sufficient time to engage in such practices. There is also the question of the power imbalance in the student-lecturer relationship, which means students often feel uncomfortable about seeking a more dialogic approach to feedback from their tutors (Chalmers *et al.*, 2017; Halasek, 1999). In addition to problems with individual staff feedback, Lea and Street show how institutional practices prevent students from benefitting from feedback as in a modular system assignments are often not submitted until the end of a semester and feedback not received until students are studying new modules for which the feedback may not be relevant. A partial solution to this problem was investigated by Wingate (2012), who designed a writing development initiative in which the teaching of writing, including detailed formative feedback on an 'exploratory essay', was integrated into a module on a BA in Applied Linguistics. In order to facilitate dialogue around writing, the essays were returned to the students in one to one meetings with the module tutors. In a questionnaire at the end of Wingate's intervention, these meetings were evaluated as useful or very useful by 90% of the students. In addition, the module tutors felt that time spent on the individual meetings was compensated for by the improvements in students' writing and ability to work more independently. Despite these positive evaluations from students and lecturers, Wingate's attempts to disseminate this initiative to other degree programmes were not successful as most lecturers were unwilling to adopt practices which they perceived to be time-consuming.

According to Lea and Street (1998: 159) the emphasis placed by the academic literacies approach on 'identities and social meanings draws attention to deep

affective and ideological conflicts in such switching and use of the linguistic repertoire'. This is supported by Ivanic (1998) who found in her research into the experiences of mature students writing at university that her undergraduate participants were aware of the need to adopt a 'dominant member of the academy *persona*' (p. 251). Ivanic notes that the extent to which the participants attempted to adopt such a persona depended on whether they desired this identity or felt resistance towards it. Ivanic's student participants also showed awareness of the differences in writing for different disciplines. For example, commenting on writing a Medical Ethics essay and a Philosophy essay, one participant said:

> There are two John's. In the Aids essay there's a kind of hopefully socially aware John and in the Philosophy essay there's the person who's good at playing with ideas […] So I think they are two different people, but I feel I am both of them and that's very important (Ivanic, 1998: 295).

Post-graduate Health Sciences students are not generally faced with the problem of writing for two or more disciplinary communities. However, a useful question is how post-graduate science students can learn to adopt the persona of a scientific expert in ways which both reflect their identity and are acceptable to their tutors. Ivanic and Simpson (1992: 142) suggest that 'it is a question of making choices from a range of alternatives within academic writing, trying to find ones which are most in harmony with our sense of ourselves.' They believe that for students to develop a sense of their own identity as writers, critical awareness is as important in reading as it is in writing: students need to be able to identify the writers and readers behind the ideas

in the texts they read in order to be able to select the features with which they wish
to identify.

3.2 Post-Graduate academic literacies

It might be assumed that when students begin a Master's degree, they are better
prepared to meet institutional expectations than the undergraduate students in the
studies discussed above. However, as Scott *et* al. (2014) point out, studying at
Master's level requires students to perform at a higher level than previously, possibly
using different skills. Thus, the transition to post-graduate study represents a
significant challenge for many students. Similarly, O'Donnell *et al.* (2009), who
conducted a qualitative study into student experiences of the transition to post-
graduate study, highlight the fact that widening participation at undergraduate level
has led to an increasingly heterogeneous post-graduate student population, many of
whom feel they need support to improve their academic writing and study skills.
These authors suggest that this is because, contrary to the popular perception of the
post-graduate student as a recent graduate making a smooth transition to the next
level of study, many are in fact adults returning to study after a long gap, and may be
taking a course that has little relation to their undergraduate degree. Interestingly,
however, one participant in O'Donnell's study suggested that students who begin a
post-graduate course shortly after completing their undergraduate degree might also
be at a disadvantage due to over-confidence and a failure to realise that different
approaches to study may be required. It should be added that in the UK, the majority
of students on many taught Master's programmes are from overseas and may
therefore be engaging with academic practices which are entirely unfamiliar to them,

including producing extensive pieces of writing, and summarising, synthesising and referencing information and ideas from a range of sources. It is fairly common for students from East and South-East Asia, for example, to claim that all their previous assessment has been exam-based. In addition, according to Hoadley-Maidment (2000), in medical schools, multiple choice tests, practicals and oral examinations are used to assess students more frequently than written coursework. This suggests that even some British-born students beginning a Health Sciences MSc might have limited experience of extensive academic writing.

Two very interesting studies which appear to take an academic literacies approach although the authors do not use this term were conducted by Casanave (2002) and Tardy (2005). Both examined student trajectories on post-graduate programmes, considering questions of identity, power and voice. As Prior argues, rather than viewing disciplinary enculturation in structuralist terms as a process of experts transmitting the objects and rules of an abstract discourse community to passive novices, it is important 'to examine the concrete nature of cultural spheres of literate activity' (p. 138) since writing, or literate activity, is situated, mediated and dispersed. In other words, writing is influenced by the context in which it is produced and the various texts and discourses on which the writer draws. In addition, writing is dispersed across time including the processes of reading, thinking and planning what to write.

Casanave (2002) conducted a case study of the academic writing experiences of five native and non-native speakers of English on a MA TESOL programme. She found that tutors' feedback on written work was important in helping students to develop a

sense of themselves as evolving professionals. However, she also notes that tension remained between this need to develop agency and authority in their writing and the need to continue to play the role of deferential students to the professors who retain power over them. Casanave (2002) points out the current lack of published case studies of the academic enculturation of Master's level students. She also highlights the importance of such studies since it is at this level where many students begin to develop a sense of their identity as a semi-authoritative member of an academic community rather than simply as a student.

Casanave's study is interesting since it examines MA student writing development in one discipline over an extended period of time. If, as Hyland (2007) argues, 'writing must be seen as embedded in the epistemologies of individual disciplines and taught as an integral element of disciplinary pedagogies', then studies such as Casanave's would seem to be a fruitful approach. Her study, however, examined an academic discipline in which it is possible that at least some of the tutors began their careers as teachers of English to speakers of other languages, and they might therefore be more sensitive to cultural differences and more used to giving feedback in terms that students can understand than lecturers from other disciplines who are less used to discussing language-related issues. Other case studies involving post-graduate students in a range of disciplines need to be conducted.

 Tardy's (2005) research differs from Casanave's in that she focussed specifically on the development of two post-graduate students' rhetorical knowledge of disciplinary writing over two years as they moved from 'knowledge telling' to 'knowledge transforming' (Bereiter and Scardamalia, 1987). Tardy notes that few previous

studies have examined this aspect of advanced academic literacy. She also points out that it is usually at post-graduate level that students begin to grapple with the need to persuade readers of the significance and credibility of their work. In other words, they learn that it is not just what writers say but how they say it that is important. Tardy found that it was when her students were engaged in high stakes writing tasks, such as conference papers and drafts of a Master's dissertation, that they appeared to make progress in their understanding of how to write persuasively. In response to tutor feedback they gradually refined the drafts of their work to give them 'the "epistemic presentation" that is essential for creating an authorial niche' (p.327). Tardy also found that one of her participants, a doctoral student from Thailand, resisted certain aspects of academic writing in English, particularly the need to emphasise the value of his own work over that of others, which he found uncomfortably close to boasting, and the need to highlight limitations in previous studies, which he referred to as 'blaming' previous researchers. Although these practices conflicted with this student's own sense of identity in the early stages of his studies, he gradually began to incorporate them into his own writing as he worked alongside his supervisor on conference papers. Tardy describes the students' trajectories as being influenced by the social nature of their learning. These students were engaging in legitimate peripheral participation as part of a community of practice (Lave and Wenger, 1991). As a result of working alongside and receiving feedback from supportive supervisors and mentors, these students were able to maintain their sense of self as they developed an understanding of academic writing as involving more than simply providing information.

However, the situation for the MSc Health Sciences students in my research is somewhat different from Tardy's study. Most of my participants are on one-year taught Master's programmes, and as Carole Sedgwick (2011) points out, such students cannot be defined as genuine members of their disciplinary community and do not even experience legitimate peripheral participation in Lave and Wenger's sense because, unlike Tardy's participants, they do not participate in the daily life of their department or work alongside their tutors on research projects, except in a few cases for the dissertation. They are in fact, Sedgwick argues, expected to write for imagined, at best partially experienced, global communities when the actual audience for their work is small and local. Nevertheless, as Sedgwick found, many such students do develop an understanding of the need to situate their work within the literature of their disciplinary community, thus creating a research space (Swales, 1990) and positioning themselves as authoritative scientists, at least in their introductions.

In the sections above I have discussed the three approaches to academic writing which were first presented in a model by Lea and Street (1998). By adopting an academic literacies framework for their research, Lea and Street usefully highlight a number of problems related to student writing and offer worthwhile avenues for further exploration. However, apart from some suggestions for improving tutor feedback, the paper offers little indication of how the findings might inform pedagogy, and it is difficult to see how a full academic literacies approach to student writing can be implemented without significant changes in both institutional practices and individual staff attitudes. Lillis (2003) points out that while the first two perspectives in

the Lea and Street model are associated with pedagogic approaches to teaching writing, the academic literacies approach has not yet been taken up in this way, although it has been extremely influential as a frame for research. Similarly, Haggis (2009: 386) notes that academic literacies research continues to be under-represented in the most widely read UK journals of higher education 'despite its extraordinary relevance for developing a wider range of understandings of teaching and learning and, even more importantly, as a source of generative/transformative critique of higher education cultures and practices.'

3.3 Context and Identity

It is clear from the discussion above that writers' sense of identity and the context in which they are working are important factors in influencing the approach they take to any writing task. MSc Health Sciences students writing a review article as a module assignment are working in a very different context from the more typical review article author, who is likely to be a professional scientist actively engaged in both the research about which s/he is writing and in an ongoing dialogue with colleagues. This dialogue may at times be conducted face to face, but it also plays out on the pages of scientific journals through both research and review articles. MSc students, on the other hand, are more likely to be concerned with how their tutor will evaluate and grade their work than with whether they can successfully influence the direction of future research.

3.3.1 Context

Many writers emphasise the need to take context into account when researching writing. For example, Blommaert (2006: 4) points out that language cannot be 'context-less' and that there is always 'an identifiable set of relations between singular acts of language and wider patterns of resources and their functions.' Similarly, Lillis (2008) suggests that an understanding of the contexts in which texts are produced offers insights into what is involved and what is at stake for writers. Samraj (2002) identifies the importance of the academic context in writing, arguing that student writing is influenced by a series of contextual layers as illustrated in the figure below:

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┌──────────────────────────────┐
│ Academic Institution         │
└──────────────────────────────┘
      ┌──────────────────────────────┐
      │ Discipline                   │
      └──────────────────────────────┘
            ┌──────────────────────────────┐
            │ Course                       │
            └──────────────────────────────┘
                ┌──────────────────────┐
                │ Task                 │
                └──────────────────────┘
                    ┌──────────────────┐
                    │ Student          │
                    └──────────────────┘
                            │
                            ▼
                    ┌──────────────┐
                    │ Text         │
                    └──────────────┘
```
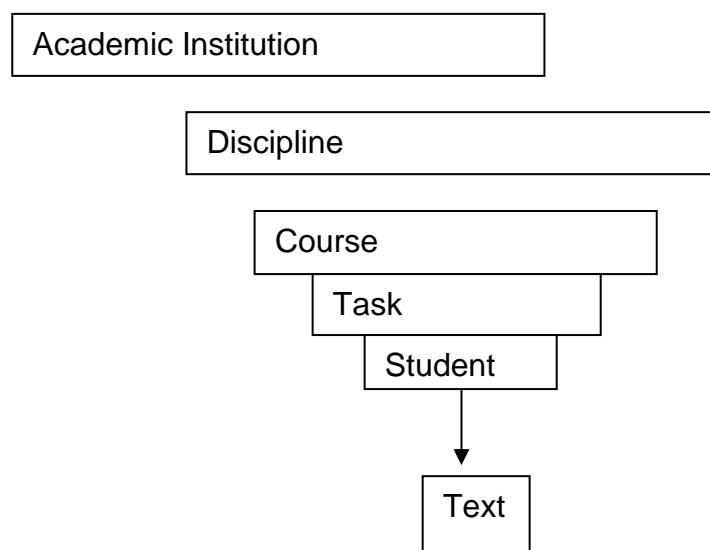
In an ethnographic study which examined writing by students on a master's degree in environmental science, Samraj (2002) found that when students were given the task of writing a review paper, neither the students nor their tutor seemed to see any need to justify or contextualise the review in the introduction. She also found that only a few students constructed an identity of potential researcher by identifying a gap in the research or a problem which needed to be solved. Most of her participants simply took on a student persona by displaying knowledge and understanding in their writing because, according to Samraj, the task is embedded within a course in a wider academic context but perhaps also because, unlike the review article assignment set for the students in my study, the task does not explicitly require students to construct another identity for themselves. In another course investigated by Samraj, students were required to write a memo to a state governor. On this course, students were given extensive information about the case and their role as policy staff person advising the governor, and Samraj found that as a result the texts produced by the students had many features typical of workplace memos, although some of the less successful students also included conclusions more typical of academic papers.

Samraj's findings suggest that the way in which an assessed task is framed for students can affect the approach that they take to it, but also that elements of the academic context may result in the inclusion of academic textual features being included in students' responses to a task which is ostensibly related to the workplace rather than the classroom. However, Samraj's model seems to represent students as helpless victims of contextual forces bearing down on them and eventually resulting in a text which is mainly the result of these outside forces. Samraj did not investigate students' individual contexts and purposes although she acknowledges that it would have been interesting to do so. Add Goodwin & Duranti (1992) and Bazerman & Prior (2005) B&P are mentioned on page 98 so check no repetition.

Van Dijk (2008; 2009) offers a more complex approach to context. He argues that contexts should be viewed as mental models which include the identity, knowledge, goals and intentions of discourse participants. This means that each individual has a unique, subjective mental model of any given context, and this can help explain variation in discourse. In addition, van Dijk suggests that a comprehensive theory of context provides more substantial grounds for analysis than Lave and Wenger's notion of communities of practice, since not all situated practices fit neatly into the category of 'community'. In terms of making stronger links between text and context in academic literacies research, Lillis (2008) highlights the relevance of indexicality and orientation in the analysis of both writing and interviews about writing. Different parts of a written or spoken text index different aspects of the participants' context, shedding light on what is salient in the context for individuals. Lillis gives the example of European academics writing for publication in English and the reviewers who provide feedback on their work. Many of the European writers use long sentences in

their work, which, according to Lillis, index scholarly style in some cultures. The reviewers' comments (e.g. 'pretentious', 'weasel words') indicate that they orient negatively to this style.

3.3.2 Identity

In recent years, the concept of identity has become a central construct in applied linguistics, and in the post-structuralist perspective which is generally taken in the social sciences today, identity is viewed as a social process rather than a fixed product (Block, 2013). Identity is, as Cameron (2001: 170) argues, 'shifting and multiple, something people are continually constructing and reconstructing in their encounters with each other in the world'. Therefore, Bucholtz and Hall (2010: 18) define identity as 'the social positioning of self and other' and they argue for 'the analytic value of approaching identity as a relational and socio-cultural phenomenon that emerges and circulates in local discourse contexts of interaction rather than as a stable structure located primarily in the individual psyche or in fixed social categories'. In addition, these authors identify three different types of identity positions, which, they argue, can occur simultaneously. These three types of positions are macro-level demographic categories such as age, gender and class, local ethnographically specific cultural positions, and temporary, interactionally specific stances and participant roles (p.21). Sociolinguists often focus on the first type. For example, van Dijk (2008) frequently refers to gender and class as aspects of identity relevant to the analysis of context. However, according to Bucholtz and Hall (2010), research in linguistic ethnography has shown that local identity

categories may be more relevant for research participants and more useful in analyses of linguistic practice.

Just as Lillis highlights the importance of indexicality for analyses of context, so Bucholtz and Hall (2010: 21) emphasise its relevance for the study of identity. They identify four ways in which identity may be indexed in discourse: overt reference to identity categories; implicatures and presuppositions regarding identity positions; the evaluative and epistemic orientations displayed by speakers or writers; and the use of linguistic structures and systems with ideological associations to particular personas or groups. This reflects Bazerman and Prior's (2005: 141) argument that a writer's utterances 'index personal, interpersonal, institutional, sociocultural, and material histories and are charged with affective overtones and motivational trajectories as well as semantic meanings', and suggests that discourse analysis is a useful tool to reveal the ways in which participants construct identities in both writing and interviews.

3.3.2.1 Professional Identity

According to Wenger (1998) identity is closely linked with practice, and various studies have found that practitioners, particularly professionals from the fields of health and social care, have a strong sense of identity as a practitioner. For example, a survey study which investigated the strength of identity amongst first-year undergraduate students on health and social care related courses found that these students already have a strong sense of identity associated with their chosen profession even at this early stage in their studies, especially if they have relevant work experience (Adams *et al*., 2006).

108

In addition, several studies have investigated the transition of professionals from various fields, including health and social care, into lecturer posts in higher education. These studies have found that many practitioners find the transition to academia difficult and confusing. For example, Shreeve (2011) notes that for some art practitioners entering higher education as lecturers, their professional and academic spheres can be experienced as two separate cultural worlds, which causes difficulties as they attempt to negotiate new identities. Findlow (2011) found that nurse lecturers, whose sense of professional identity depended on their expertise and their values as nurses rather than engagement in academic research, often felt inferior to and intimidated by their academic colleagues from other departments. This is echoed by Gourlay (2011a & b) who found that some participants felt 'less clever' than colleagues who had entered academia through the more traditional PhD route. Some of Gourlay's participants also experienced a conflict between their own values as caring, patient-centred practitioners, and what they perceived to be the more 'selfish' ethos of higher education where individual research is often prioritised. This may be why some new lecturers are slow to embrace new academic identities (Boyd, 2010; Smith and Boyd, 2012) but instead hold on to their practitioner identities (Boyd, 2010), perhaps becoming caring, student-centred teachers rather than 'self-centred' researchers (Findlow, 2011; Gourlay, 2011a).

These studies on practitioners making the transition to lecturer posts in higher education highlight some of the tensions which exist between practice settings and academia. However, it is difficult to say whether post-graduate students who are also

experienced or aspiring practitioners experience the same tensions when beginning

a course which has an academic rather than a practical focus. While a number of

studies have investigated various aspects of students' experiences, including

academic writing, on professional formation degree courses such as nursing and

social work, and on professional doctorates where the practice setting retains an

important role, there appears to be little research which examines the experiences of

practitioners on a post-graduate course where the practitioner role is viewed as

having limited value.

3.4   Conclusion

This chapter has examined the three approaches to academic writing identified by

Lea and Street (1998). It has considered the problems inherent in the first two

approaches – study skills and socialisation, and the benefits which the third

approach - academic literacies – can provide. The most notable benefit is a

transformation in assessment and the teaching of writing in higher education, so that

the academy makes some adjustments to accommodate the identities, experiences

and needs of students rather than labelling certain students as deficient because

they cannot make sense of the mysterious practices of academia.

In their 2007 article, Lillis and Scott pointed out that the public discourse on the

falling standards of students' written work which has accompanied the increasing

cultural, social and linguistic diversity of the student population in UK higher

education had not yet brought about any significant increase in attention to language

and literacy in mainstream higher education pedagogy. To a large extent, this still

seems to be the case today. Lea (2004) suggests several reasons why this might be the case. Firstly, she points out that because subject specialists view course content as their main responsibility they tend to overlook the centrality of writing and textual practices to student learning. Secondly, academic literacies research has its roots in disciplines not traditionally associated with research into student learning and has therefore as yet had little influence on educational developers. Thirdly, much academic literacies research has focused on groups of non-traditional students – who tend to be seen as marginalised - and their written assignments. This, along with the fact that much academic literacies research has been conducted by practitioners who are themselves marginalised in the academy (Lillis and Scott, 2007), has perhaps contributed to the marginalisation of the research itself.

Lea argues that the advantage of academic literacies research over studies on approaches to learning or communities of practice is that the rich data produced by the ethnographic approach of the former illustrate the complexity of the relationship between writing and the acquisition of disciplinary knowledge. According to Lea (2004: 742), the limited amount of research which has been done with more traditional students (e.g. Scott, 2000; Pardoe, 2000) indicates 'the need to attend more broadly to the workings of academic literacy practices'. She argues that attention to student writing should be located within the disciplinary contexts where it occurs, and that attention should be paid not just to the student essay but to a much wider range of texts related to course design, including course materials, guidance notes, feedback sheets and policy documents. The research which is the subject of this thesis, my investigation into the writing practices of MSc Health Sciences

students, includes some of these texts. The next chapter presents the research

design and methodology for this study.

4 **Methodology**

4.1 Introduction

As stated in chapter 1, this small-scale qualitative study investigated how context influenced the ways in which MSc Health Sciences students approached critical evaluation in the writing of a scientific review article and the identities which they constructed for themselves in their writing as well as in semi-structured interviews about their writing. The study also examined tutors' evaluations of the students' writing. Viewing academic writing from an academic literacies perspective as a social practice rather than a decontextualized product, I adopted a philosophy and research methods in line with Lillis and Scott's (2007) definition of academic literacies research as a critical ethnographic gaze.

This chapter begins with an outline of the theoretical perspectives which were influential in my approach to the research and the ways which this research can be considered ethnographic, including the importance of reflexivity. This is followed by discussion of the ethical issues which needed to be taken into account during the research process. I then discuss my data collection methods and provide details about my research participants. The chapter ends with an explanation of my approach to data analysis.

4.2 Theoretical Perspectives

This research is an exploratory qualitative study informed by interpretivism/social constructivism. According to Cohen et al (2007: 21) 'the central endeavour of the interpretive paradigm is to understand the subjective world of human experience'. The underlying assumptions of this paradigm are that individuals construct multiple and varied subjective meanings of their experiences. These meanings are often negotiated socially as individuals interact with others. This leads the researcher to rely as much as possible on the participants' views of the situation being studied, to focus on the specific contexts in which people live and work and to examine the processes of interaction amongst individuals (Creswell, 2007).

With regard to academic writing practices, a social constructivist perspective views written academic genres as socially constructed; they are constantly evolving and stand in a dialogic relationship with the culture of disciplinary communities in that members of the community both shape the genres and are shaped by them (Koutsantoni, 2007). This approach to writing has been defined as the academic literacies approach by Lea and Street (1998). This view fits in with the notion of academic writing as a social practice rather than a view of language as a transparent and autonomous system (Lillis, 2001). Lillis and Scott (2007) state that the epistemology of research approaches which adopt an academic literacies approach can be defined as a critical ethnographic gaze. They add that such approaches are characterised by the extent to which they privilege practice over text and that practice offers a way of linking language with what individuals, as socially situated actors, do. The academic literacies approach is ethnographic because it examines not only what individuals do but also what they make of what they do (Lillis, 2009).

114

Heath and Street (2008: 106) argue that ethnography brings new perspectives to research into reading and writing in higher education, where previous work 'has centred in prescriptive statements, program descriptions, or quantitative measures of discrete skills.' Similarly, there have been many corpus analyses of expert and student academic writing which offer insights into how writers in different disciplines or at different levels in the academic hierarchy differ from each other, but such studies rarely offer insights into the reasons why writers express themselves as they do.

4.2.1   An Ethnographically-Oriented Approach

Since the aim of this study is to gain insights into students' experiences of academic writing on a taught Master's programme in the Health Sciences the research approach taken is influenced by ethnography. Atkinson *et al.* (2001: 4) state that ethnographic research 'is grounded in a commitment to the first-hand experience and exploration of a particular social or cultural setting on the basis of (though not exclusively by) participant observation'. Mason (2002) suggests that in participant observation, there is a continuum from complete observer to complete participant, and each researcher needs to identify where their role lies on this continuum. Oberhuber and Krzyzanowski (2008) also point out ethnographic studies need not necessarily follow the traditional anthropological practice of long-term, intensive participant observation, but may involve more limited encounters with the field. In my case, although my engagement with the department of Health Sciences and the Communications module did not include long periods spent on site observing interactions between participants, neither was I a detached observer simply visiting

to conduct interviews and gather documents. Rather, it has been an extended involvement over several years of teaching, tutorials, observations, interviews and more informal interaction, all of which influenced the way I conducted the research and the way my participants viewed me.

In relation to the researcher's role, a number of writers highlight the importance of reflexivity in ethnographic research (e.g. Bloome, 2012; Hammersley & Atkinson, 2007; Street, 2012) Reflexivity can be defined as the researcher's awareness of the experiences, beliefs and values which s/he brings to the research process (Street, 2012). As Coffey (1999: 36) argues,

> The definition and location of the self is implicitly a part of, rather than tangential to, the ethnographic research endeavour. One of the strengths of ethnographic enquiry is the real involvement of the fieldworker in the setting under study. A weakness is not the possibility of total immersion but a failure to acknowledge and critically (though not necessarily negatively) engage with the range of possibilities of position, place and identity.

As a participant in the setting, I teach all the students on the MSc Health Sciences programmes for two classes on academic writing which form part of the five introductory lectures to the Communications module, and I give feedback on the 1,000-word formative assignment which students produce for this module. My role is to give feedback on writing skills including 'language', while the students' supervisors, who are members of the Health Sciences programme team, are

116

supposed to give feedback on content. I also teach some (mainly international) Health Sciences students who take an optional module in academic writing for post-graduate students, and I am available to any student who wishes to discuss their writing in a tutorial. This option is mainly taken up by students whose first language is not English, but native speakers occasionally request an appointment. On the other hand, I am not a member of the Health Sciences programme team and I have little contact with them apart from discussions at the beginning of every academic year about the teaching timetable and submission date for the formative assignment and occasionally when they want to refer a student to me for academic writing tuition.

Although I am not fully involved as a participant in the setting, the fact that I do have a role other than that of observer is likely to have influenced the way my research participants saw me and the kind of responses they gave to my questions. For example most of my student participants talked about language and grammatical accuracy as an important aspect of their writing although I did not specifically ask about this. Their decision to discuss it may result from a number of factors, including the fact that their tutors often make critical comments about students' use of language, but it may also be because they think that it is what I want to hear about. I also found that participants tended to interpret my questions about specific aspects of their assignments as criticisms, which sometimes made me reluctant to ask about sections of their texts which I did regard as problematic.

In addition, I sometimes found it difficult to separate my role as interviewer from my role as writing tutor, and in some of the early interviews, particularly two which I did

as a pilot study and which are not included in this thesis, I found myself giving

feedback on the student's work in the middle of the interview. Later, I tried setting

aside some time immediately after the interview to discuss possible improvements to

the paper. Eventually, however, I found that what worked best was to interview the

student after they had submitted the review paper because this allowed us to

concentrate on the interview without worrying about how the paper could be

improved.

In addition to reflecting on my impact on the research process, I also took some time

to reflect on the interview process. As suggested by Wengraf (2001), I listened to the

recording of each interview as soon as possible after it was finished in order to make

notes on my initial thoughts while the memory of the interview was still fresh in my

mind. I also used this opportunity to reflect on what I could have done differently and

what changes I might make to my approach in the next interview.

4.3   Ethical issues

Regarding ethical issues in qualitative research, Guillemin and Gillam (2004)

distinguish between 'procedural ethics', which is mainly related to obtaining approval

from an ethics committee, and 'ethics in practice', which the authors define as 'the

everyday issues that arise during the doing of research' (p.263). I have discussed

some of these everyday issues in the previous section, and in this section, I combine

discussion of procedural ethics, such as recruitment, informed consent and

confidentiality with reflection on the specific issues which arose in my research

context.

4.3.1 Recruitment of participants and informed consent

Before starting the data collection, I received approval for the study from the ethics committee at the Institute of Education. I then discussed my research plans with the MSc Health Sciences convenor, who agreed to facilitate access to any relevant documentation, such as the module descriptor and marking criteria, and to classes that I might wish to observe.

In order to be able to contact students whom I only saw at the start of the academic year when I taught them for two workshops on academic writing, I informed the group about my research at the end of the second class and collected the contact details of any student who was willing to consider taking part. I explained that providing their details did not place them under any obligation to actually participate and that they would receive more information about the project before making any decision about participation. These points were also included on the form which I passed round for students to add their contact details.

Later in the academic year, I emailed students who had given me their contact details to ask if they were still willing to participate. In accordance with the BERA Revised Ethical Guidelines for Educational Research (2011), a letter was attached to the email giving detailed information about the aims of the research, the extent of the commitment required from participants, and the ways in which their data would be used (see Appendix ?). It was made clear in the letter that although I teach academic writing on the programme, I do not have any influence over the grading of

assignments and that their decision to participate or not will not affect their grades in any way.

Apart from offering to pay travel expenses when participants had travelled to campus specifically to do the interview, I did not provide any monetary incentive for taking part in the interviews. However, I did offer participants an opportunity to discuss any questions or concerns about their writing with me at the end of each interview, after the recording device had been turned off. In addition, I reminded participants that they could book a tutorial with me or another writing tutor if they should feel the need for additional support with their writing as a result of the interview process.

Those who agreed to participate were asked to sign a consent form (see Appendix ?) and were informed of their right to withdraw from the study at any time for any reason. A similar letter and consent form were sent to potential staff participants (see appendices ??). Finally, at the beginning of each interview I requested permission to record the interview on a digital recording device.

4.3.2 Confidentiality and Anonymity

In order to maintain participants' anonymity, real names were replaced with pseudonyms in all transcripts and copies of assignments. In addition, pseudonyms have been used in the thesis. However, it has been difficult to remove or change all the personal details, such as country of origin, age and profession, which might enable someone who knew the student participants well to identify them. This is

because these personal details formed part of the participants' identities and appeared, in some cases at least, to have an impact on participants' experiences of academic writing on their master's programmes. In addition, since extracts from the student participants' assignments are also included in this thesis, it is possible that their lecturers could identify them whether personal details are included or not. However, as many international students join the Health Sciences programme every year, and as the participants in this study left the university several years ago, it seems unlikely that lecturers will remember enough about them to identify them from the descriptions in this thesis if they were to read it. In addition, even if a particular lecturer were able to identify an individual student participant, this is unlikely to cause any harm since participants did not make any comments that might cause offence, and all participants have now graduated. Having said this, I am aware that I would need to take care to remove as many identifying details as possible if I were to present this research at the university where it was carried out.

Protecting the anonymity of staff participants represented a particular concern since using a pseudonym but including details such as gender, age and academic specialism may lead to some participants being identified, especially if the thesis is read or the findings presented at the university where the research was carried out. Therefore, I have included only minimal details on staff participants and in some cases I have changed details such as gender.

4.3.3 Limiting the burden on participants

Since taking part in a research interview may represent an additional burden on students who may already be under stress from the demands of their MSc course and their employment, I made every effort to schedule the interviews at times which were convenient to the participants. In my pilot study, I attempted to interview participants several times over the course of the academic year, but I found that the most useful interviews were those conducted after the review article was complete. Therefore, I settled on one interview towards the end of the academic year, just after the students had submitted their review article. Since classes were finished and the students had also submitted most of their other assignments apart from the dissertation, they usually had some free time. In addition, because most assignments had also been marked, participants were less likely to worry that taking part in the interview could influence their grade in any way.

4.4 Data Collection

According to Atkinson *et al*. (2001), a range of research methods might be employed in ethnographic research, including observations, interviews and the analysis of textual materials which offer insights into how group members and institutions represent themselves and others. The data for this study were collected over a period of about two and half years. I began by gathering some background information about the module and its assignments in 2012 while I was conducting some pilot interviews. I then recruited participants from two cohorts of MSc students

in the academic years 2012-13 and 2013-14. In the following sections, I will outline the data which I collected and the methods used to collect them.

4.4.1 Background data: discussions and observations

When I began planning this research project, I approached the convenor of the Communications module to explain that I wanted to investigate students' experiences of writing the review article. She agreed to help me in several ways, including giving me some background information about the aims of module in a fairly informal conversation, allowing me to observe the first lecture of the module, where the review article assignment is introduced, and inviting me to observe student presentations. This latter observation was followed by a discussion in which she explained how the presentations had been graded. I also collected documents, including the module handbook, and sample review articles by students and professionals which were given to me by the module convenor. Apart from the observations of the first lecture, which is discussed below, these background data do not form an extensive part of my thesis, but they did help me to plan my research and provide insights into the ways in which Health Sciences lecturers view the assignments and evaluate students' work.

My observations of the introductory lecture on the Communications module were particularly useful as they provided evidence of how the review article assignment is framed by lecturers for the students. I observed this introductory lecture twice as a different lecturer took on responsibility for the module in the second year of my data collection. I did not record these sessions but made detailed notes on what the

lecturers said, the content of the Powerpoint presentation (which was the same in both sessions and made available in the virtual learning environment after the lecture) and on student responses to questions. This helped me to formulate some of my interview questions.

4.4.2 Interviews and student assignments

The main focus of the research is the review articles produced by the students on the Health Sciences programmes. Therefore, I began by collecting copies of participants' finished review articles and associated formative assignments if available. These documents formed the basis of the semi-structured interviews which I conducted with 9 student participants. The aim of the interviews was to gain an understanding of students' backgrounds, writing experience, expectations, anxieties, and reasons for choosing to express themselves in a particular way. Therefore, I prepared a list of general questions for all participants alongside some more specific questions for individual participants based on their review article and sometimes on other assignments as well. As the interviews were semi-structured, I was able to ask follow-up questions to clarify responses or elicit more detail where necessary. Interviews ranged in length from about 35 minutes to just over an hour depending on how talkative the individual participants were. The interviews were recorded with a digital recorder and transcribed using Silverman's (2005) simplified transcription symbols.

In addition to the review articles, I collected a range of other assignments and copies of tutor feedback, which varied from one participant to another depending on what

each student was willing or able to give me. These sometimes offered insights into the influence of early feedback on later writing, including on the review article, or into patterns that were repeated across several assignments.

As well as the student interviews, I also conducted interviews with members of the Health Sciences team who were responsible for supervising and marking the review articles. In some cases, we discussed review articles written by student participants in this research, whilst in others either the tutor or I provided two or three review articles which had received different grades, so that I could gain insights into which features were valued or viewed negatively by the tutors.

According to Lillis (2009) this method - 'talk around texts' – represents an important development in writing research because it places writers centre stage, paying careful attention to their perspectives and allowing them to contribute to the direction of the research, whilst still maintaining a focus on language through the use of linguistic discourse analysis. The articles also served as concrete examples of practice which both the interviewees and I could use to illustrate our points. For example, rather than asking student interviewees an abstract question about how they expressed critical evaluation in their writing, which might have led them to describe what they thought they did rather than what they actually did, I asked them to point out examples of evaluation in their texts. Similarly, I was able to ask staff what specific problems they perceived in the review article which they had identified as weak, rather than asking what kind of problems they encountered in MSc writing in general.

4.5 Student Interview Participants

As I explained in section 4.3.1 above, I collected the contact details of potential student participants at the beginning of the academic year and later sent out invitations to participate. Although about half the students in each cohort filled in their contact details on the forms which I distributed, it still proved very difficult to actually recruit participants. I had originally intended to interview a range of students including home students (UK born students). However, most home students had full-time jobs and were studying part-time. They tended to be on campus only one day a week when they had a full day of lectures. Even when they expressed a willingness to take part, in practice it was impossible to find a suitable time for the interview as I also had a busy teaching schedule. Home students who were studying full time tended to be younger recent graduates who simply did not respond to my requests for an interview. Therefore, as I have included all the students who responded positively to my invitation, the sample in this study is a convenience sample, which limits the generalizability of the findings.

I did, however, manage to interview a range of students including some who had completed all or part of their previous education in English either in the UK or in countries where English is an official language, such as India and Nigeria, and some who had moved to the UK some time ago. Some of these participants were already working or were planning to work in the NHS. My interviewees also included students who are generally referred to as 'international' as they had come to the UK just to complete their MSc and were planning to return to their own country soon after submitting their final dissertation. The following table gives details of the student interviewees.

126

Name	Age	Country of origin	Background	Review paper topic
Noor (f)	40	Iran	BSc Public Health from Iranian university. Worked in public health. Came to UK to get married. Has a 1-year-old child. Wants to work for the NHS.	Exercise and obesity in childhood
Padhma (f)	27	India	Qualified as a doctor in India. Worked in A & E for one year. Planning to take PLAB and work in UK.	Effects of diet, exercise and surgery on obesity
Amanda (f)	23	Honduras	BSc Clinical Nutrition and Dietetics from Honduras. No work experience apart from work placements during degree. Planning to work as a dietician in Honduras.	Nutrition in chronic kidney disease
Noy (f)	24	Thailand	BSc in Pharmacy from Thailand. Worked as a clinical pharmacist in a Thai hospital for two years. Planning to return to Thailand after MSc.	Nutrition in coeliac disease

Anouk (f)	23	Netherlands	BSc in Nutrition from the Netherlands. Worked for one year as a dietician. Hoping to gain some work experience in a developing country after the MSc.	Stress and eating patterns
Jenny (f)	29	Hong Kong	Qualified (BSc, MSc) and worked as a practitioner of traditional Chinese medicine in Hong Kong. Planning to return to Hong Kong after completing her post-graduate diploma.	Dietary exclusions in childhood atopic dermatitis
Benedito (m)	30	Angola	Qualified as a nurse in Angola. BSc in Public Health from UK university. Wants to work for World Health Organisation. Practising Christian and community leader in the Angolan community in London.	Prevention of sexually transmitted infections.
Temilayo (m)	33	Nigeria	Qualified as a nurse in Germany. Works as a diabetes nurse in a London hospital.	The effects of low dietary protein in diabetic nephropathy

Ananthi (f)	23	India	BSc Biology from an Indian university. No work experience. Wants a career in research.	Gene-nutrient interaction in cancer.

In addition to interviewing students, I also interviewed three members of academic staff who taught on the Health Sciences programmes and who were involved in supervising and marking students' review articles on the Communications module. In some cases these interviews were based on review article assignments written by student participants in this study, while in others the lecturer participants chose to discuss two or three reviews by past students. I have not included extracts from these reviews in this thesis as I do not have permission from the writers.

4.6 Data Analysis

Throughout my data analysis, I used a combination of thematic analysis to identify broad recurring themes, and discourse analysis to reveal how participants oriented towards these themes. Although the literature review and my own experience of working with Health Sciences students had given me some indication of the themes that might arise, I remained open to the possibility that other themes might emerge, or that participants might orient to the expected themes in unexpected ways.

I began by looking at the data (interview transcript, final review article and where relevant other assignments) for each participant and then compared the themes which emerged across the data set. As the data set was relatively small, I chose to

work with paper copies of my interview transcripts and my participants' assignments. Rather than coding the data and grouping segments into themes using software for qualitative data or corpus analysis, I used highlighter pens to mark themes and made handwritten notes in the margins. This approach enabled me to keep interview responses and written extracts in the context in which they occurred rather than decontextualizing them in a software package. This is also reflected in the data analysis chapters, where I have used relatively extensive extracts from the interviews and assignments to tell the stories of individual participants instead of just using brief extracts to illustrate similarities or differences between participants.

My approach to discourse analysis was essentially that proposed by Gee (2014a & b). Gee (2014a: 24) defines discourse as 'interactive, identity-based communication using language' while Discourse (with a capital D) is 'interactive, identity-based communication using language and everything else at human disposal'. Thus, Gee's approach to discourse analysis is focused on identity, and the ways in which identities 'are enacted and recognised by different social groups and social and cultural formations in society' (Gee, 2014a: 23). This is particularly relevant to my research in which identity emerged as a key theme.

Another relevant issue is the question of whether discourse analysis should be critical or purely descriptive. As noted in Chapter 2, the academic literacies approach to student writing is influenced by critical discourse analysis, which focuses on the meaning-making role of discourse in social relations and on critique as a means to identify how 'wrongs' in a particular social context might be 'righted' or mitigated (Fairclough, 2010: 7). Gee (2004b) argues that all discourse analysis should be

critical because 'all language in interaction is inherently political' (p.34). This is because it involves social roles and positions that have implications for potential social goods, such as who can be considered an insider to the social practice in question. In the case of my own data, the ways in which my student participants are positioned and position themselves in spoken and written interaction have implications for their ability to achieve academic success and thus to access other social goods such as a good job or further study. It is therefore appropriate to take a critical approach to the discourse analysis of my data from observations, interviews, student assignments and other documentation.

In order to facilitate a critical approach to discourse analysis, Gee (2014b) puts forward 28 'tools' or sets of questions to ask when analysing discourse, most of which can be applied to both spoken and written data. These questions focus the researcher's attention on the linguistic details in the data and thus on how the speaker or writer is using language to accomplish something, such as position themselves as a particular kind of person. As Gee points out, different tools may be more or less appropriate for different types of data. Of the 28 tools that he proposes, I found the following to be particularly relevant to the data from my interviews, observations and student assignments:

- What identities are speakers or writers constructing for themselves or others? (The identities building tool).

- How do participants draw on certain Discourses to enact specific socially recognizable identities? (The big D discourse tool).

- Why have participants chosen this topic and what are they saying about it? (The subject tool).

- What is the situated meaning of an utterance? What specific meanings might words and phrases have in the context under investigation?

- How does a speaker's intonation contribute to the meaning of their utterance? (The intonation tool).

- What is the significance of a speaker or writer expressing a point in a particular way when compared with alternative ways of expressing the same point? (The why this way and not that way tool).

- Have I considered all the aspects of the context that are relevant for the meaning of the data? (The frame problem tool).

- How is language used to build or reduce significance for certain things? (The significance building tool).

- How do participants' utterances (spoken or written) relate to other texts? (The intertextuality tool).

The following sections provide more detail on my approach to my data analysis.

4.6.1 Analysis of the Interview Data

In relation to interviews, Kvale and Brinkmann (2009) state that there are two different epistemological conceptions of research interviews. They suggest that interviewing can be conceived as a process of knowledge collection (or mining for information) or of knowledge construction. Clearly, in an interpretivist paradigm the latter is more appropriate. According to Kvale and Brinkmann knowledge is actively created in the interaction between the interviewer and interviewee. The construction of this knowledge, which continues in the transcription, analysis and reporting stages of the research, is influenced by the procedures and techniques applied by the researcher. Therefore, as Abell and Myers (2008) point out, the complexities of the interaction which takes place in an interview need to be taken into account in the analysis of interview data, and this can be achieved through discourse analysis.

In addition, as noted in Chapter 3, Lillis (2008) argues that the use of discourse analysis can help to close the gap between text and context through consideration of how different contextual factors are indexed and oriented to by the interview participants. Similarly, Cameron (2001: 147) contends that 'the reason it is important to consider communicative acts in their original context is, precisely, that they will always and inevitably be performing functions other than just referring to states of affairs in the world'. In particular, Gee (2014a) notes that identities are constructed and enacted in discourse. Therefore, discourse analysis can reveal which identities participants regard as salient in a particular context. Further to this, Kvale and

Brinkmann (2009) suggest that by taking a discourse analysis approach, researchers can avoid some of the criticisms that are often made of interview data as inauthentic and subjective. They argue that in this view of interview data, attitudes and the self are conceived as stable authentic essences whereas from a discourse analytic perspective they are socially constituted and fluid.

In order to answer my research questions on the identity positions taken up by the student participants and the contextual factors which they regarded as important in influencing their writing, I adopted an iterative, careful reading approach. I began by identifying points which stood out as being particularly relevant, interesting or unusual. I then read through the interview transcripts many more times, considering each utterance in relation to the research questions and also examining how the students' responses might have been influenced by their relationship with me as their writing tutor or by the way in which I asked the questions or responded to their answers. Where necessary I listened to the recordings again to take into account how particular things were said, considering which words were stressed or whether the participant sounded certain or hesitant, for example. This careful reading process also enabled me to identify recurring themes across interviews and to examine similarities and differences between the participants in the ways they oriented towards various aspects in their academic, professional and personal contexts. Working with hard copies of the interview transcripts, I used coloured highlighter pens to identify these themes across all the interviews. Finally, I also moved back and forth between the interview data and the participants' review articles, considering how what the participants said either illuminated, supported or contradicted the decisions they had made in writing the review.

4.6.2 Analysis of the student participants' review papers

One possible approach to the analysis of written discourse, including student assignments, is the use of corpus software. This can be used to search for particular words which are associated with functions of language such as hedging. However, I did not consider such software appropriate for my analysis of critical evaluation in the student review articles because, as shown in the literature review, evaluation is a complex phenomenon which may be expressed indirectly. Therefore, the approach I adopted was to conduct a careful reading of each text in order to identify instances of evaluation based on the features of evaluation identified in Chapter 2 of this thesis. This is similar to the approach used by Salager-Meyer (2001) in her analysis of criticism in medical discourse. In particular, I considered the following questions:

- What is evaluated in the students' review papers?
- How is critical evaluation expressed?
- What stances do the student writers adopt towards their material and their readers?

- How do the student writers use the sources on which they draw in their writing to support their own arguments and evaluations?

- Which contextual factors does the writing index?
- What authorial identities do the writers construct for themselves through their choices of what to evaluate and how to evaluate it?

- In what ways do the things that students say about critical evaluation in the interviews support or contradict what they actually do in their writing?

These open questions, some of which were based on issues discussed in the literature review and some of which emerged from my initial perusal of the review papers, allowed findings to emerge from the data rather than closing down the analysis too early with closed questions based on pre-conceptions about what I would find.

As with the interview data, analysis of the textual data was an iterative process. I began by using coloured highlighter pens to mark sections of the text which related to the themes identified in the analysis of the interview data. I then went on to identify sections of the text which were clearly evaluative. I carefully considered the content and structure of introductions and conclusions, as the former is where the writer establishes a relationship with the reader and the latter is where key points from the discussion in the review paper are likely to be evaluated. I also examined sections of the papers which appeared to stand out as different in some way, where the writer had made more or less use of hedging for example, or seemed to be advancing a particularly strong argument. Although I had originally planned to avoid any form of quantitative analysis, I did occasionally find it useful to take into account the frequency and distribution of certain linguistic features in individual papers. For example, one participant's review article had quite a strong didactic tone, and only by looking closely at her use of 'should' and 'must' compared with the number of

hedging devices in her paper and in another paper with a different tone could I identify why this was. In line with Gee (2014a: 174), the numbers do not carry any statistical significance. Rather, they simply facilitate 'close scrutiny of the actual details and content' of the discourse. Finally, where it seemed useful, I looked at the original published research and review papers which participants had referred to in their review article assignments to see how they were using this work to support their own arguments.

4.7 Conclusion

In this chapter, I have attempted to provide a detailed account of my research process in order to convince the reader of the credibility and trustworthiness of this study. This account included the theoretical perspectives which informed the research design, the ethical issues which were taken into account and my methods of data collection and analysis. The following chapters present the findings from my data analysis and aim to answer my research questions:

- How does context influence the student participants' approach to the writing of a critical review article, particularly the expression of critical evaluation?

- How do participants negotiate the tension between writing (in theory) for an academic journal whilst (in practice) producing an assessed piece of work for their lecturer?

- What identity positions do participants construct for themselves in their writing and in the interviews?

- What are the lecturers' perspectives on the students' execution of the review article assignment?

5 The Transition to Post-Graduate Study in the UK

5.1 *Introduction*

Having reviewed the literature and discussed the research methodology in the previous chapters, the following three chapters will present the findings of my research into students writing a scientific review paper as an assignment on a Health Sciences programme. These three chapters are based on broad themes which emerged from the interview and observation data and which also relate to some of the themes discussed in the literature review in chapters two and three. These

themes include participants' transitions to master's level study, the ways in which the context of the Health Sciences programme and participants' identities as students appeared to influence writing practices, and finally the influence of participants' professional and personal contexts and associated identities on their writing.

It is clear from the data that participants' contexts are much more complex than Samraj (2002; see chapter 3) suggests. The contexts which participants index in their discourse and which appear influential in their writing practices include not only the academic context but also their professional and personal experiences, reflecting Bazerman and Prior's (2005: 154) argument that 'disciplinarity is not a map of autonomous social spaces […] but a heterogeneous sphere of activity that partly constitutes other social domains of practice (e.g. family, government, community), whereas those other domains simultaneously co-constitute disciplinarity'. These multiple activity frames are relatively foregrounded and backgrounded (Goodwin and Duranti, 1992) with aspects of the academic context being more obvious in the participant's written work as an influence on the development of writing practices and other contexts remaining more hidden, only becoming apparent through the analysis of interview data.

In addition, while participants' identities, such as student, parent, and healthcare professional, emerged as an important aspect of these contexts, it was also clear that participants were doing identity work in the interviews. In other words, they were constructing particular kinds of identities within their multiple contexts such as 'hard-working and attentive student', 'caring practitioner' and 'good mother'. Although the academic context, the need to meet tutor expectations and the desire to be a

successful student were to some extent foregrounded in participants' accounts of their writing practices, the interview data shows that other contexts and identities also played a role in shaping their approach to the review article assignment.

The data presented in these chapters are mainly taken from my interviews with my student participants. These extracts are supported where appropriate with extracts from participants' review papers and other assignments, and with data from my interviews with lecturers. Although I recognise that some data extracts could fit into more than one chapter, I have tried to organise them in the most logical way possible so that, where participants expressed similar points of view, for example, these are presented together. In addition, since the nature of both the data and the research questions makes it difficult to devote individual chapters to specific questions. The three research questions are therefore addressed throughout the three chapters. The concluding chapter then considers each research question individually and relates the findings to the literature discussed in chapters two and three.

This first data analysis chapter presents the data analysis on participants' transition to master's level study in the UK. All nine participants were born outside the UK, and only one had completed undergraduate studies in the UK. Therefore, a key theme which emerged from the data was the difficulty participants experienced in generally adjusting to a different education system and particularly learning to include critical evaluation in their academic writing. As discussed in the literature review (Chapter 3), in order to make a successful transition to master's level study and be recognised as a legitimate student, students need to learn new ways of being and doing, which may be quite different from their undergraduate experience (Scott *et al.*, 2014).

However, this transition may be complicated by a mismatch between tutors' and students' expectations of the course, such as when lecturers attempt to socialise students into an academic career but students wish to gain a qualification to enhance their prospects in a profession outside academia (Scollon & Scollon, 2002).

In addition, lecturers' discussions of academic writing and feedback on assignments may reflect a study skills or socialisation approach (Lea & Street, 1998) and thus may hinder students in their quest to understand what it means to be a successful student in their discipline. These kinds of problems and mismatches are apparent in my data, and will be discussed in the following chapters, beginning in section 5.3 below, which, following a brief overview of the module in section 5.2, provides some insights into the approach to writing and student identity taken by the module convenors. Data analysis presented in later sections in this chapter and in chapters 6 and 7 will show how participants sometimes struggled with the study skills and socialisation approaches taken by the lecturers, and also resisted the identity positions constructed for them.

This chapter begins with an overview of the module for which my participants were writing their review article, and an analysis of the ways in which the review article assignment is framed for the students by the lecturers. This analysis is based on the module handbook, my conversations with the lecturer who was coordinating the module when I first began teaching on it, and my notes from my observations of the introductory lecture.

I have included a substantial amount of detail about the module handbook and the first lecture because they offer important insights into the ways in which the module tutors frame the review article assignment and construct identities for the students. The ways in which these framings and identities are taken up or resisted by the student participants will then be considered later in this chapter in the sections on transition, and in the following two chapters.

5.2 Overview of the module

As previously noted, the review paper assignment is the main assessed piece of work for a module called Communications, which is compulsory for all students on MSc Health Sciences programmes. According to the module handbook, the aim of the module is to enable students to develop the following: in-depth knowledge of a specialist topic, an awareness of recent advances and trends in the field, the ability to critically evaluate current literature on a specialist topic, scientific writing skills and confidence in oral presentation skills. These aims are achieved mainly through independent study with some guidance from a supervisor since the module includes just five taught sessions, which take place at the beginning of the academic year and last approximately one hour and 45 minutes each. These sessions mainly cover study skills: information searching, academic writing at post-graduate level, including essay structure, referencing and criticality, and presentation skills.

In addition to the review paper, students are required to do two other assignments for the Communications module: a formative assignment and a presentation. The formative assignment is a 1000-word essay on the topic chosen for the review paper.

Students are told that they will receive feedback on the content of their formative assignment from their supervisor and feedback on their writing skills, including their use of English, from the writing tutor, and that they should use the feedback to develop their review paper. Similarly, the presentation, which is worth 20% of the marks for the module, is designed to be an opportunity for students to obtain feedback on the work they have done for their review paper before they submit their final draft.

Regarding the assignments for this module, students receive very little written guidance. The module handbook contains a brief outline of what is required. For the review article, it states: 'An extended essay approximately 3000 words – written in the form of a review paper such as would be suitable for publication in a named journal in the appropriate field of study'. Thus, the task is framed here as an academic assignment – an essay – in the form of a review paper, rather than as a review paper in its own right. This statement is followed by some guidelines, reproduced here as they appear in the handbook:

Guidelines for writing the review

This assignment is a **tutored** piece of work. You will therefore need to find a tutor (see attached list for potential tutors and areas of interest). Your tutor will discuss and assist you with:

- your choice of topic,
- the journal for which you are writing,
- specific literature available,
- selection and organisation of the material.

There should be evidence of extensive reading around the subject of your choice. See also the 'How to' booklet available on the University website which will give you

43

These guidelines seem to focus mainly on the formatting and study skills aspects of the review paper assignment. Students are referred to the university's *How to…Guide* and told that this will help them to tackle the review paper, but in fact this is a study skills guide aimed mainly at undergraduate students, and although some students may find some of the generic advice on academic reading and essay writing useful, it contains nothing of direct relevance to writing a post-graduate scientific review paper. Similarly, the points the students are directed to pay attention to in their chosen journal's instructions for authors relate mainly to formatting issues.

In addition, the first point on this page, the fact that the review paper is a *tutored* piece of work, seems to suggest that students can expect to work quite closely with a

tutor. This impression is supported by the table on the final page of the module handbook for students to record meetings with their supervisor. At the top of the page, it is stated that students should submit a copy of their supervision record with their final review paper. This table consists of twelve rows and three columns with the following headings: Date, Type of contact (face to face, email etc.) and Notes. This suggests that students might have up to twelve meetings, phone conversations or email exchanges with their supervisors about their review paper and presentation. Therefore, students might expect to receive substantial amounts of guidance and feedback on drafts of their work, but as will be shown in the next chapter, evidence from the interviews with the student participants indicates that this was not the case.

5.3   The First Lecture

In order to find out how the task of writing a review article was framed for the students, I observed the introductory lecture to the module twice. The reason for the second observation was that a different lecturer was responsible the module in the second year of data collection, so I wanted to see whether the task was framed in a similar or different way for the second cohort. In this first session, the lecturer who is responsible for overseeing the module introduces the module and its assignments (a review article for a named journal and a presentation) to the students. For full time students, this is usually their first MSc lecture at the university, but some part-time students may have already completed other modules on their MSc degree programme.

In both the sessions that I observed, the class was fairly large – between 30 and 40 students, so the atmosphere was one of a formal lecture rather than an interactive seminar. However, in the first observation there was some interaction between the lecturer and the students as the lecturer asked questions and also gave the students a task to do in groups. In the second observation, the lecturer asked few genuine questions, only rhetorical questions which he answered himself, so the students were mainly silent.

As in the module handbook, study skills were also highlighted by the lecturers in their introduction to the module. In these presentations, which were both based on the same set of Powerpoint slides, the students seemed to be constructed in two ways: as (potentially deficient) students and as (novice) research scientists. For example, in relation to the former, the lecturer put a substantial amount of emphasis on referencing and plagiarism. In fact, the main point he made about the formative essay was related to referencing:

> The formative essay gives us a chance to see what you can do. My most frequent feedback is that students need to reference more especially at the start of the paper.

Thus, he seems to anticipate a possible weakness in the students' papers and warning against it. Following this statement, he moved on to a Powerpoint slide which contained a list of guidelines on writing style, which he read with very little commentary:

Writing style
- Must be factual and accurate.
- Must be informative and (hopefully) interesting.
- Must be objective.
- Use past imperfect tense, passive mood.
  - *ie write in the past, do not use pronouns.*
- Must be clear and structured.

These instructions are typical of a study skills approach in which generic (and in this case sometimes bizarre) terminology is used without explanation as if its meaning is transparent. In addition, the tone of the instructions is very categorical with no acknowledgement that verb tenses and forms as well as the extent to which a text is 'factual' and 'objective' may vary depending on what exactly is being discussed.

Since the topic of the next Powerpoint slide was plagiarism, the lecturer then returned to the subject of referencing, stating that 'good students lose marks over referencing; there is no forgiveness for post-grads over getting referencing wrong'. Here he seems to be referring to the technical aspects of referencing rather than the rhetorical aspects because he went on to say:

> For review papers you should use whatever style the journal requires. Otherwise use Harvard style. Please check your references for accuracy and look at your work. If there are six main references or less on the first page, go

back and rewrite it. However many references you have on other pages, it is the first page that makes the first impression.

Thus, there is a focus on the need for accuracy in referencing and the need to have sufficient references, particularly on the first page of the review article, but no explanation is given for why a minimum number is required.

Moving on to plagiarism, the lecturer pointed to the screen, where a slide with the heading Plagiarism was displayed, and asked 'Does everyone know what this is?' The Powerpoint slide contained a definition of plagiarism - 'this means copying your *own* or another author's work and implying it is yours' – followed by the words 'Don't do this!' in large, red, underlined letters:

> # Plagiarism
>
> **This means copying your *own* or another author's work and implying that it is yours**
>
> ## Don't do this!
>
> **Instead, understand the material that you are writing about and write it in your own words**
> **Avoid using quoted text from your source**
>
> **All work is screened electronically**
> **There is a mark penalty for plagiarism – it is seen as academic misconduct**

Students who are already familiar with the concept of plagiarism are unlikely to learn anything new from this definition. At the same time, it does little to illuminate the complex phenomenon of plagiarism for those students who have completed their previous education in contexts where it is not discussed.

In addition to constructing the students as potentially deficient in terms of study skills, the lecturer makes an interesting contrast to this by also positioning them as novice professional research scientists. Following his introductory remarks welcoming the students to the programme, he made the following points about the purpose of the module assignment:

> Your professional face as a scientist is written. We teach you how to produce a professional level paper. It is a literature review format. You need to do it as near as you can to a professional standard. This is a dry run. We are nicer than some journal editors. Some of you may already have published so it will be more or less easy for you.

The word 'professional' is used three times, but rather than referring to students' roles as healthcare professionals, the lecturer's use of the term here seems to refer to research professionals since the professional face of a practitioner is unlikely to be entirely or even mainly written. The fact that the assignment is described as a 'dry run' suggests that the lecturer sees the students as apprentice researchers who are being given a chance to practise a task which they will later do for real in the

workplace. He also acknowledges that some members of the class may already have experience of writing for publication, and may therefore already be professionals in his terms.

Following this, the lecturer went on to speak briefly about some aspects of the timetable, particularly the research methods module and the research seminars. For the former, he gave two reasons for its inclusion in the curriculum: firstly, it would help students to read and understand research papers which they would need to do even if they were not aiming for a research career; and secondly, 'no one will want you on their research team if you don't know a t-test from a hole in the wall'. This reference to being part of a research team was echoed later in the session when the lecturer was discussing the relevance of the skills gained on the module for the workplace. He stated 'I'd be happy for someone on one of my research teams to be able to write a review paper'. Hence, although he acknowledged that not all the students in the room were necessarily seeking a research career, his main emphasis is on the benefits of the MSc in general and the Communications module in particular for aspiring researchers. Regarding the research seminars, at which guest speakers present their recent research, he explained:

> There are research seminars on Fridays. These are not part of your MSc but my view is that you are colleagues. You are all invited. There is a good range of speakers as we are in London. It is an opportunity to make contacts and find out what's going on in the various professions.

In describing the students as colleagues, the lecturer positions them as (novice?) academics. In addition, since the research seminars are given by researchers and not by practitioners, the implication seems to be that by attending these events, students will be able to make contacts and learn about recent developments in different fields of research rather than network to develop a career as a practitioner.

Pardoe (1997), whose research focused on MSc students writing an environmental impact study, describes how a lecturer seemed to be 'marketing' his module to the students by emphasising its value for their future careers. In the same way, the lecturers leading the Communications module seem to be trying to 'sell' the module and its assignments to the students by highlighting the useful skills that they will gain. As stated above, some of these skills, such as understanding research methods and writing review papers, are considered beneficial in a research career. The lecturer also noted that 'the review paper is not supposed to have much to do with your dissertation, but it is in effect the first chapter of a dissertation'. In theory then the students are also learning how to write a literature review, which will benefit them when they reach the dissertation. These points reflect the explanation that I was given for the module design when I first began to teach on it. I was told that on the one hand the review paper assignment fits in with a sequence of assignments across the whole MSc programme, which are together designed to develop students' ability to critically examine the literature on various topics in their field. This sequence begins with some short papers with titles containing the words 'critically evaluate' and ends with the dissertation literature review. On the other hand, the review paper and the associated presentation were perceived as giving students authentic professional experiences in writing for publication and presenting at a

conference as a whole day was set aside for the presentations, which the lecturer described as a mini conference.

What is interesting is that no effort is made to 'sell' the module to the students in terms of its potential benefits for a practitioner career despite the fact that many students are already established healthcare practitioners and others aspire to such careers. In the introductory lecture, only two references were made to practitioner roles. The first of these was made rather indirectly when the lecturer was attempting to explain critical evaluation:

> You need to critically evaluate information. What does that mean? When I worked in a hospital, what the head whoever said went. In science you need multiple sources of authority. Never use the word prove. Nothing we know in science now will not be superseded.

Rather than providing a direct answer to the question 'what does [critical evaluation] mean', the lecturer makes an interesting contrast here between 'working in a hospital', where he suggests that one might perhaps unquestioningly follow instructions given by a superior, and 'science', where one needs to consider more than one source of authority. This seems to carry the implication that those students who work as practitioners may need a change of attitude if they are to be successful academic writers. In addition, the instruction to never use the word 'prove' seems to index 'deficient' student behaviour again.

The second time that the lecturer referred to the practitioner role was also in connection with critical evaluation, but this time he constructed the practitioner as the *consumer* of review articles rather than the producers which the students are expected to be:

> However, what is important is the critique. A busy doctor in a hospital doesn't have time to read everything. He or she wants to know who the top researchers are, what is the latest research, and what are the implications. A good review will identify who are the most important researchers, what are the issues, what are the latest findings, what are the implications and future research directions.

This reflects something that was said to students by the lecturer who originally designed the module: 'you are the expert and the review paper is a fairly easy way for other scientists to get up to speed'. Thus, writers of review articles are constructed as expert scientists who are able to summarise and explain information on a particular topic for readers who are likely to be less expert on that topic and who may be practitioners. However, no mention is made of the fact that review articles aimed at practitioners may differ considerably from those aimed at researchers or that separate publications exist for the two groups.

When I observed some of the student presentations for the module, I was told that one student had chosen to write for a journal aimed at practitioners, but it seems that this was something she had worked out for herself rather than being advised by her

supervisor. In addition, although she achieved a good grade for her presentation (68%), the student who gained the highest grade (75%) was the one whose presentation was clearly aimed at research scientists. This possibility to choose a practitioner journal was withdrawn from later cohorts of Clinical Nutrition students as they are now assigned a journal aimed at researchers. Although students on other Health Sciences degrees still have the option to choose in theory, most are not aware that any such choice exists because the differences between journals and audiences are generally not made explicit to them.

5.4 Researcher, student or practitioner?

To sum up, in the module handbook and in the introductory lecture to the module, lecturers seem to position students in two contrasting ways: as apprentice researchers and as students who may be deficient in terms of certain study skills. The practitioner identity is side-lined or ignored. It is difficult to know how much impact this first lecture has on the way the students approach the task of writing a review article. On the one hand, since students receive so little input on the Communications module, one might expect that they would refer back to their notes from this lecture and therefore the lecturers' construction of students as research scientists or experts might be quite powerful. On the other hand, it seems likely that many students will feel somewhat overwhelmed by all the information that they receive on their first day and that much of it will simply be forgotten. Indeed, my student participants made little mention of this first lecture having any impact on their final review paper although at least one participant did echo the lecturer's comment about 'busy doctors' as the audience for a review paper.

The first lecture discussed above represents the beginning of students' transition to master's level study. The remainder of this chapter presents my analysis of interview data and supporting extracts from participants' assignments to show how my student participants experienced this transition.

5.5   The transition to master's study in the UK

As discussed in the literature review, the transition to master's level study is not necessarily smooth as students may have completed their undergraduate studies many years ago, in a different country, or in a different academic field. This was certainly true for many of the participants in this study, some of whom seemed to regard the interview as an opportunity to tell stories of their early struggles in making the transition from education systems which required them to learn information for exams to a system which emphasised independent learning and essay writing. In addition to experiencing difficulties in transition, most participants also seemed to resist the 'potentially deficient student' and 'novice research scientist' identity positions constructed for them by their lecturers. Instead, they attempted to position themselves as, on the one hand, pro-active, hard-working, compliant students struggling to do their best in difficult circumstances, and on the other hand as caring practitioners who wished to use the knowledge gained on their MSc programme to benefit their patients. Only Ananthi expressed a desire to become a researcher, but her construction of this identity in writing proved to be problematic given her lack of research experience in the area she had chosen to review.

Most of the participants in this study had completed their undergraduate degree in their home country. Temilayo had completed his schooling in his home country, Nigeria, before moving to Germany to train as a nurse. Only Benedito had done a BSc in the UK prior to beginning his master's degree. All the participants said that they had found some differences between their experiences of undergraduate study and their current post-graduate programmes. While for some participants these differences were mainly related to the need to study and write in English rather than in their first language, others also described difficulties in making the transition to master's level study in the UK, including the need to comply with academic writing conventions in terms of grammar, punctuation and referencing and the need to engage critically with research in their field. For several of the participants this transition seems to have been characterised by a great deal of struggle and confusion, particularly with regard to the expression of critical evaluation in writing, yet most were ultimately successful in terms of achieving good grades on their assignments. Since participants' experiences of transition may have influenced their perceptions of the salience of certain contextual factors, it is worth considering their stories in some detail.

5.5.1 Temilayo: 'I don't know if there's any secret around it'

Interestingly two of the participants, Ananthi and Temilayo, began the interview by emphasising the differences and difficulties that they had experienced. In both cases, I started with an outline of what I hoped to cover in the interview, to which these two participants responded by telling me what they had found different and

difficult at the start of their UK master's programme. The following extract is Temilayo's response to my explanation at the beginning of the interview that I was interested in his experiences of writing on the master's degree course:

T.   I'm very thankful to you because when I first started it was really difficult to understand how to do the academic writing and everything so especially when it had to do with having to do some critiques and everything so I didn't really understand how that would work but if you remember very well I mean when I first started I contacted you to say I was having some problems with academic writing (yes) and that has really helped me a lot er and then because I don't attend the uni particularly (aha) because erm I'm a distance learning student it was even more difficult so I then tried to buy some books and erm try to read on how to do the writing academic writing and everything so I was attending some I was doing some courses at I mean simultaneously as well at St George's (aha) for the continuous erm what do they call it

In this extract, Temilayo emphasises how difficult he found academic writing at the beginning of the course, particularly the need to be critical. He then goes on to point out a factor which contributed to his difficulties (distance learning), and to position himself as both an active, engaged student (seeking solutions to his difficulties) and as a hard-working professional (doing a full time job, a master's degree and CPD courses at the same time).

A little later in the interview, in response to my question about why he had chosen this MSc, Temilayo emphasised the difference between the exam-based system of assessment he had experienced in Germany and the assignment-based UK system:

> T.   […] when I got here I found out that there is a bit of problem (aha) because I was speaking German (yes) I mean and then I found out that the way I the way we we actually didn't write essays there so we do exams (aha) so that is the problem (yes) so we basically write exams (aha) and that is the end so when I got here I found out that it's essays essays essays and I found it really difficult to cope and especially when they mentioned to me that I had to erm critically analyse things so and I was asking everybody 'what do you mean by critically analyse' and nobody was actually able to tell me definitely what it is but I found it out myself (yes) I think it's a bit better now.

Here, Temilayo seems to suggest that he experienced three problems. First, he remarks on the problem of language: he had to make the transition from studying in German to studying in English. Second there was the transition from an exam-based to a coursework-based system of assessment. Temilayo's repetition of the word 'essays' combined with his claim that he 'found it really difficult to cope' gives the impression of a relentless stream of assignments, and his construction of the situation suggests that the problem of writing essays in English were already huge even before the addition of the third problem – the need to include critical analysis in

his writing. When I asked Temilayo what he had been told about critical evaluation, he replied as follows:

> T.   that's exactly what I'm saying because when that er when that word or I'd say phrase when it first came across I was like what do they mean by critically analysing things or evaluating things so I had some friends who had been writing essays and I would ask them but I don't know if there is any secret around it and I mean it's simple to tell you okay you do it this way this is what they mean but it's like nobody was able to tell me clearly what that means but everybody was saying you'll find it out in time (both laugh) and really I found it out in time I'm really more confident in writing I mean in evaluating literatures now and everything so although the grammatical aspect might be still erm sub-optimal but in terms of trying to look for the things I need to evaluate critically I think er it's a lot better.

In this extract, Temilayo highlights a problem which many students may face: the difficulty in finding someone who can explain what is meant by critical evaluation in academic work. His comment 'I don't know if there is any secret around it' is partly joking, but other remarks, such as 'I found it really difficult to cope' and 'I was asking everybody…' suggest that this concept was a real source of stress and confusion for him. Although Temilayo did not discuss the transition to a more independent approach to learning at length, he echoed other participants' comments about the benefits of an independent approach to learning when he described how he had

asked a tutor the exact meaning of critical analysis, but she was unable to provide a satisfactory answer:

> I did ask one of the er tutors there that was the English tutor to sort of explain er what do you mean by critically analyse this and she was like 'well these are things you find out as you move along in your writing' academic writing yeah well I think probably is a way of making you find out for yourself and then erm it probably sticks better rather than somebody telling you this is how to do it

In suggesting that the tutor's intention was probably to encourage him to find out for himself and hence learn better, Temilayo seems to take the charitable view that her aim was to benefit him. Either it does not occur to him or he is too polite to say that she may simply have been unable to explain what she meant by critical analysis. In Temilayo's case, Clughen and Connell's (2012) description of the struggle to make sense of academic writing practices as 'Kafkaesque' seems particularly apt, but other participants also described feelings of confusion about how to approach their assignments or even about the reasons for their relatively high grades and what they could do to improve their writing further.

5.5.2   Ananthi: 'It was painful but yes it was something good'

Like Temilayo, Ananthi seemed keen for me to know that she had never written essays before coming to the UK as she spontaneously introduced the topic in response to my general opening question about her background:

S.   […] so could you tell me a little bit about your background what you studied before whether you have any professional experience

Anan.   I did my bachelor's in science but majored in nutrition and dietetics (aha) and straightaway I started with my master's and I did not have any kind of work experience before

S.   okay

Anan.   also erm in academic viewpoint we had exam based assessment and not essay ba- er I never wrote essays before so that was different in my master's

My opening question is quite general and does not specifically request details of differences between past and present approaches to study, yet Ananthi seems to think it is an important point to make at the beginning of the interview. A little later in the interview we returned to the topic of differences:

Anan.   Erm we had lectures like six days a week and here we just had lectures one one day a week which was again different I felt this was much better because this gave us time to do a lot of reading for a lot of reading a lot of self study rather than having to attend classes every day and it was kind of like we were spoon fed back home and here was more of independent learning and I think this was much better

S.   aha so you've actually enjoyed (yes) the independent learning

Anan. It was painful but yes it was something good

S.   aha why was it painful do you think

Anan. Because I'm used to being spoon fed and given every information and told how where to look for which books to refer here we had to do everything on our own so it was di- it was kind of difficult to change from that but erm over the period of time it's much beneficial than what what I did in my undergrad independent learning it's definitely much beneficial

Ananthi seems to hold a very positive view of the more independent approach to learning which she has been required to adopt. Although she acknowledged, in response to my question about whether she had enjoyed the independent approach, that the process of adaptation has been painful, she volunteered a very positive evaluation ('much better', 'much beneficial') without any prompting from me and repeated it several times, ending with an emphatic 'it's definitely much beneficial'. It is interesting to note however, that like several other participants, she states that 'here we had to do everything on our own', which seems to imply there is little support from the course tutors. In addition, it seems as if she is about to describe the

transition as difficult but then she adds a hedging phrase, 'kind of difficult', perhaps not wanting to position herself as a student who has really struggled to cope.

Following a brief discussion about which languages Ananthi spoke (Tamil as a mother tongue and English for official purposes, including study), I asked her how she felt about academic writing generally, and she responded as follows:

> Anan. Erm it's a bit tough because er erm obviously we did not have a very strict rule of I mean not like er we did not really follow academic English even though we did er learn in English and everything but they never really focussed because especially they would say since you're a science student you really don't need to look er look at your language er they would correct grammatical mistakes they wouldn't er reduce marks for that in our exam papers so I feel erm there was a disadvantage for me and I do find it difficult sometimes erm

In this extract, Ananthi frames her difficulties with writing in terms of language, particularly grammar. Her description of the situation in India where she claims there were no strict rules and no penalty for grammatical errors seems to imply that the situation is different in the UK with more emphasis on correct use of English and a reduction in marks for errors. Then in response to my question about her experience of writing the first assignment she mentions other problems including uncertainty about how to approach the assignment, the need to develop an academic voice in her writing and a lack of familiarity with critical evaluation.

Anan. Erm it was I did not know I was confused I did not know what exactly I
was supposed to do but erm I managed to score sixty so

S. yes that's quite good for a first assignment isn't it

Anan. Yeah it was kind of surprising for me as well because I it was my first
experience writing essay and there were a lot of things like I had to
focus on my academic the voice that I used I also I wasn't really
familiar with critically analysing so er and stuff

Thus, like Temilayo, Ananthi mentioned the need to include critical evaluation in her
writing as a source of difficulty in her first assignment, and in a similar way to
Temilayo, she positions herself as a pro-active student, seeking out advice from
tutors and fellow students and making an effort to follow it:

S. cos I was just looking at that one now and I noticed you included quite
a lot of critical analysis quite a lot of directly critical language you know
and how did you decide to do that do you remember

Anan. I er did take a lot of advice from er Dr David Wheeler who was my
programme convenor I also had help from you and er classes

164

academic writing classes that I attended and also I took advice from

one of my flatmates who was an American and she kind of helped me

and I just incorporated every all the information that I got (aha) into my

essay

S.   did you actually go and talk to David or is it just what he said in the

class

Anan. I did talk to him and he just he did not look at the academic part but he

did explain to me how to critically analyse I mean what exactly this

assignment means and what I'm supposed to do

In fact, Ananthi seems to have had more success than Temilayo in finding

constructive advice because she included a substantial amount of critical evaluation

in her first assignment, which was entitled 'Critically analyse the key factors

influencing protein requirements in adults'. For example, in her introduction which is

reproduced in reduced form below, she problematises the issues of protein

requirements and nitrogen balance, thus suggesting that these are issues worth

investigating:

Protein need in adults varies from one person to the other. Nitrogen balance is a key
factor in determining protein requirements. […] Many factors affect the nitrogen
balance and hence it becomes very difficult to achieve and maintain nitrogen
balance. […] This essay will discuss the difficulties in assessing protein needs
accurately by taking into considerations the limitations of techniques used to assess
the needs as well as the factors affecting protein needs of an individual.

However, the advice Ananthi received seems to have led her to view direct negative criticism as a key aspect of critical evaluation. For example, in the extract below, which is the first paragraph of the main body of the essay, all the evaluations (underlined) are negative, and most of them are directly critical of the two techniques under discussion (e.g. 'shortcomings', 'failure', 'inaccurate' etc.).

Techniques used to measure protein requirements

Determining the protein requirement <u>has never been easy</u>. Nitrogen balance technique <u>has been criticised repeatedly by many researchers</u>. This technique <u>has many shortcomings</u>. <u>One of the practical drawbacks</u> of the nitrogen balance technique is <u>failure to measure accurately</u> all modes of nitrogen intake (such as spillage and residue on plates) and nitrogen loss (such as loss through skin, sweat, and desquamation) which leads to an <u>inaccurate</u> positive nitrogen balance {{39 Anonymous 2007}}. Protein requirements measured by carbon oxidation technique gave <u>controversial</u> results {{44 Fürst,Peter 2004}}. The estimates showed higher protein requirement by this technique than the nitrogen balance technique. This difference was eliminated by reanalysing data using nonlinear regression and the addition of miscellaneous nitrogen losses {{41 Pencharz, P.B. 2003}}. Still this technique is considered <u>poor</u> because of the <u>difficulty</u> involved in making sure that the balances are accurate {{44 Fürst,Peter 2004; 41 Pencharz, P.B. 2003}}.

Most of the direct negative criticisms which Ananthi included in her essay are aimed at methods for evaluating protein requirements rather than at individual researchers. However, in one comment on the carbon balance technique, she directly criticises the researchers who pioneered this method:

> Young et al (1986), who pioneered this technique [carbon balance], did their initial studies in fed state <u>only</u> (cited by {{41 Pencharz, P.B. 2003}}). This made it <u>difficult</u> to say whether the data represented 24 hour amino acid requirement. Also this technique could be used to determine those amino acids whose carboxyl group is released in carboxyl pool directly so that it can be traced in breath. Even in 24 hour study <u>the above limitations remains</u>.

In this extract, the underlined words and phrases are clearly negative evaluations of the work of Young *et al.* It seems likely that the third sentence in this text is also a negative evaluation although it contains no lexis with negative connotations.

In addition to direct negative criticism, Ananthi used a variety of other ways to express critical evaluation. For example, following her negative evaluation of the nitrogen balance and carbon balance methods for determining protein requirements, she gave a detailed account of the theory and the research behind the indicator amino acid oxidation (IAAO) method. This account indirectly creates the impression of a positive evaluation perhaps because it suggests that the development of this method was very systematic. In addition, the account ends with a directly positive evaluative statement:

> The indicator amino acid is another technique which also uses stable isotopes. This technique is based on the theory that in presence of a limiting amino acid all other essential amino acids are not used in protein synthesis and the excess, including the indicator amino acid, therefore, gets oxidised {{45 Elango,Rajavel February 2008}}. When intake of limiting amino acid increases, IAAO decreases which indicates the increased incorporation into protein. On fulfilment of the requirement of limiting amino acid, no further changes takes place in the oxidation of the indicator amino acid. This is called the breakpoint and it is identified using bi-phase linear regression analysis which shows the mean or the EAR of the limiting amino acid. Bayley et al (1983) developed this method to estimate protein requirements in pigs (cited by {{45 Elango,Rajavel February 2008}}). This

167

Ananthi also included some detailed descriptions of research studies which evaluated protein requirements in different populations, including information about the number of participants and which method was used (although in other cases such details are missing). Finally, she used a range of reporting phrases to introduce research studies and their findings, which serves to construct a view of knowledge as the contested product of human activity. Some of these ways in which Ananthi chose to express critical evaluation, such as the strong direct negative criticism of the nitrogen and carbon balance techniques, may be considered inappropriate by the scientific community. In addition, her work contains grammatical and lexical errors which sometimes make it difficult to follow her line of argument. However, the range of linguistic resources which Ananthi used in this first essay to express critical evaluation seems to indicate that she had reflected deeply on this key aspect of academic writing. Yet she reported that the feedback which she received on this

assignment focused mainly on grammar and the formatting of references. I asked Ananthi whether the lecturer had also commented on her use of critical evaluation, but she said she could not remember. This issue will be discussed in Chapter 6.

5.5.3 Padhma 'Everything is new for me'

Like Ananthi, Padhma was generally positive about the differences between her previous experiences of studying medicine in India and her current MSc programme, but she struggled with unfamiliar writing practices at the beginning of the course. In response to my question about how the master's course compared with her medical training in India, Padhma described it as 'very different':

> P.   Very very different actually (laughter) actually erm here a good thing is like everything what I'm learning everything is new like (aha) it's not exactly what I did in my country and it is like going into erm some internet search and doing something very professional for a post-graduation level (aha) so very interesting and it is like er erm making you to you know search for more information and collect and like (unclear) so each course work we do on obesity is like more and more we learn about obesity than you know erm compared to my undergraduate it's like whatever is in the book we just read that one and then we do the examination but this is not like that you need to search and take more information from your side so very interesting that one

S.   okay so in India you had just text books did you (yeah) the university told you which text books to read (yeah) and you just had to read the text books and learn what was in the text books

P.   Yeah and some of the class lectures and they might be collecting some information from outside that is the thing and we need to do our examination or anything (aha) but here it's in your hands so you need to do everything from your side

S.   Yes and in India did you have any of the kind of assignments that you have here

P.   No not at all

S.   was it all exams

P.   Everything is new for me (aha) all my course work my English writing everything is new

Padhma seems keen to emphasise that the whole approach to study and learning on her master's course is very new and different from her experiences in India. In response to my first question, she states that the experience is 'very very different'. Then at the end of this extract, instead of answering my question 'was it all exams?' with a 'yes' or 'no' she emphatically states 'everything is different'. Padhma also

stresses the importance of autonomy and may be implying that she feels she receives little support or guidance from tutors when she says 'here it's in your hands so you need to do everything from your side'. Unlike Ananthi and Noor, Padhma did not indicate that she had had difficulties with the transition to a more independent approach to study. However, in response to my question about whether she had found writing assignments difficult at the beginning of the course, she replied as follows:

> Really difficult because when I came my first assignment was within some one month within a month I think so so people who are who knows about this one before are very fast and we don't know how to write at all so I was just searching how to do this work so it was not very helpful for me and then I started er just taking English class then I came to your English class and then my first course work when I gave I didn't know how to put full stop and how to do referencing all those stuffs so those although the information is there er the comment is like because of poor referencing and poor English writing (aha) it's not even when I er umm take my first work and if read then I can make it out the difference from the first one to this one because my English was not good for the first one yes

Thus, Padhma framed her initial difficulties in terms of problems with punctuation, language and study skills. Her remark 'the comment is like because of poor referencing and poor English' suggests that the feedback on her first assignment was focussed on study skills. Unlike Temilayo and Ananthi, Padhma did not mention being concerned about the need to include critical evaluation at this point in the

171

interview. She compares herself and perhaps other international classmates ('*we don't know how to write at all*') with students who have experience of writing assignments, implying that the first assignment was much easier for them, and stated that she had felt 'depressed' as a result of the feedback and the grade on her first assignment. This will be discussed further in Chapter 6.

5.5.4   Noor: 'you feel alone sometimes'

Noor was also positive about the transition to a more independent mode of study but seemed a little more ambivalent than Ananthi and Padhma. Noor had explained at the beginning of the interview that there was much more emphasis on exams than coursework assignments in her country. A little later in the interview I asked her whether she thought there was any difference in tutors' expectations for the content of the assignments compared with her experience of doing exams in Iran, and she responded:

> Noor   No but I think the style is different in my country the tutor come to class give you every knowledge everything in your plate everything ready to just eat but here you create the whole knowledge I mean you how can I say you force yourself to doing something your tutor probably guide you sometimes even so you feel alone sometimes so just force myself to do something but it's the better way because already my tutor know all of this he can give it to me he can teach it in the class but you leave me that area to the researching and find the things and er I'm happy mmm this style mmm the thing is I just fed up with my English I knew

I'm not born here I'm not study here I'm not expecting so much for myself for my accent or change it but I need to a little bit improve compared from last year

Thus, on the one hand, Noor spoke enthusiastically about the difference between studying in Iran where, echoing Ananthi's metaphor of spoon feeding, she claims that tutors provided students with everything they needed, and the UK, where she sees students as being responsible for creating knowledge. However, she seemed to imply by hedging the verb 'guide' with 'probably' and 'sometimes' that she feels tutors do not always provide sufficient support. She then suggests, on a more positive note, that independent learning is better 'because my tutor already know all of this' but she sounded less certain when she said 'and er I'm no I'm happy some mmm this style mmm'. This doubt may be due to her frustration at her level of English, which she seems to suggest has not improved as much as she would like, but she also implies with the phrase 'force yourself/myself', which she uses twice in this extract, that independence requires a certain amount of effort and struggle.

Although Noor seemed somewhat ambivalent about the amount of support she received from her lecturers, she appears, like the other participants discussed above, to have sought out guidance from them in order to improve her grades. When I asked her whether her supervisor had given her any feedback on the structure of her formative assignment, she explained that he had agreed to look at a draft of her review paper before she submitted it:

S.   […] did he say anything about the introduction the conclusion

173

Noor   Not really that much but I'm going to see him again / when I'm

talking about other assignment I'm say have one left with you I

need to improve my I don't want to be in the same mark or less

than that and he said you can bring it the final one and have a

look and say to you which part need a change

Thus Noor positions herself as both proactive in seeking out feedback and as a

motivated student who is not satisfied with simply passing her assignments but who

wishes to learn from feedback in order to improve her grades.

The emphasis that these four participants, Temilayo, Ananthi, Padhma and Noor,

placed on the differences and difficulties that they had experienced in transition,

whether in terms of approaches to studying or in terms of language, seems to serve

almost as a plea for recognition that any perceived 'deficiencies' are not entirely their

fault. In addition, their accounts of their attempts to find out what is required for

successful academic writing position them as pro-active students doing their best in

very difficult circumstances. This is particularly true for Temilayo and Ananthi, who

brought up the topic in the interview before I had raised the question of differences,

but also for Padhma and Noor, who emphasised how different the master's course

was from their undergraduate degree. In particular, the interview data discussed

above suggests that for these participants the transition from a system in which

students were provided with information in lectures and textbooks and required to

learn it for exams to one in which they were expected to seek out information for

themselves, organise it and critically evaluate it in course work assignments was a positive but sometimes painful change.

5.5.5 Noy: 'I have to criticise them; it's the assignment'

While Temilayo, Ananthi, Padhma and Noor struggled to some extent with the transition from exam-based assessment to course work assignments, Noy, who had come from a similar system, appears to have experienced less difficulty. In response to my question about whether her master's degree course was different from previous courses, she replied:

> Noy   hmmm it is in many ways like in undergraduate we normally be assessed by examination like hmmm a paper examination or oral test but here mainly we have to write an essay or review article

> S.   Aha so how does that influence the way that you studied do you think

> Noy   Yeah it gives us more a wider like point of view because we have a opportunity to search into information ourselves but in my undergraduate it's mainly they will provide us information and use for the exam

As can be seen in the interview extract above, Noy discussed the differences between her experiences of undergraduate study in Thailand and post-graduate

study in the UK in very similar terms to Ananthi: in Thailand information was provided by the tutors and learnt for use in examinations. However, unlike some participants, she framed her experience of independent study in purely positive terms as '[giving] us more a wider point of view' and as 'an opportunity'. Although Noy did discuss some differences between higher education in Thailand and the UK as well as some of the difficulties she had experienced with academic writing in English, she did not place as much emphasis on these as some of the other participants did. It is possible that she expected the UK higher education system to be very different from that of Thailand and so she was prepared to deal with those differences in a way which Padhma, Ananthi and Temilayo, who had completed at least some of their education in English, were not. For example, Noy registered for the academic writing classes which the university offers to all post-graduates whose first language is not English as soon as she arrived. She also made full use of opportunities to book individual tutorials with a writing tutor. In contrast, Padhma did not join the writing classes until she began to experience difficulties with writing and negative feedback from her tutors. Similarly, Temilayo, who was registered as a distance learning student, contacted the English Language Unit for advice on academic writing after he failed an assignment.

Thus, in response to my question about her experience of writing the early assignments on the course, Noy discussed her difficulties mainly in terms of language:

Noy.   I find it at first I find it difficult to write what I think because sometimes I think in Thai and I have to translate and the sentence structure is

different between Thai and English so it's quite difficult I worked

through each assignment more experience in reading so it provides me

more experience to write

However, later in the interview, when I asked Noy specifically whether she was used to including critical evaluation in her previous experience of academic writing in Thai, she said that it was an unfamiliar practice for her and one which she had found very difficult:

Noy   not at all no we've never expressed any [critical evaluation] (laughs)

        like we do very little evidence-based discussion normally we er my

        undergrad is like erm clinical pharmacy we learn from the case of

        patients and then we discussed the case but we didn't discuss the

        evidence

[…]

S.   and how did you feel about it when you

Noy   very difficult (laughs) at first I had to read like almost a whole paper in

        order to criticise but later on I just read the methods part and the

        abstract and then I can catch the important information the paper wants

        to express

In this extract, Noy seems to suggest that the focus of her undergraduate course was more practical (learning from patient case studies) rather than theoretical (discussion of evidence from published research). In addition, she appears to view critical evaluation as relating mainly to research methods since she has learnt to focus her reading mainly on the abstract and the methods section of research articles in order to critique them.

I then asked Noy how she had learnt to be critical in her writing:

S. aha and how did you learn how to express criticism or be critical (er) in your own writing

Noy. er just the words (aha) that you use? Er adjectives erm the adjectives and adverbs help me a lot in criticism and erm how do I learn to criticise

S. yes

Noy yeah I just have to read and read

S. aha so you looked at how other writers expressed criticism (yes) and then tried to imitate them (yes) did you find it at all uncomfortable to be

> Noy   to be critical yes I think I'm not like the writers is are like surely good better than me and I have to criticise them so it's awkward but yeah I have to do it it's the assignment

At first, she replied that she used adjectives and adverbs, and this seems to be a reference to an exercise from Swales and Feak's (2004) *Academic Writing for Graduate Students*, which involves classifying evaluative adjectives, and which we did in the writing class. She then seems to reinterpret the question and responds that she has to 'read and read', which I interpreted to mean that she imitated other writers, and she confirmed this. Bearing in mind Tardy's (2005) finding that her Thai participant was uncomfortable with the need to be critical of other researchers in his writing, I started to ask Noy about this. Although it might have been better to ask a more open question, such as 'How do you feel about the need to be critical', the fact that Noy completed my question for me suggests that was not simply giving me the answer she thought I wanted. She then offered an explanation for her discomfort – 'the writers is are like surely good better than me', positioning herself as less expert than the researchers whom she is required to critique, but also, with her use of 'have to' indicating obligation in her comment 'I have to do it it's the assignment', as a pragmatic, compliant student.

However, later in the interview, when I asked Noy to point to some examples of critical evaluation in her review paper, it became apparent that she preferred to express it indirectly, which may be partly a result of her discomfort with the need to be critical:

179

Noy   aha erm yeah like somewhere like here I'm not directly criticize about

the use of a case report which someone who have the background will

understand it's just a case report it's not strong enough (yes yes) erm

somewhere else I evaluate the methods they use that it's different in in

any er articles I'm referencing so it should not be compared yeah

Here Noy indicates that she understands critical evaluation to include detailed

descriptions of research design which indirectly inform the reader that studies on

apparently similar phenomena cannot necessarily be compared. In this way, she

positions herself as a writer communicating with expert readers who do not need

directly evaluative statements in order to understand the strengths and weaknesses

of a study.

Oats controversy

Many studies and literature reviews have been done to evaluate the safety of oats as a gluten-free food [11, 23, 24]. Evidence suggests that most coeliac patients are able to consume pure oats safely. Oats are high in fibre and vitamin B12 content. Moreover, it can increase palatability and help reduce LDL cholesterol which is beneficial to cardiovascular health [25]. A double blind randomized controlled trial in children with newly diagnosed coeliac disease showed that the consumption of moderate amounts of oats (15 grams of oats daily) does not prevent intestinal mucosal healing and does not affect serological parameters [25]. This study found no significant differences in biopsy specimens between two groups: one following a standard gluten-free diet and the other following an oats-containing gluten-free diet (p>0.05).

In fact, the expression of critical evaluation in this extract is quite complex. On the one hand, the description of the study in the first paragraph - a double blind randomized controlled trial – suggests to the reader that it is likely to have produced more reliable evidence than the case report in the second paragraph. On the other hand, the ordering of the information serves to cast doubt on the findings of the first study, and this extract ends with an evaluative comment on the need for more research.

Noy's review article includes other instances of critical evaluation, some of which we discussed in the interview. For example, she stated that she always included information about the research design and when discussing findings from studies, she included the significance value (p). However, when I asked her why she did not always include the number of participants, her reply seemed to indicate that she viewed negative criticism as more important than positive evaluation:

Noy   er okay if like er if normally if I mention how many participants it means like it's little it's not so much but if it's like in the hundreds or thousands then I didn't mention it

S.   aha so do you think the reader will *know* if it's not mentioned that there were hundreds

Noy   erm no (laughs) yeah yeah but sometimes I think like if they would like

to know more information they can follow the reference (aha) yes

(okay) because I have the word limit

With her explanation that she only includes information about the number of participants for small studies, Noy implies that it is necessary to highlight weak evidence rather than strong evidence. Although she quickly offers an explanation for not always including the number of participants, her hesitation and laughter in response to my question about the reader's knowledge suggests that she had not really considered this issue before.

5.5.6   Benedito: learning to express ideas 'in a scientific way'

Whilst all the other participants in this study presented relatively coherent narratives of their struggles to understand and engage in post-graduate academic writing practices, and their interview data offered useful insights into their writing practices, Benedito's story proved more difficult to unravel. He was the only low-achieving student who agreed to participate in my study, and at the start of the interview, when I asked for permission to record it, he appeared slightly hesitant. At first, he suggested that perhaps we could do the interview but that I would not use the data in my thesis. However, when I explained that this would not be very useful for my study and it might be better to abandon the interview, he agreed to participate fully.

Benedito's reluctance to participate may have been linked to his relative lack of success on his master's course. Whilst some of the other participants had struggled with academic writing at the beginning of the course, they were all achieving satisfactory grades by the second term, and these participants seemed to welcome the interview as an opportunity to tell their stories of overcoming adversity. In contrast, Benedito continued to fail assignments or achieve only the bare minimum passing grade throughout the course. Other students who appeared to be struggling in a similar way to Benedito had refused my invitation to participate in my research, which suggests that discussing unsuccessful academic writing may be an uncomfortable experience for some students. This may be why Benedito's answers to my questions were sometimes unclear, and they appear to shed little light on his writing practices. He seemed to be trying to give me the answers he thought I expected, and we sometimes seemed to be talking at cross purposes. For example, when I asked him which journal he had chosen to write his review article for, Benedito seemed to misunderstand my question as referring to journals he had read:

S. […] the review paper erm it is supposed to be a review paper written for a specific journal yeah did you choose a journal and write for a specific journal when you were writing

B. yeah actually I went to the some journals

S. (2.0) aha okay (2.0) but erm normally you are supposed to choose a journal

B.   just one journal

S.   and say I am writing for this journal

B.   okay

S.   did you do that

B.   (1.0) to be honest I went to the two or three different journals (yes) where I was based

S.   yes so that was looking for information

B.   for information but I chose one with the sexually transmitted infections (aha) and where I got the more information (okay) I think by seeing the references you can identify which one is more referred

S.   aha erm okay but when you were writing it you didn't say I am writing for this journal no

B.   no I didn't specify that

In this extract, my first question and Benedito's response to it are both quite direct. However, the pauses in my follow-up to Benedito's response are indicative of my discomfort at having to inform him that he has misunderstood my question and

therefore probably also the assignment instructions. Following my next direct question (did you do that?), Benedito also pauses and then claims to have looked at two or three different journals. Then in response to my request for clarification on whether he used those journals to search for information, he says 'but I chose one with the sexually transmitted infections […] you can identify which one is more referred', which seems to be an attempt to imply that he did what the task required and selected a journal. However, the list of references that accompanies his review article does not support this claim: of the 31 references included in the list, 27 are clearly journal articles from 19 different journals, and four of these journals contributed two articles each. Therefore, no single journal dominates the reference list, and this suggests that Benedito's response in the interview extract above is an attempt to give me the answer that he thinks I require rather than a reflection of what he actually did. It should also be noted here that Benedito's referencing within his review paper is so inaccurate that his reference list may not represent an accurate record of the reading that he actually did for the assignment either.

In this particular case, I pushed for a more specific answer to the question of whether Benedito had selected a journal or not ('you didn't say "I am writing for this journal", no?'), and I received one ('no I didn't specify that'). However, it is clear that this was a slightly uncomfortable exchange. Therefore, I sometimes chose not to persist with other questions, such as the issue of inaccuracies in referencing, which Benedito may have found even more face threatening than the question of whether he had fully complied with the assignment instructions:

      S.   okay number twenty-two like your reference is Moore and Glen yeah

               and it says 'investigation shows that condoms are distributed in public

places such as schools hospitals hotels pubs and health centres the ability of using condom properly is high evidence of preventing any sexually transmitted infections' I looked at the paper by Moore and Glen

B.   Yes

S.   and I couldn't find that they actually said that erm

B.   okay

S.   so

B.   yeah in this case maybe what I have to do I have to go back to my references or to the reference that where I got the information and to recheck it maybe This needs a bit of analysis. Check intonation and pauses, and note use of 'maybe' twice. Also add that there were many mismatches between claims made in Benedito's review article and the actual content of the articles to which he referred, and this is discussed in chapter 7.

In contrast to the five participants discussed above, who all indicated that they had experienced some kind of struggle in making the transition to master's level study, Benedito, who appeared to be the least successful of my participants in terms of

grades, did not raise the issue of his difficulties in the interview. Instead, when I asked him whether the master's course had met his expectations, he discussed the difference between his undergraduate and post-graduate courses in terms of expectations around use of language, particularly the need to express ideas in a precise scientific way:

> B. no actually it helped me to get another picture especially for scientific way of thinking and even interpreting you see undergrad when you are doing just a degree things are a little limited (unclear) you can see that this is a degree but in MSc er I was getting the feedback like saying no this is not correct way of saying the thing that you said is correct but the way that you said it is not correct in scientific way because you are not presenting your things to people who they are selling in the market but they are professional (unclear) so you must have a correct way of presenting that

It is unclear whether Benedito is quoting the words of one his lecturers here when he compares market traders with professionals or whether he is just conveying his understanding of what was said. Like several other participants who described receiving negative feedback on their assignments, Benedito also includes some positive feedback – the thing that you said is correct. He went on to say that he was trying to put his lecturer's advice into practice in his daily life:

> Just it didn't impact me in academic ways but impacted me even to my day to day living life because when I talk to some people er even I know I have to

say this way but I will try to say it in ac in scientific way the way that I can know affect someone

In the next chapter I will consider how Benedito's experience and identity as a leader in the Angolan community in London seemed to influence his approach to his review paper. The interview extract above suggests that his learning on the MSc course had the reverse effect, perhaps impacting on the language he used for people seeking advice in the community.

Although Benedito did not discuss any difficulties with his transition to post-graduate study, he did imply that his undergraduate studies had not been entirely smooth, partly due to his limited knowledge of English when he began his course:

S.   yes yes okay erm so you already have some experience of studying in the UK

B.   yes

S.   yeah how did you get on on your undergraduate course

B.   it was very difficult because firstly when I came in UK I could not speak
        English (aha) at all just Portuguese and some local language (mmm) and I
        have to learn everything (aha) to learn everything but as I was willing one day
        to do my degree to do a public health in place of going to give all my life by
        waiting to get money I was thinking to invest (aha) even with the language

challenge I had to try to invest (yes) yes and I was trying to do my best I had a difficulty but some teacher when they see the way that you are behaving (aha) er what you are trying to gain and some people they was helping they was helping and I tried to complete or I completed my honours degree (yes) in public health

S.   well done and erm did you have to study English then before you started your honours degree

B.   to be honest I did just some basic (aha) basic things in English yeah

S.   mmm so you

B.   I didn't have money to invest more in English (aha) yes

I did not pursue the question of how Benedito had come to be accepted on an undergraduate degree course with only a basic knowledge of English since this was not main focus of the interview. It is possible that if he was struggling with English, he may have developed some writing strategies which helped him to pass his assignments at undergraduate level but which were less successful at master's level.

5.5.7 Amanda and Anouk – problems with English

While Benedito framed the transition to master's level study in terms of a change in his view of academic language, he did not highlight any particular difficulties with this

191

change. In contrast, Amanda and Anouk both indicated that they had struggled a little with the transition from writing in their own language to writing in English. Interestingly, they both specified that their previous academic writing had been in their own language although I did not ask that particular question. Amanda began her response to my question about differences between her previous studies and the MSc by stating that there had been more emphasis on exams than on essays. Then after explaining that she had also written essays and research projects, she added 'and it was written in Spanish':

Am.   we didn't have to write so much essays it was more with exams

S.   okay okay erm so was it all exams on the previous course or

Am.   not all exams we had a couple of essays but maybe just or like big research projects maybe just three a year and it was written in Spanish

In this extract, Amanda seems to imply that the transition to studying for a master's degree in the UK has not been easy. First she suggests that she has little experience of writing essays, but the fact that she had three essays or 'big research projects' a year seems to contradict this. Her comment that these assignments were written in Spanish seems to create an unspoken contrast with the fact that she now has to write in English with the implication that writing in Spanish was easier.

In a similar way to Amanda, Anouk also pointed out that she had completed her previous studies in her own language. She did this at the very beginning of the

interview, in response to my general opening request for some information about her background and previous studies:

> An.   I did my undergraduate my bachelor in the Netherlands and I studied
>   nutrition and dietetics that was four years all in Dutch

As with Amanda's comment about writing in Spanish, Anouk's statement that she studied for four years 'all in Dutch' highlights a difference between her previous and current studies with the possible implication that studying in English is more difficult.

Both Amanda and Anouk then went on to frame their difficulties with writing at the beginning of the course specifically in terms of language, although Amanda also said that she struggled to organise her ideas in both Spanish and English:

> Am.   I've always struggled writing even if it's in Spanish or in English but I
>   think the part that gives me more problems or at least at the beginning
>   er with the English was the those words that you say the same in
>   Spanish and in English but it has a different meaning in English
>
> S.   okay so it's like a vocabulary problem erm
>
> Am.   yes

S.   and so even in Spanish you struggle with writing what kind of problems

Am.   the structure

S.   aha so just generally the overall structure

Am.   yes and trying to develop ideas

In fact, the language problem that Amanda highlights here, a difficulty with 'false friends' in English and Spanish vocabulary, is a relatively minor one. It is possible that she chose to tell me about it because language is not in fact a major issue for her but because she sees me as an English teacher, she feels she needs to talk about language.

Anouk also responded to my question about whether she had experienced any difficulties in academic writing with a comment about specific language difficulties:

An.   it it becomes easier because I'm doing more and more but in the beginning I found it really hard to make good sentences and the tenses those kind of things

It is often assumed that students from northern European countries such as the Netherlands will have few difficulties with academic study in English. However,

Anouk's comment that she found writing good sentences and managing the verb tenses 'really hard' suggests that she did not find academic writing easy at the beginning of the course. This is despite the fact that she was the only participant in this study to have completed the university's summer pre-sessional course, which aims to prepare students for the linguistic demands of their academic courses. In response to my question about whether she had found the pre-sessional course useful, Anouk responded as follows:

> An. Yeah a lot yeah I always had difficulties with English in secondary school so it was good to look at it again and on a more academic level and I am more interested in it now than when I was younger

This comment indicates that Anouk was not making a smooth transition to studying in a language with which she was familiar and confident. Thus, although Amanda and Anouk appear not to have struggled to make the transition to master's level study in a new culture in the same way that some of the other participants did, by highlighting the fact that they are writing in a language that they have not previously used for academic study, and by discussing the difficulties that they experienced in using this language, they seem to make a bid for recognition of their achievements. In addition, analysis of their review articles and interview data reveals that both these participants experienced some difficulties with the expression of critical evaluation in their writing, and Amanda, like Temilayo, struggled to obtain useful feedback on how to improve her writing. In the interview, she stated 'I'm not sure what I'm doing good

or what I'm doing wrong because usually they say like good writing good discussion and that's what I get but I don't know what to do like to get my grade to go up.' These issues will be discussed in the following chapter.

5.5.8   Jenny: 'it's quite similar'

Unlike several of my other student interviewees, Jenny did not appear to have found her master's course very different from her previous experiences of higher education. Jenny described it as 'a different knowledge system because the theories of Chinese medicine are totally different from that of Western medicine', but when I asked for clarification on this, she said that the approach to study was similar because she had been trained in critical thinking:

> S.   and is it different in approach in the things that you're required to do in the way that you're assessed

> J.   erm I think er to a certain extent er it's er the it's quite similar yeah because it needs our critical thinking like writing a paper yeah

> S.   and that's the same as you did in

> J.   yeah yeah

> S.   in Hong Kong

J.   yeah yeah it's different from the theory yeah but the way I was trained

er is critical thinking yeah I think it's more or less the same

In highlighting the fact that she is familiar with critical thinking, Jenny positions herself as a student who is competent in a valued skill in UK higher education. It is possible that she is aware that East Asian students are often perceived to lack critical thinking skills and wishes to resist being positioned as deficient in this area. However, it should also be noted that Jenny was the only participant in this study who had already completed a master's degree in her home country and this may be one of the reasons why she seemed better prepared.

5.6   Conclusion

Try to bring in something about ac lits and add something about participants' understanding of CE as revealed in this chapter.

It seems clear from the interview data analysed in this chapter that for most of the participants in this study, the transition to master's level study in the UK was characterised by varying degrees of confusion and struggle. Most participants seemed to want to position themselves as facing challenges, either cultural or linguistic or both, in making this transition. Several appeared to embrace the transition from an academic context in which they were 'spoon fed' to one where they were expected to be more independent, but they also indicated that this was sometimes a lonely and difficult experience. In particular, Temilayo's account of his attempts to elicit advice on critical evaluation reflects Clughen and Connell's (2012) description of the situation faced by new students struggling to make sense of the

'rules' around academic writing as 'Kafkaesque'. Several participants give the impression that they underwent quite extreme culture shock, and, challenging the stereotype that East Asian students are likely to struggle the most with Western education practices (Ryan & Louie, 2007), in this small group, it is the students from India and Nigeria who were already used to studying in English who appeared to experience the greatest shock. This may be partly because their familiarity with the language led them to expect a familiar educational experience. Anouk and Amanda, whose previous educational experiences in the Netherlands and Honduras respectively were perhaps most similar to the UK system, described struggles with writing in English.

Having mostly overcome the challenges that they faced at the beginning of their course, the student participants appear to have used the interview as an opportunity to seek some recognition of both their struggles and their success. The two participants who did not describe difficulties in making the transition were at opposite ends of the spectrum in terms of academic success: Jenny perhaps had no need to describe problems in transition because she had not experienced any, while Benedito may have been uncomfortable discussing his difficulties because he had not overcome them.

It is possible that the interview participants make these bids for recognition of their struggles and success because these issues are not acknowledged by their lecturers. Certainly, in the first lecture, the lecturers make no comment on the fact that many of the students in front of them are entering an unfamiliar education

system. Rather, the lecturers construct two contrasting identity positions for the students. With references to working in a lab and being a team member who can write a review paper, they construct images of themselves (Haggis, 2003) as expert research scientists. On the other hand, by making statements about plagiarism and grammar, they position the students as potentially deficient. Whilst the interview data presented in this chapter suggests that at least some of the participants perceive themselves to be somewhat deficient in certain aspects of their academic writing, they appear to resist the 'deficient' label by positioning themselves as pro-active students seeking advice from peers, tutors and books in order to better understand the academic writing practices they are expected to engage in.

This reflects Scott *et al.*'s (2014: 171-2) argument that:

> In the context of wider practices of attribution and normalisation, and associated discourses of deficit and anxieties about 'dumbing down', students struggle to be recognised as legitimate or authentic university students. Forging an identity as a post-graduate student in a university is arguably intensified in the context of the academic hierarchies that produce 'dividing practices'; what it means to be/come a Master's student is different from what it means to be/come an undergraduate student. Such differences are marked out by ways of being and doing, and thus the subject is required to perform in particular ways in order to be recognised as a viable student. Students therefore need to know how to decode the dominant pedagogical practices in particular disciplinary contexts in order to 'be a student', and thus in ways that allow them to be recognised as legitimate subjects. This requires the student

to conform to the dominant practices of the pedagogical context and at the same time master those practices. Students who do not understand the 'rules of the game' are likely to be misrecognised in problematic ways.

The data presented in this chapter suggests that some participants appear to feel that they were misrecognised in the early stages of their course. Padhma, for example, suggested that some native speakers received a higher grade than her because they were more familiar with the dominant academic writing practices expected by the lecturers rather than because the content of their papers was of significantly higher quality. In their attempts to make sense of the rules of the academic writing game and be recognised as legitimate Master's students, several participants sought clarifications from their tutors in face to face conversations. This advice-seeking suggests a desire for dialogue, and as Scott *et al.* (2014) point out, opportunities for both formal and informal dialogic feedback are important in helping students to develop their ability to include critical evaluation in their writing. Data presented in this chapter suggests that it is often through such dialogues, rather than through written feedback comments, that students gain insights into the expectations of their lecturers. This will be further demonstrated in Chapter 6, which presents an analysis of the ways in which factors in the academic context influenced participants' writing practices.

6 The Academic Context and Student Identities

6.1 Introduction

In Chapter 5, I presented my findings related to participants' transitions to post-graduate study in the UK. This chapter now focuses more specifically on the review article assignment and the influence of the relatively foregrounded (Goodwin and Duranti, 1992) academic context on participants' writing practices, including the ways in which participants understand and express critical evaluation in this assignment. It seems obvious that since the participants in this study are students on a taught master's course, the learning environment and their identity as a student are likely to be important contextual factors for them. However, it is interesting to consider how the participants positioned themselves as certain kinds of students in the interviews and which aspects of the context appeared to be particularly relevant for them in their approaches to academic writing in general and critical evaluation in particular. In this case, several of the participants appeared to feel that they had been somewhat negatively positioned by some of their tutors as somewhat deficient in English language and/or study skills, and they seemed to resist this positioning by constructing identities as pro-active, hard-working, compliant students struggling to do their best in difficult circumstances. Thus, in discussing their responses to feedback and emphasising their efforts to understand their tutors' requirements by seeking advice from their tutors and peers, participants were not only giving a factual account of how they improved their writing practices but also doing identity work.

Although the participants were in theory writing a review article for a specific journal, the context in which they are operating is very different from that of a typical review article author, since, as noted in Chapter 2, reviews are generally written by scientists engaged in research related to the topic of their review. Van Dijk's (2008) definition of context as a subjective mental model which includes the identity, knowledge, goals and intentions of discourse participants suggests that discourse produced by different participants in the same context will vary because individuals will perceive different contextual factors to be more or less relevant. In addition, van Dijk points out that we can only gain access to individuals' mental models of context through analysis of their discourse and the aspects of the context which they index.

The contextual factors which emerged as particularly relevant for participants in this study were tutor feedback and their efforts to engage with it, and the supervisor as the intended reader of their final review, both of which appeared to be motivated by participants' desire to please their tutors and hence gain good grades. In this study, much of the feedback that students received seemed to reflect Lea and Street's findings that staff feedback is frequently expressed both in terms that are simply not comprehensible to students and in a 'categorical modality' (Lea & Street, 1998) in that it consists mainly of imperatives and assertions. Much of the feedback that I saw was brief and it was often unclear what kind of changes the tutor required. However, as noted in the previous chapter, some of my participants were able to seek a more dialogic engagement with their tutors, and some of these dialogues gave them useful insights into their lecturers' requirements, particularly regarding the expression of critical evaluation in academic writing.

In the following sections, I will present my analysis of the ways in which feedback and the supervisor as intended reader of the review article influenced participants' approach to the assignment, particularly the expression of critical evaluation. As in the previous chapter, the analysis draws mainly on the interview data but where relevant extracts from the participants' written assignments are included to illustrate how they put their understanding of critical evaluation into practice. As stated at the beginning of the previous chapter, my data chapters do not deal directly with my individual research questions, but this chapter contains data which relates to all four questions: how contextual factors influence writing practices; how participants negotiate the tension between writing for a journal and writing for a lecturer; the identities that participants construct in their writing and in the interviews; and lecturers' evaluations of student review articles.

6.2   Feedback

Although the students have a range of sources to draw on when deciding how to approach their review paper, including the module handbook, their notes and the lecturer's Powerpoint slides from the first lecture, the guidelines for authors in their chosen journal, and published review articles, an influential factor for many of the participants in this study seemed to be what they perceived to be the requirements of their supervisor. The participants seemed to gauge these requirements from the written and verbal feedback which they received on their assignments, comments

made by their tutors in class, and the responses they received to specific questions and requests for clarification. Participants often discussed their difficulties with writing in terms of language and study skills, particularly referencing. In some cases, this may have been because this is what they expected me to be interested in as their writing tutor. However, it also seemed to be at least partly a result of the feedback which they received on their formative assignment and other early assignments on the course, which positioned them as deficient in these areas.

6.2.1 Focus on language and study skills

I asked all the participants what kind of feedback they received from their tutors on their early assignments, particularly the formative assignment which they do for the Communications module and which forms the basis of their review paper. Depending on their answers, I also asked some of the participants how useful or comprehensible they found the feedback. Several participants said that the main focus of the feedback had been on use of language and referencing.

> Er the first one er he didn't give me like you the er actually I didn't get any feedback like you (aha) just give it to me and then say to you have a grammatical mistake you need to improve your English and give some mark but he said to me you are in the right track you choose good articles so I'm happy and I think those articles for the final one as well (aha) and just not like to point it out and then give me er which part is really I did mistake (Noor on the formative assignment)

Yeah yeah my first comment was from my tutor was like er you have information but the referencing's not good and the English writing is not good and everything is not quoted in a clear way so I I just got depressed when I saw my first one because my first one I got some fifty-nine or sixty something (Padhma on her first assignment)

Yes it was mainly for my references (aha) I did not use proper references […] there was there were some places where I was supposed to write et al and I wrote all the names some places where I did not put comma or like the colon and erm the references list as well I did make some mistakes I did not write put the title in italics (Ananthi on her first assignment)

er yes I wrote some orthographics error errors if this is the way that I can say it like some spelling and also grammar (yes) yeah grammar […] (Benedito on the formative assignment)

Similarly, when asked about the feedback on their presentation, which constitutes 20% of the final grade for the module and which is designed to help students plan their final review paper, most participants reported that the comments had focussed mainly on issues such as the design of their Powerpoint slides:

she said erm it's some of the sentence in my slides is I I er extracted is an extract from the journal so she said it should be my words yeah my

206

concluded sentence not like copy the whole thing […]and the rest is

like okay I should she said I understand well about the content (Noy)

He's happy for all the things he said it's really good but the most

problem is I'm speaking so fast and the font of my slides is too small

(Noor)

the thing is that the only thing they said it was something good but I did

it in eight minutes cos I was little bit nervous I had practised back home

but the thing is that I had to cut a lot of slides down cos it was too long

but then when I left it for ten minutes when I came here I ended up with

eight so it maybe it looked like I didn't put much effort or so that was

like the critique […] that I could have expanded a little bit more

information (Amanda)

These three participants all indicated that they had received a positive general

comment along with specific negative comments related to presentation skills.

According to their accounts, they did not receive any specific advice to help them

improve the content of their final review paper. However, Ananthi and Benedito both

said that their feedback included some content-related comments:

Not really I mean it was o- better than the first presentation that I had to

give but er there were some issues with my slides like I did not put any

settings for it to go forward automatically but it did go and I had like no

control over that (aha) and sh- I think that was pretty much the problem

with it cos when I asked for feedback that's that was the main and also

the fact that my topic was too broad like it was broad and certain terms

were not clear (Ananthi)

er the feedback that I got it from the presentation I wasted more time

on showing the background of the sexually transmitted infections

without of explaining the strategies […] I was supposed to go

straightaway to the strategies (Benedito)

The feedback comments which Ananthi and Benedito say they received appear to be

more directly related to the content of their presentations than some of the other

feedback reported by participants in this study, but these are still quite general

comments. However, in Benedito's case, this feedback appears to have had little

impact on his final review paper because out of 13 pages, five and a half are devoted

to the introduction. In the interview, Benedito explained that this introduction

constituted both an introduction to the topic (strategies for controlling and preventing

sexually transmitted infections in the community), designed to engage the reader's

interest, and some background information about sexually transmitted infections

(STIs). He then added that this background section was necessary because the

reader needed first to understand STIs before being able to control them:

B.   yeah because er logically (aha) you cannot control any disease or prevent a disease (mmm) if you don't know disease (aha) for example to control me as B. (mmm) you must know me

S.   yes

B.   If you don't know me it will be difficult to control me (aha) where I live you don't have my address (mmm) which way I came from to come to your office you don't know (yes) it was the reason that I tried to give introduction and for the same time a background (aha) about what the sexually transmitted infection it is

S.   yes yes okay

B.   and then I went to the strategies (aha) of controlling and preventing which are maybe two or three or four strategies (aha) using condoms education case management and er they are the strategies

Benedito seems quite confident here that he has taken the right approach to the structure of his essay. His tone is slightly didactic as he uses an analogy to explain to me (a non-scientist) why it is necessary to understand a disease in order to be able to control it. This confidence may be why he chose not to revise his paper in response to the feedback on his presentation, or it may mask a sense of confusion about what exactly his supervisor requires.

Ananthi, on the other hand, was a little more successful in that she at least appeared to understand what her supervisor required and why. However, the resulting text was rather disjointed. Firstly, Ananthi had difficulty identifying a sufficiently narrow focus for the review paper. The focus of her formative assignment was quite broad - gene-nutrient interaction in cancer, diabetes and cardiovascular diseases and the ethical issues of nutrigenomics – so her supervisor suggested that she should just focus on cancer:

A. Er the thousand words er that's where she asked me to not write about diabetes and cardiovascular and she asked if I could er be more er elaborate certain terms because they were like certain terms that not many people would be familiar with so she asked me to elaborate on that

Following this feedback, Ananthi eliminated diabetes and cardiovascular disease from her review paper, but the feedback that she received on her presentation still indicated that her topic was too broad and that she needed to provide more explanation for key terms:

A. […] the fact that my topic was too broad like it was broad and certain terms were not clear

S. so the same feedback on the presentation as on the formative assignment

A. Yes I did not explain a lot of the terms and I included like short forms and abbreviations but I did not er elaborate them

The feedback that Ananthi received on her presentation suggests that it was not enough to simply focus on cancer; she should perhaps have selected one type of cancer, or as she proposed:

A. Maybe if I just focussed on one particular gene and its relation to cancer but er my concern was it was four thousand words and there isn't much research in this field yet so I wouldn't have been managed I wouldn't have managed to find so many articles so

However, in another comment she indicated that she had had to cut a lot of information out of her final review article in order to comply with the word limit. Therefore, she could perhaps, with a little more guidance from her supervisor, have found a narrower focus for her paper.

The feedback comments on the need to explain key terms for the reader led Ananthi to include a number of definitions in the introduction to the review paper. Thus, while the introduction, which is reproduced below, includes the 'moves' which 'create a research space' and hence engage the reader's interest, as identified by Swales (1990), it feels somewhat disjointed because these elements are interspersed with definitions.

Introduction:

The term 'gene-nutrient interaction' may mean one of the following: 1. A SNP (single nucleotide polymorphism) that regulates the effect of a specific dietary component on a specific phenotype, or 2. Dietary components that directly or indirectly act on DNA and gene expression at a molecular level (1). *Nutrition is an important environmental factor which decides who among the genetic susceptibles will develop the disease or the condition (2). Studies have shown a considerable variation between and within the populations in their biochemical genetics and these are highly significant for nutrition.* The application of high throughput functional genomic technologies in nutrition research is called nutritional genomics (3). *Nutrients, micronutrients and phytochemicals found in food can regulate the expression of genetic information (4). A link between dietary habits and degenerative diseases such as cardiovascular diseases, type 2 diabetes and cancer has been established.*

Nutrients and genomics interact at two levels (5)and hence the broad field of nutritional genomics is divided into two research specialities - nutrigenomics and nutrigenetics (6),*their common goal being to optimize health of the population through personalized diet* (7).The study of effects of nutrients on genes is called nutrigenomics whereas the study of individual genetic variation on the interaction between diet and disease is called nutrigenetics (6). Methodology used in nutrigenetics is the identification and characterization of genetic variants that are responsible for different response to certain nutrients or food components. These variations are generically designated as polymorphism which includes polymorphism of single nucleotide (SNP), differences in the number of copies, inserts, deletions, duplications and rearrangements. Nutrigenomics research currently uses the genomic tools such as metabolomics, transcriptomics and metabolomics.

Single nuclear polymorphisms (SNPs) interact with nutrients and other bioactive components of food (8). Based on the Genome-wide association study (GWAS) it has become evident that metabolic inefficiencies can be caused in humans due to SNPs (9). Therefore it is reasonable to consider that the SNPs may affect the dietary requirements of an individual.

The response to a nutritional therapy is not the same in all the individuals (10). Paoloni-Giacobino states that this has led to the difficulty in understanding the responses to nutrients and food in a population based intervention studies. Identifying whether it is possible to use the information derived from these studies to provide reliable and predictable personalized dietary recommendations for specific health outcomes is the biggest challenge. People may benefit from this optimized nutrition to reduce the incidence of obesity, type 2 diabetes mellitus (T2D), cardiovascular diseases and several types of cancers and infectious diseases (11).

The goal of this review article is to view in detail the polymorphisms in the endogenous oxidative enzyme MnSOD (manganese superoxide dismutase) gene, VDR (vitamin D receptor) gene, Androgen Receptor (AR) gene and methyltetrahydrofolate Reductase (MTHFR) gene and their association with

In her effort to comply with her supervisor's suggestion to include more definitions, Ananthi seems to have produced an introduction which is not very 'reader friendly'. The need for review articles to be reader friendly was highlighted by one of my lecturer participants in a discussion about the introductions to two student review papers: one about tree nut allergies, which she viewed positively because it had 'a good flow' and 'told a story', and the other a highly technical, jargon-ridden paper on the subject of lycopene (an anti-oxidant found in tomatoes), which she regarded, on first reading at least, as more problematic. Although she began to revise this opinion as she examined the lycopene paper more closely, she identified two issues with the introduction which had caused her to judge it negatively: the introduction was too technical with insufficient definition of key terms and it was not 'appealing' to the reader:

> […] when you go into betacarotene all this kind of scientific jargon you really have to have kind of not slow learning a good starting you know (aha) a cushioned starting point otherwise like you know immediately just (reading unclear) hydrocarbon and all these things it's very technical just very and that is the introduction you know just deep into that chlorophyll er betacarotene C20 domains and all these things even not defined not defined kind of abbreviations (aha) so when people are reading this it has to be someone who is really an expert in whatever it is [the writer] could bring that at a later stage and just give some very broad introduction even if it just one paragraph (aha) and then slowly just take that person you know and slowly help him or her go up the stairs or whatever (yes) so it is a bit diving into it er umm and then

214

lycopene it is not common it's not a common name er which everybody

knows […] tree nut and all this kind of thing they are quite (aha) familiar

that's what I mean

These remarks suggest that this lecturer does not expect readers to necessarily be

an expert on the topic of the review article they are reading, and that the amount of

background information provided in the introduction depends on how familiar the

reader is likely to be with the topic, something which may be difficult for students to

judge. In making the comparison with the other student review paper that we were

discussing, she implies that some topics, such as nut allergy, are more familiar to

non-expert readers, and therefore likely to require less 'cushioning' at the beginning.

She also highlights the importance of defining terms to help non-expert readers

understand the topic. But then she goes on to state that it is important for the

introduction to be appealing:

Make it more appealing you know create the interest (aha) the interest

at the end of the day of course that is the most important thing about

the antioxidants they are there to protect the individual from chronic

disease such as cancer and all other chronic inflammation so it is really

something that will make it more erm worthwhile doing that or someone

reading it and also it's more important that er to make that important

association er of the substance to the er to the purpose or the

importance of that specific substance in health (aha) so yeah she could

have introduced a little bit of what it is in a way and after that it will be

autodrive they will follow better (yes) what she has written

Therefore, the writer needs to make the topic of the article both accessible and appealing, possibly whilst not deterring more expert readers who do not wish to be patronised with basic definitions. This highlights the importance of students and lecturers understanding the audience of the journal for which the student's review is intended. Anouk, for example, assumed that she was writing for an audience of practitioners who would need clear explanations of basic processes, but her lecturer criticised what he regarded as excessive attention to basic details (see section 7.6.2). Although Ananthi has attempted to both cater to less expert readers by providing definitions and appeal to all readers by showing why gene-nutrient interaction is an important topic, the lack of flow between the different ideas in the introduction results in a somewhat incoherent story.

Since the participants discussed in this section did not show me the feedback comments they received from their supervisors, it is not clear how accurate these accounts are. However, it seems that the comments on language and referencing are what stood out as salient for them. Although the rubric for the formative assignment explains that students will receive feedback on content from their supervisors and feedback from on writing style and use of English the writing tutor, many students, not only the participants of this study, report that their supervisor's feedback comments mainly focused on problems with referencing and language.

6.2.2   Resisting the 'deficient student' label

In their accounts of the feedback on their early assignments, Noor and Padhma both indicate that they received a positive general comment about the content of their assignment. They both also describe an emotional reaction to the feedback: Noor was happy because she was told she had chosen appropriate articles, while Padhma was depressed because she perceived the grade to be low. Padhma went on to discuss how she had compared her work with that of some of her classmates:

> P.   That's my first mark because you know I just worked so much for that one and umm I put a lot of effort and when I got the mark and er just I compared with a few people sorry to say I compared with a few people even there's no information the English is good and if it is in a good flow then they can score more marks so when I saw that one then it was a bit upset for me when I submitted my first one then I started working on it I I just worked on all the three things which they asked me to do yeah

Here Padhma seems to suggest that in her view, her work may have been stronger on content than that of some of her classmates whose assignments she looked at after receiving her first feedback. She positions herself as a hard-working student who puts substantial effort into her work, pays attention to the feedback that she receives and uses it to improve her next assignments. In addition, she seems to have the impression that what really counts is the ability to use English well to create a 'flow' in the text.

Both Padhma and Noor made the point that they would have found the writing tasks less challenging in their own language, and these comments seemed to serve as a plea not to be defined as deficient per se, only in terms of language skills.

> Yeah that's the thing like you know if they ask me to do a course work in my language then the way I portray the way I give the information within a few lines will be really strong but since it's just academic one not much of flow I improved but not much of flow that's preventing me to do my course work in a great way (Padhma)

> I think that assign not writing assignment even several times I say if I writing in Farsi probably I get writing better than English (both laugh) if I translate it it can have it better than this (aha) to write it in English but I learn so much when I'm doing the assignment that's a good way I like it […] (Noor)

Thus both these participants resist their lecturers' attempt to position them as 'deficient' by stating that they would have done better in her own language. Padhma is quite confident in this assertion ('the way…will be really strong') while Noor is somewhat more cautious ('probably I get writing better than in English').

Benedito also made a comment in the interview which suggested that he wished to resist being labelled as a 'weak' student by his lecturers. In his case, rather than

framing the issue in terms of language, he suggested that a lack of familiarity with information technology might put students from developing countries at a disadvantage:

S.   aha okay and is it I suppose is it very different in terms of the kinds of assignments that you have to do from your undergraduate or from studying in Angola

B.   yeah it's in Angola actually we had a limitation like to start using the computer on this time I didn't get any chance of using the computer just for accessing the email and to do the assignment you need to type it computer it was an issue to use computer you need to have electricity electricity it was an issue and even the books they are limited I remember when I was maybe twelve years when you go to the library you need just to spend two hours to get out and to let another student to go in as well yeah and all those things even yesterday I was trying to think for myself er what I'm getting the feedback right now isn't because oh I'm not clever but maybe the people from this school they must to understand the background that someone is bringing or he brought it till now from the country that he came from

Benedito did not really answer my question, which was about types of assessment in Angola and on his undergraduate degree in the UK, rather than about the conditions under which assignments might be produced. Rather he seems to have taken this as

an opportunity to discuss something different. Since Benedito had also completed a BSc in the UK, it seems unlikely that he was still at a disadvantage compared with other students as regards ability to use IT and find resources. His comment 'what I'm getting the feedback right now isn't because oh I'm not clever' suggests that he feels he is being pathologised for his problems with academic writing. He explicitly stated that his difficulties are not due to a lack of intelligence and makes a plea for lecturers to recognise that some students might be disadvantaged by their previous educational experiences.

Benedito had also commented earlier in the interview, in response to my question about how much writing he had done during his nursing training, that he had been 'a good student' in Angola:

> B.   er actually we used to do some writing because you need to write a project and also as I was a good student one of the good students we used to present a lot like attending seminars and presenting to the seminar that means we was writing a lot

> S.   so were you presenting to other students and your tutors or

> B.   yes to the not just the students it was to the health personnel like professional of health yeah

These comments about being a good student and presenting at seminars for health professionals as well as students reflect Benedito's attempts later in the interview to

position himself as a respected professional in the field of public health. This will be discussed in the next chapter.

6.2.3   Seeking clarification on feedback

While the feedback that many participants received on their early assignments seems to have focussed mainly on language and study skills, some participants seem to have elicited more useful feedback by approaching lecturers directly and requesting clarification. For example, Padhma described how her formative assignment had elicited some useful advice on critical evaluation. However, this appears to have been the result of a conversation with her supervisor which she initiated, rather than the supervisor's written comments. This is her response to my question about her experience of writing the formative assignment:

> P.   It [the formative assignment] was really poor it was really poor when I gave to my tutor like I got the feedback from my tutor and though there is no mark many just red that one just say it's an average performance then I asked him like what way it falls to average one and then he said like it's not clear it's not clear and it's like a review one you need to write what people have done and it's er what I used to in the initial stage I used to collect er the points from all the articles I put my own words and then I just write only the points but I'm not discussing about what's written so that is also a main drawback of my writing initially so when they said that one from my next coursework I started erm to to

give explanation about that one it's like you know the thing and you say

your own point so

Here it seems that the supervisor's use of the red pen along with his comment that Padhma's work was 'average' led Padhma to view her work as 'really poor', which suggests that she may have been accustomed to achieving higher than average grades in her previous educational experiences. In addition, Padhma's account of her writing process highlights a difficulty for many students whose first language is not English: the need to use their own words to summarise and paraphrase ideas from the texts they are reading. Although Padhma does not specifically say that she found this difficult, she lists it as a clear step in her writing process, which suggests that it may have taken her attention away from other aspects of writing, such as the need to evaluate as well as summarise. In seeking clarification on her supervisor's feedback comment that her work was of average quality, Padhma learned that she needed to do more than simply identify relevant points in research articles and paraphrase them; she also needed to comment on the research she was writing about rather than simply summarising it.

In order to check what Padhma had understood from her supervisor's comment, I asked her to show me an example in her review article, and she identified a section where she had suggested a reason for the differences in findings between two sets of studies:

P.   Yeah (shuffling papers and silence) yeah this one this page like I just
      said about er all about the hormonal action 'evidence suggests this

ghrelin' all those stuffs and then I just said the those studies the short term studies didn't give much of er a positive result so er there is no significant weight reduction 'in contrast few studies have shown no change in plasma ghrelin concentrations' some have shown result but some have not shown the result I just explained why those studies might have gone into a negative result so I just said 'the negative result in previous short term studies might be due to limited negative energy balance during these exercise bouts that have failed to alter the ghrelin concentration' so these kind of points I never used to do in the beginning of my course though it is not like the English barrier doesn't allow me to write what I'm thinking in a very fluent way but something a little bit like this I started including that's the thing

The relevant extract from Padhma's review article is reproduced below with the sentence which she identified as critical evaluation underlined:

Evidence suggests that ghrelin, an orexigenic appetite stimulating peptide hormone secreted from stomach and small intestine, is increased by both short term and long term exercise in overweight adults. Jurimae et al. (2007a) investigated the effect of exercise on plasma ghrelin levels in elite male rowers and after a 6000 m rowing ergometer test (30 minutes) there was an increase in ghrelin ((+ 24.4 %, P< 0.05) and decrease in leptin concentration (-15.8%; P< 0.05). The acute negative energy balance caused by short term exercise seems to be more effective in alteration of hormonal level and decrease in body weight. Long term aerobic exercise for 1 year without caloric restriction among 173 postmenopausal sedentary overweight women has also shown significant weight reduction (1.4 ± 0.4 kg) compared to the controls (Foster-Schubert et al, 2005). Evidence suggests that normal weight exercising women along with weight loss do have greater increase in ghrelin concentration than weight stable exercising women (Leidy et al, 2004). In contrast, a few studies have shown no change in plasma ghrelin concentration after submaximal rowing (Jurimae et al, 2007b), running (Schmidt et al, 2004) or cycling (Dall et al, 2002). The negative results in these short term studies might be due to

Thus, Padhma's conversation with her tutor seems to have led her to understand

critical evaluation, or at least one aspect of it, as suggesting reasons for differences

in research findings. In this interview extract, Padhma again positions herself as on

the one hand deficient in language skills, and on the other hand as a 'good' student,

one who takes a systematic approach to her assignments as well as paying close attention to her tutor's advice and trying to implement it. However, it is important to note that she needed to seek out this advice on critical evaluation by talking to her supervisor as it was not (according to her account) included in his written comments on her formative assignment.

Similarly, in a discussion about her perceived reader (presented in section 6.3) Ananthi described how she had developed an understanding of the relationship between detailed descriptions of research studies and critical evaluation by asking her lecturer for clarification on his feedback comments:

An. […] like er in there were some comments where he said oh you did not include the number of patients or you did not include there was like small details which I felt were not important but yes of course they are important so er I improved in that sense like how to critically analyse a paper

S. aha why are they important details like the number of patients

An. Erm maybe one study might have less number of patients and the other more and maybe that's why they have a difference in their data and also the dose of er his second essay was all about omega 3 and how the dose of omega 3 maybe one group one study used a lower dose and the other one higher dose and so it was important to include

the dose and I think I did not include it for all the papers I mean for all the studies

S.   and does David does he explain so he tells you you need to include more details (yes) does he also explain why or does do you just guess why

An.   No he did I mean he is not erm until unless I ask something erm sometimes it's like he tells himself but sometimes I do ask him like why is that information relevant and that's when he tells why is it relevant

S.   aha so do you actually go to him after the class or something

An.   Yes

Here Ananthi again indicates that she was engaging with and reflecting on the notion of critical evaluation throughout her course. She also illustrates a problem which many students face. Firstly, they are not familiar with the need to include details about the research studies they are discussing in their assignments. Secondly, whilst it is not uncommon for lecturers to include feedback comments telling students to include these details (see examples in section 6.3.4), they rarely tell students why the details are necessary. In the case of Padhma, Ananthi and also Noor (see section 6.2.4), it seems that they were sufficiently confident to approach David to request additional feedback, and David was willing to engage with them.

6.2.4   Examples of written feedback

Three participants, Sally, Noy and Anouk, provided me with copies of their formative assignment, which forms the basis of the review article, complete with their supervisors' feedback comments. Although these participants did not receive the type of negative comments on their use of English that Padhma, Ananthi and Noor reported, there is surprisingly little feedback on the content of the assignment. For example, the feedback for Sally and Noy, which was provided by the same supervisor, consisted of between five (Noy) and eight (Sally) brief comments on points within the assignments with no general advice on how the assignment might be improved as it is developed into a review paper. Anouk's feedback, which was handwritten, consisted of a series of ticks in the right-hand margin, three single-word comments written on the first page, and three brief comments at the end.

The feedback provided by Noy and Jenny's supervisor seems to be aimed mainly at socialising the students into disciplinary writing practices. For example, several comments praise aspects of the students' writing which are valued in academia. In Jenny's case, for instance, the supervisor wrote 'Good first few sentences highlighting the condition and reason why it is an important area of study with appropriate referencing' at the end of the third sentence in the introduction. In a later section of the essay, where Jenny included some direct negative criticism of a study, the supervisor commented 'good to include this critical analysis of the study', thus

indicating to Jenny that direct negative criticism is acceptable practice. In a section in Noy's essay which contained a description of a research study, the supervisor wrote 'good you include some study details, try to indicate the quality of the study/if it is the only study published in that specific area'. This comment contains some praise for valued practice but also some advice for improvement although there is no indication of how Noy might indicate the quality of the study. The supervisor made other comments on Noy's work about the need to indicate if the studies under discussion were the only ones on a particular topic or if they had been chosen for a particular reason, but again she does not explain why these details are important.

As the supervisor who wrote the feedback comments on Jenny's and Noy's assignments did not give any reasons for the changes which she suggested, I asked Jenny, who brought her feedback to the interview, how she had interpreted some of these comments. For example, the supervisor had commented on one of Jenny's descriptions of a study 'Interesting info, consider including some study details, maybe number participants, were they from the UK?' When I asked Jenny why she thought the supervisor wanted these details, she suggested two reasons:

> erm I think erm because it's a kind it's a questionnaire er erm about the
> attitudes of the erm the parents of the er baby children er and er it may er the
> attitudes may be different from different erm cultures and ethnic groups so
> she asked me to er state it specifically er on whether this er question er study
> er was conducted in UK or in other countries yeah because this course is
> based in UK and I think er she needs to see some innovation about UK

This response suggests that Jenny has not fully understood the purpose that a detailed description of a piece of research serves in a review paper, which is often to allow the reader to judge the quality of the research and its findings.

Of the eight feedback comments on Jenny's formative assignment, two relate directly to use of English and suggest that this particular supervisor is very sensitive to vocabulary choices which might not be considered completely suitable for a scientific paper. In the first instance, Jenny had written the following sentence: 'Thus clarifying the role of food on AD can provide solid grounds for identifying the effectiveness of dietary avoidance'. Her supervisor responded to the use of the word 'grounds' with this comment: 'Try to keep wording scientific, this is bordering on journalistic writing style'. Therefore, in the final version of her review paper, Jenny substituted 'grounds' with 'rationale'. However, she was not able to understand her supervisor's second comment – 'wording would benefit from clarification' - on her choice of the word 'overlooked' ('As late non-eczematous reactions are more likely to be overlooked…'), so she made no change to the final version. When I asked Jenny if she had had an opportunity to discuss her review paper with her supervisor, ask for clarification on any of the feedback comments or show her a later draft of the review paper, she replied brusquely 'no she's very busy she hasn't got the time to read every article'. Thus, while some participants felt able to approach their supervisor for additional advice and clarification, this was not true in Jenny's case.

Interestingly, when I asked Noy in the interview about the feedback she had received on her formative assignment, she claimed that it related mainly to grammar:

N.   yes mainly about erm some about grammar grammatical errors and some are she said some it's too vague and in some points she said yes it's a good area to consider kind of

However, Noy later emailed me a copy of her formative assignment with her supervisor's comments, none of which refers to problems with grammar although the assignment does contain some grammatical errors. Rather, in addition to the feedback comments mentioned above, there are two comments which refer to the order in which information is presented. The first of these appeared in a section entitled 'Nutrients status of patients with CD':

Nutrients status of patients with CD

Wheat, rye and barley are generally found in western food and contain certain essential nutrients such as vitamin D, calcium, vitamin B12 and folic acid. Therefore, exclusion of these foods does not affect only eating habit of coeliac patient, but also their nutritional status. In order to aid the treatment in coeliac patients, substitution of food and ingredients that contain gluten with gluten-free alternatives can improve nutritional sufficiency and compliance to the diet.

1. Vitamin B12 deficiency

An intervention study by Dickey (2002) assumed that vitamin B12 deficiency may not be directly associated with celiac disease. However, researchers found that vitamin B12 deficiency is common (41%) in untreated CD in a small prospective study of biopsy-proven CD adult patients and suggested that it is not secondary to folic acid deficiency (Dahele & Ghosh 2001). Moreover, a more updated review in the hematologic manifestations of CD also presented a parallel result about vitamin B12 deficiency in CD individuals (Baydoun et al., 2012).

> temp
> Maybe indicate whether theses are all the studies relating to coeliac and B12 or two you have chosen, if the later indicate why they are chosen

2. Calcium and Vitamin D deficiency

Vitamin D is associated with calcium absorption. Calcium absorption is decreased when serum 25-hydroxyvitamin D level is less than 20 nmol/L (Lips, 2012). Thus, serum calcium can be a direct indicator for vitamin D status when serum vitamin D level cannot be measured.

CD patients are often present a low Bone Mineral Density (BMD). A survey questionnaire study in North American adults showed a low bone mass effect in both dietary and non-dietary treatment CD patients (Meyer et al., 2001). However, results were predominantly received from postmenopausal women who are known to have a risk of osteoporosis.

> temp   February 27, 2013
> Consider the order you are presenting the information, relating why the deficiency may be seen in coaeliacs

In the final review paper, the only change which Noy had made to this section was to combine these two paragraphs into one. It is not clear to a non-specialist exactly what the supervisor thinks should be added or changed, but it might be argued that Noy has explained why calcium and Vitamin D deficiency may be seen in patients with coeliac disease in the introductory paragraph to this subsection on nutrient status, where she states that the elimination from the diet of cereals containing essential nutrients such as vitamin D and calcium may have an impact on a coeliac patient's nutrient status. On the other hand, it is not very clear exactly how the point on which the supervisor has commented relates to coeliac disease, so this may be what she is trying to say, but since Noy did not make any changes here, it seems that she did not understand what her supervisor wanted.

The second comment that the supervisor made about the order in which Noy had presented information was on a section entitled 'Treatment with gluten-free diet':

This comment seems even less clear than the first one, perhaps especially for a student from a different culture who may have a different understanding of what constitutes a logical order. In addition, the fact that both these comments about order are attached to a single word make it difficult to understand how much of the text needs to be changed. In the final review paper, Noy had moved this section on

treatment closer to the beginning of the paper, so it was followed by sections on non-compliance to gluten-free diet and the nutrient status of patients with coeliac disease. This may have satisfied her supervisor's request for a more logical order since Noy now has a clearer line of argument: approaches to treatment, reasons why patients might not comply with the treatment, and the effects of compliance or non-compliance on nutrient status and how these effects can be resolved.

As noted above, Anouk also gave me a copy of her formative assignment feedback, which was provided by a different supervisor. Anouk's formative essay was formatted with single line spacing, so this may be why the supervisor wrote 'Format!' at the top of the first page, and 'Please format correctly' at the end of his general comments. However, in the interview Anouk informed me that she did not know what her supervisor meant by these comments. The only other two words written on the first page are 'tenses' above the verb in the first sentence of the essay ('The prevalence of obesity and overweight is doubled globally since 1980'), and 'with?' in the left-hand margin about half way down the first paragraph. It is unclear what this latter comment refers to. In addition, of the seven paragraphs in the essay, five have one or two ticks next to them in the right-hand margin. Finally, the supervisor wrote three comments on the back of the essay's cover sheet. In addition to the formatting comment mentioned above, these were 'Overall very good' and 'I think the issue of emotional eating is important and needs to be introduced earlier and more strongly'. What is interesting about this rather minimal feedback is how it contrasts with the comments the supervisor made about Anouk's final review paper when I interviewed him. His interview comments indicated that he was quite critical of some aspects of Anouk's work, and that she might have benefited from more detailed feedback on

her formative assignment, her presentation or a draft of her final review paper. These comments are discussed in more detail in Chapter 7.

In the interview, I asked Anouk whether she had referred to her supervisor's feedback before starting her final review paper, and her response suggested that she had not looked at it very carefully:

> Anouk: Yeah I had it in mind that he thought it was very important to write about eating behaviours and over-eating so I used a lot of references about that so I expanded it but I didn't put it as the first statement in my essay

Her use of the phrase 'I had it in mind' indicates that she may have relied on her memory rather than referring back to her supervisor's comments. This is supported by some comments that she made slightly earlier in the interview on the topic of organising the information and ideas in her review paper:

> Anouk: Because I had in mind that I was writing for other dieticians I thought first I have to explain what stress response is and also for myself cos this was in the beginning of the course I still had to structure all the things about stress and how it works so I first wrote about that and then although now I'm reading the feedback from Patrick maybe this wasn't a good idea

Anouk's final comment here suggests that it was only in the interview with me that she looked carefully at her supervisor's feedback comments. In addition, these comments indicate that unlike most of the other participants in this study (see section 6.3), Anouk did not have her supervisor in mind as her primary reader when she was writing her review. Rather, on the one hand, she was imagining an audience of other dieticians, and this may be why she chose to explain some stress related processes in detail, a decision which her supervisor criticised in the interview with me, and on the other hand she was using writing as a way to learn. Thus, although her supervisor's comments had some impact on the way she shaped her final review paper, her identities as a student learning about a topic which interested her and a dietician writing for colleagues were also involved.

In addition to the limited feedback that she received on her formative assignment, Anouk also stated that she did not receive any feedback on her presentation:

Anouk: Erm no I had to ask several times for my score and I er asked Alan so there were two markers John and Alan so I asked Alan about it because I had classes from him and he looked in his stuff and found his marking thing and erm it was 70 per cent but he didn't know if they were if they agreed for the score so and I emailed John but I don't get something back so yeah I didn't get any feedback or anything

Therefore, in Anouk's case, the theory behind the design of the module – that students will be supported to improve their academic writing and produce a

publishable review article through feedback on the formative assignment and presentation – appears to have failed in practice.

6.2.5   Amanda: Unhelpful feedback

Most of the participants in this study did not complain about the feedback which they received from their lecturers although the fact that some of them approached their lecturers for clarification of feedback comments and advice on how to improve their grades suggests that they may have found the written feedback to be inadequate. Amanda was the only participant who emphatically stated in the interview that she had not received useful guidance on improving her assignments. I began the discussion about feedback by asking Amanda what kind of feedback she had received on her formative assignment, to which she replied that her supervisor's only advice had been to 'add more information on this topic add more add more'. I then asked whether she had found the feedback on her formative assignment or on other assignments helpful, but she was clear that she had not:

> Am.   no no like I'm not sure what I'm doing good or what I'm doing wrong
> because usually they say like good writing good discussion and that's
> what I get but I don't know what to do like to get my grade to go up

> S.   and what kind of grades have you been getting

Am. for the first essay I wrote I got a sixty and then the last one at least I got

a seventy-one I think

S. wow

Am. and the only thing I did different was because the first time I asked cos

it said good good good so I'm like what should I do and he's like add

more articles more references so I tried to double it and at least I got to

a seventy I don't know if that was like the only thing but (okay) at least I

got there

S. aha mmm that's interesting

Am. but that's the thing because I'm not sure what I should do and they

don't criticise on my English they don't say anything so I don't even

know if I'm writing well or not

In this extract, Amanda, like several other participants in this study, positions herself

as a proactive student who is not satisfied with a good grade but wishes to achieve

excellent grades. Like these other participants, it seems that Amanda actively sought

clarification from her tutors on their feedback and then put their advice into practice.

Amanda was a fairly competent writer. She had not struggled like some of the other

participants to deal with major problems with grammar, punctuation and the

formatting of references, and she had some previous experience of writing essays. It may be that in the absence of obvious errors, her busy lecturers were unable to easily identify areas for improvement. However, Amanda expresses a sense of confusion here about her writing. Like Temilayo, she appears to have sought advice about how to improve her writing but did not view the answers that she received as satisfactory or helpful. She did not show me any of the feedback from her lecturers, but it seems from the discussion above that she was motivated to raise her grades from good to excellent and felt that she was not receiving adequate guidance to achieve this goal. However, in response to my comments about how I thought her writing had changed, she did highlight a small incident which had made a difference:

S.   okay no I mean generally it's pretty good the big difference that I feel between this and the other writing that I've seen from you is there is more sense of your own voice in here of you commenting on things and you know recommending things at least whereas with a lot of your writing I've just had the feeling that it's just information you know but there's nothing of you in it at all but then I guess perhaps a lot of the writing that you've done for your assignments has been different

Am.   yes back home it was more information like you could not give your opinion so that's something I did learn over here but not because somebody said it but the lecturer was saying it in class like you have to do this you have to so that's where I got it from

S.   aha so in class they tell you you have to give your own opinion or

Am.   they didn't really tell it I don't know why it just came up and he said

       something like a small sentence about it and I got it

S.   okay do you remember what he said exactly or

Am.   er that you should try to put your opinion as well

S.   aha okay and that's what you've done here and in

Am.   yeah that's what I always try to do at the end of the paragraphs or

       when I'm discussing about studies

In this extract, Amanda highlights a difference between her previous experience of academic writing where she was not expected to express an opinion and her master's degree where she learnt almost by chance that students were expected to include their own views in their assignments. Amanda's comment 'not because somebody said it' seems to mean that this information was not given in feedback comments or in the discussions that Amanda had with her tutors about how to improve her work. In addition, in her comments in this extract Amanda seems to position herself as an attentive student who pays close attention to the lecturer's comments in class. Amanda's approach to critical evaluation which resulted from this chance remark will be discussed in more detail in the next chapter.

6.2.6 Benedito: Struggling to respond to feedback

While Amanda felt that she was not receiving useful advice on how to improve her writing, Benedito seems to have been given some helpful suggestions by his supervisor, but he struggled to put this advice into practice. In particular, the interview data suggests that he understands the need to include details about the research that he discusses in his assignments, but his writing did not generally include these details. This was his response to my question about how his writing had changed over the academic year:

> B.   yes like er before I used to say when I handed the one thousand er the research shows that the study shows that the study referred to that but without of giving any evidence which is the study it was about what just saying the study and but previously when I said the study I have to say the study on (aha) yeah the study regarding who did who conducted the study yeah

> S.   okay and how did you find that out is that feedback from your tutors as well or

> B.   yeah yeah yes

> S.   aha so you need to say what the study is about and who conducted it

> B.   yeah

Thus, Benedito appears to have understood from the feedback he received that he needs to include more details about the research studies he discusses in his writing. In fact, a comparison of Benedito's formative assignment with his final review paper reveals that he did make some changes in this area, but still fails to include information about research design which would allow the reader to evaluate the strength of the research findings. In the formative assignment, no details are included, so when research is mentioned, it is in very vague terms with statements such as the following:

> Researchers revealed that the chance of being affected with sexually transmitted infection to olds people aged from 70 to 95 years old is very low compared to young people and adults.

> Study shows that sexually transmitted infections in women can lead to serious complications such as pelvic inflammatory disease, ectopic pregnancy, cervical cancer, abortion and infertility (Lengen et al, 2010).

In contrast, Benedito included a little more detail in his final review paper, with statements such as these:

> A study conducted by Sadovszky et al (2009) about women's evaluations of a self-administered intervention to prevent sexually transmitted infections during travel revealed that the number of death per year with sexually transmitted infections is increasing in the world (Sadovszky et al., 2009).

A study conducted by Trent et al. (2006) on gender based differences in fertility beliefs and knowledge among adolescents from high sexually transmitted disease-prevalence communities showed that in children sexually transmitted infections can cause pneumonic, low birth weight, eye infection and blindness.

In these two examples, Benedito has included some information about the focus of the study in question. In both cases, this information has been copied from the title of the article. Benedito then states what appears to be the main finding from each study. However, the findings which he describes appear to be unrelated to the main focus of the studies and in fact bear no relation to anything in the original articles, which suggests that Benedito was making more effort to comply with the surface features of academic writing than to critically engage with the ideas and research findings presented in the literature.

In the interview, I went on to ask Benedito whether he had ever been advised to include details about research design when discussing research findings. He responded that he had in fact received this advice from me and from a Health Sciences tutor:

S.   […] so you tell us what the study is about and who conducted it erm but you actually don't give any information about the methods you know sort of how was the study conducted erm how many participants were involved in the study has anybody ever told you to do that

B.   er I got this feedback with you

S.   yes

B.   yeah I got this feedback with you and also but it was for the last time that I handed my work with David yeah he made this kind of comment as well when you do the study you need to refer the method how weak that it was how relevant it was yeah

S.   aha and

B.   I hope maybe to the next works or to the dissertation to try to add all those informations

S.   aha and was that was that written feedback from David or was that something he talked about in class

B.   no he talked he talked

S.   in class or in

B.   when I was doing the I resitted my paper of nutrition before handing the paper I went to see him for feedback yeah from there when he told me about the previous essay

Like several other participants, Benedito reveals here that he received useful advice on writing practices not in written feedback on his assignments but in one to one conversation with a tutor. In Benedito's case, he seemed unable to put this advice into practice: although he states in this extract that he hopes to include details about research designs in his dissertation literature review, he did not do this. What did change in his writing over the course of the academic year was the number and range of reporting verbs that he used. He gradually moves from using a small range of dialogically contractive reporting verbs and phrases ('show', 'reveal' and 'demonstrate') in his formative assignment to a wider range of more dialogically expansive ones (e.g. 'indicate', 'argue', 'agree with') in his dissertation literature review.

6.3   The tutor as intended reader

6.3.1   'He's very strict about the word limit'

The assignment that is the main focus of this thesis is a critical review paper, which students are told to write for a named journal. However, most participants seemed more concerned with what they perceived their tutors' requirements to be than with following the guidelines for authors in their chosen journal. For example, although most journals set word limits for articles, no participant highlighted this as a concern. However, several participants explained how their tutor's perceived strictness about

the word limit had impacted on their decisions. For instance, when I asked Padhma what she was aiming to achieve with her conclusion, she described it as 'simple' and 'very short'.

P.   Yes this conclusion I just gave something like er very simple conclusion for this review to be honest […] because when I put so much of er when I saw the word limit I can't take any information from my essay so I made my conclusion very small for this because it's a vast topic it's not only about physical activity so I need to put dietary management all the managements so then when I came to the conclusion and the word limit made me to write my conclusion small but but whatever the review everything said I just put in the conclusion very short

[…]

S.   and erm sometimes in review articles writers also do things like identifying gaps in research or where future research er should go erm you didn't include that here I think

P.   Yeah I included in all my essays I think except for this one (both laugh) I think yeah it's needed but erm that's what I said because of the word limit I thought of reducing some studies and erm go into that but when you saw my initial one I included so many studies when I compare this one I feel I don't want to miss the information from the study so when I came like that he's very strict about the word limit so even if you make one word more it will be a problem for me so I think I didn't I made my

conclusion short but all other works I think I used to do my future future what we need to do

Thus although Padhma indicates that she is aware of the conventions governing review article conclusions, her key concerns are her sense of attachment to the work she has produced (she does not want to cut anything from the main body of the essay), implications for practice (discussed in the next chapter) and her desire to comply with her tutor's strict requirements on the word limit. In fact, many of the regulations around word limits are set by the university and not by individual lecturers. Whilst other participants did revise the main body of their paper in order to comply with their supervisor's strict word limit and include an evaluative conclusion, in Padhma's case, her preoccupation with her supervisor's strictness on this issue seems to have led her to neglect other important aspects of a review article.

Ananthi was also aware of her supervisor's strictly imposed word limit, and she highlighted a tension between this and what she perceived to be the requirements of the journal (no word limit). However, she seemed more willing than Padhma to edit her paper.

S.   aha do you think if you were actually writing it for publication it would need to be more specific or do you think it's still okay to keep it quite broad

An.   I feel it's still okay and I feel like erm as far I read the journal of nutrition clinical nutrition guidelines it does not really have er limitation on words so I feel like if I had more words I can write this topic I can desc- I mean I can write more about this topic when I was writing this I had to cut down a lot of information just to keep it between four thousand I mean within four thousand words

S.   aha I think John actually said at the beginning did you attend the very first lecture for Communications

An.   Yes

S.   erm I think John said you know you just have to follow the word limit for the journal so if the journal says you can write ten thousand words (yes) you *can* write ten thousand words (yes yes) you know he said like probably you won't want to

An.   But Susan was very specific about it she said she wants only four thousand words

This extract also highlights a problem on the module with different lecturers having different requirements. Students are told at the beginning of the year that they should comply with the instructions for authors in their chosen journal; they should not write less than 3,000 words, but the maximum limit is set by the journal. However,

individual supervisors set their own limits, and these are what my participants

seemed to pay most attention to because their supervisor is the one to grade their

work. In the extract above, Ananthi is very clear about what her supervisor wants but

her information about the journal's requirements may be less accurate since most

journals do set word limits.

While Ananthi felt constrained by her supervisor's requirements, Jenny used the fact

that her supervisor was a little less specific than the journal to her advantage. She

had been obliged to cut some paragraphs from her essay because it was well over

4,000 words but she still exceeded the limit set by the journal because her

supervisor had specified the university's standard allowance of the word limit plus or

minus 10%.

> S.   […] you know because it's a journal article it would depend a bit on
>
>   what journal you've chosen and erm what the limits are for the journal
>
>   you know so if the journal says not more than four thousand words
>
>   then you shouldn't write more than four thousand
>
> J.   yeah that's the limit for the guidelines of the clinical nutrition journal
>
>   yeah based on the guidelines of that journal but Susan said we have to
>
>   limit our word count to four thousand plus or minus ten per cent yeah
>
>   and so yeah I cut the paragraphs yeah

Thus, although Jenny was familiar with the journal's requirements, she chose to ignore its strict word limit and take her supervisor's slightly more generous allowance. Similarly, the journal set the maximum number of references for a review article at 50, but Jenny's review paper included 53 references because 'she [the supervisor] said around 50'.

6.3.2   The supervisor as knowledgeable expert

Participants' comments about the need to respect the word limit set by their supervisor indirectly indicate that when they are writing and revising their review papers, they have their supervisor in mind as the reader and marker. In addition, in response to my question about who they perceived the reader of their paper to be, several participants directly stated that they were writing with their supervisor in mind. For example, Temilayo stated that the only readers he had in mind while writing were his tutors and perhaps also himself:

> S. […] anyway when you're writing do you have a reader in mind are you thinking about who is going to read your paper at all or
>
> T. er not really I know well I'm submitting it for my work and not that I have a particular reader in mind apart from the academic tutors that are going to look into it sometimes I do give it to my friends to have a look but I think I'm the number one reader myself because sometimes I go into this thing and I feel like 'oh did you write this'

Temilayo's comment that he is 'the number one reader' perhaps reflects the fact that students are learning as they write. In fact, as will be shown in the next chapter, where participants had a choice of topic, they tended to choose something that they want to learn about and which will help them in their clinical practice.

In addition, a few participants also indicated that they perceived their supervisors to be very knowledgeable experts. For instance, Benedito explicitly stated that he had in mind a reader who knew than more than him on his topic:

      B.   I knew that it will be more than someone maybe more than with someone who have a knowledge more than me […] someone who have a knowledge more than me in terms of maybe academic or even scientific background

      S.   aha so by that do you really mean your tutor cos you think your tutor has more knowledge than you or just

      B.   or it could be anyone who the university was supposed to give the paper to read it not just my tutor because maybe someone else was supposed to look at the paper and to read the paper and I believe even someone he have more knowledge than me when he look the paper even something he will get there yeah maybe he know something but

he's forgot and looking the paper he will remember oh this is that or this is the pre-contemplation or this is the contemplation

Benedito seems quite certain that his review paper is for a reader who is more expert in his field than he is ('I knew […] someone who have a knowledge more than me'), and in response to my questions he confirms that the reader he has in mind is likely to be a lecturer at the university. Thus, it seems he paid little attention to the requirement to write for readers of an academic journal. Although he does acknowledge that even an expert reader might recall forgotten knowledge as a result of reading the paper, his perception of the reader as someone who is already fully informed on the topic led him to see no need to explain concepts such as 'pre-contemplation'. I asked Benedito about this because I had not been familiar with this concept before I read his paper. His reply suggests that his view of his reader as an expert might have led him to omit a definition which some readers may have needed:

B. I did not give the definition of pre-contemplation because regarding the lecture that we had on writing some assignments it's not relevant to define something that you expect that he knows the reader and when I writing my paper what came to my mind everyone who reads the paper as I said if he's a scientist he will know what the pre-contemplation means

In fact, the Health Sciences lecturer that I interviewed about Benedito's paper was not familiar with the concept of pre-contemplation and thought that a definition was necessary:

S.   yes I see actually there was a small thing that I wanted to ask you about which I discussed with the student as well on the second page erm he talks about erm so let's see one two three four five five lines in so it's like 'due to poor conditions of life that people live pre-contemplation and lack of implementation of strategies for controlling preventing sexually transmitted infections is identified' erm so he talks elsewhere about pre-contemplation and contemplation as well and I said actually I don't know what that means erm would you expect as an expert in health to just have that term thrown in there and

L1.   no I wouldn't

S.   so you think it should be defined

L1.   yes

S.   because one thing this student talked about and some other students say as well is basically the tutor reading my essay knows everything so he said particularly when he thought about his reader he thought the reader was someone who knew at least as much as him and he said oh maybe they might have forgotten some things but you know they'll

read this essay and they'll remember oh yeah I remember pre-contemplation erm in terms of who the students are writing for (aha) do you think they're always writing for someone who already knows everything

L1.   well I mean what I think is this I think there are two things first of all they're told fairly clearly that it's erm about things like explaining terms is encouraged (aha) erm now there's a balance there because this is post-grad (mmm) so I don't want to be told basic stuff erm I think what can happen is that you get erm a conversation with a tutor who will have been chosen specifically because they're a specialist in your area (yeah) and you get used to a kind of dialogue which in a sense uses a very specialised language now that can be quite narrowing and people get out of the habit of realising that most people even most people who are specialists in health won't be familiar or be as familiar with that terminology (aha) erm so I don't think it's a grievous error but I think it's bad practice

S.   yeah yeah cos I think it is it's a difficult balance to find sometimes (mmm) when you're moving from undergraduate to post-graduate you know where is the line between showing that you understand something and

L1.   yeah absolutely

S. and telling the reader really basic things (yeah) that anybody in the field

L1. yeah but you see that judgement is part of what we are testing for (aha) you see the information the actual facts that's not difficult to access er knowing what to tell people is the hard part

The tutor's comments highlight the importance of being able to make the right assumptions about the reader's prior knowledge of their topic. He points out that this is something that is being assessed in student writing, yet it is not included in the assessment criteria for the module, nor do lecturers appear to explicitly inform students of it in their feedback. If the audience that they have in mind is their lecturer and if they assume that this person already knows everything about the topic, they may omit information that some members of the journal readership would need.

Like Benedito, both Padhma and Noor said that the reader they had in mind was their supervisor, whom they perceived to have a great deal of knowledge on their topic. In both cases, the question of who they imagined their readers to be emerged from a discussion in the interview about whether they perceived themselves to be an expert. They both denied this and seemed to feel the need to impress their supervisor. Padhma, for example listed several qualities that she thought were important for a review article and then stated that to impress her supervisor 'you need to put something into this essay':

S. do you feel that you're writing as an expert

P.	No I don't think (laughs) it's like erm expert in the sense like I was searching this one when I write erm the article for a review the thing I kept in my mind is like you need to put some good articles in to that and you need to give the information to the reader and it shouldn't be boring er that's what I that's what I just er thought about my review article

[…]

P.	Really I don't have anyone in my mind only my tutor (both laugh) I really didn't have any anything like that in my mind I just thought about my tutor like the essay should be like a review for my tutor that's what I thought from my side […] He's really a person with good knowledge I think so for you to impress him more you need to put something into this essay if not he doesn't like the essay at all (laughs)

Thus, although the assignment rubric requires students to write for an academic journal and hence for the readership of the student's chosen journal, Padhma claims that the only reader she had in mind was her supervisor.

Noor, on the other hand, worried that her 'expert' tutor might find her work too basic, so she perceived a need to use 'complicated words' as a way to fulfil her status as a master's student.

S.   she [the module coordinator] said when you're writing a review article you the student mmm you are an expert you're so you're writing as an expert for readers who may not be so expert in that field hmmm do you remember her saying that at all

Noor   Yes (yes?) she said but sometimes you remember you forgot it when you write it down because you know your tutor you know they actually have enough knowledge about these things and you write it down you know it's so basic that's how I'm feeling about my writing any essay it's so basic I'm just writing the basic things sometimes happened because you know your tutor have a PhD in that field and expert that field and then actually you try to even my friend said to me you write it down so complicated because you use so complicated word you don't need it I said I'm a masters student (both laugh) I should do it something more than that said no doesn't need that but I forget it sometimes no I think my tutor he look at it say basic

[…]

S.   Aha so when so when you're writing are you thinking of your tutor reading (yeah) your work

Noor   Yes always I can't do that unless I'm thinking that just who is the tutor who is reading that one and actually I everyone I choose as tutor expert in that field

S.   Aha okay so you're thinking that you're writing for an expert and you try to write like an expert

Noor   I try

S.   Yes

Noor   But it's still not like them

This view of herself as a novice combined with her awareness of her supervisor as her reader also seemed to influence Noor's approach to critical evaluation in her writing. In the first interview, she talked about her struggle to balance her desire to be 'soft' rather than strongly critical with her desire to please the tutor, who liked students to include critical evaluation in their writing:

Noor   Actually I try to be soft not critically evaluation but the tutor I chose he like critically for Communications he like the critically evaluation er and there is that's the problem I don't know I can't balance with to be honest to be soft and critical very softly and not very critical between these two I can't do that really it's hard (aha) sometimes I'm going so far sometimes I'm so fast (?) like use establish with may (?) I never thinking I would like to be soft when I say may because it's sometimes when you are not sure you think something but it's say may

The point she is making about the use of 'may' is not entirely clear here, but she seems to be referring to some work we did in the writing class on reducing the strength of claims. She seems to regard 'may' as indicating uncertainty rather than as a means of softening criticism. This might explain why she avoids it in her claims about the links between junk food, exercise, television viewing and obesity.

In the second interview, I asked Noor to clarify why she felt the need to be soft rather than directly critical. She explained it in terms of her lack of knowledge of the field:

> Noor Because I think I'm still have not very enough knowledge to er give them er give a strong erm I mean statement and er I need to build up my knowledge then I can talk about it more er I mean critically and when you still have not sure about something what you can certain say that way because you not have any experience in this field you start that one I'm start this course newly and this subject is all the aspects of the subject is new for me I need to build up my knowledge otherwise I can't critical the people without enough knowledge

It is interesting that she still seems to wish to portray herself as a novice so close to the end of the academic year when she has already completed most of her assignments and almost completed the literature review for her dissertation. In addition, she already has two degrees in health-related subjects. She also presents

her understanding of critical evaluation here as 'giving a strong statement' but in other parts of the interview she appeared to be aware of other strategies for indicating attitude. For example, I asked her why she tended to use non-integral rather than integral citations, and what difference it might make to incorporate more integral citations. She explained that it was a risky strategy for her because of her difficulties with English. She knew they could help her indicate the extent to which she accepted another writer's views or findings, but she was worried that she might convey the wrong attitude through an inappropriate lexical choice:

S.   Why did you choose mainly to put references at the end of sentences instead of using reporting verbs

[…]

Noor   I really sometimes because I make a sentences or paraphrasing the sentences the way I'm writing try to be safer and easier just so I think I done that otherwise I done the last one erm I'm working on it now but not completed I didn't bring it for you but I used that one but erm still very worried about the verb I use like er believe or pointed out I'm just not sure which word can use you know that's er safer to do that way

S.   okay so it really is just about sort of a language problem erm I mean if you were able to use those verbs correctly what difference do you think it might make to your writing to the impression the reader gets

Noor   I don't know what do you

S.   Do you think it might make any difference to the meaning

Noor. when you are bring the first yes sometimes definitely probably you draw attention to the previous research and you said 'yes that I believe that' I don't know which word gonna be said 'I'm believe this' as far as they are believe

From these interview extracts, it is apparent that both Padhma and Noor position themselves as novices in the field writing for readers who have considerably more knowledge than them. This contrasts with the position which the module coordinator constructed for them at the beginning of the academic year as experts on their topic writing to inform a knowledgeable but less expert audience.

While Padhma and Noor seemed to focus on David as a very knowledgeable reader, Ananthi appeared more concerned about his strictness and the fact that he would likely take a critical view of her paper. Her first response to my question about whether she had a reader in mind was 'not exactly'. She then went on to say that with her literature review she was aiming for something 'more professional', which may reflect the fact that she hoped to pursue a research career. However, when I asked her directly if she had her tutor in mind as she was writing, she responded 'yes I do that' as if this was obvious:

S.   […] what about the reader so when you were writing it did you have a reader in your mind (er) at all

An.   Not exactly

S.   no?

An.   But as I'm writing my dissertation now I do aim at writing it for a more professional and I do keep thinking if I'm a reader but it's kind of hard like like I you kept on saying in your first sessions how difficult it is to criticise your own work and that's why I feel I go through like I feel like oh it's perfect but it's not

[…]

S.   but you weren't thinking of sort of the readers of the review of the journal or even your tutor do you imagine your tutor when you're writing

An.   Yes I do that

S.   and sort of what your tutor might be thinking (thinking) and how does that influence you

An.   Er I do try to erm I think in that sense Dr David really he's kind of strict

marker and erm in order to always like when I was writing the second

essay for our first module I did keep on erm thinking about what he

would think and I think that somehow er I know how he reads my paper

and he looks how how looks at all the details and I started reading a

paper in the way he would expect me to read and erm I think that got

me to critically analysing more and yes like er in there were some

comments where he said oh you did not include the number of patients

or you did not include there was like small details which I felt were not

important but yes of course they are important so er I improved in that

sense like how to critically analyse a paper

[…]

An.   I mean erm he's a strict marker and probably that's why I made the

effort to go and meet him in the first place I believe like I was scared

and I wanted to know exactly what he expected from me and

fortunately or unfortunately he's my supervisor as well right now and so

erm so it's kind of like I even while I'm in the lab with him like doing my

study I'm still trying to erm understand what he expect from us what

kind of writing does he expect from us I think it's kind of stressful but I

think it's good in the way I'm improving

In this interview extract, Ananthi states twice that David is a 'strict marker'. She also indicates that this causes her to feel fear and stress, suggesting that she is perhaps worried about not doing well in her assignments. In addition, with her comment 'while I'm in the lab […] I'm still trying to understand what he expect from us' she both expresses a sense of confusion and gives the impression of a focussed, attentive student. As with her earlier description of her transition to master's level study, she also states twice that there is a positive aspect to this situation because she is improving.

Unlike most participants, who indicated that their perceived reader was their supervisor, Jenny stated that she did not have a reader in mind when she was writing her review. However, in a discussion later in the interview about Jenny's approach to critical evaluation in her review paper, she seemed to indicate that she did in fact have a reader in mind as she was writing, and this reader was her supervisor:

S.   can you remember any particular points where you felt you were being critical

J.   er like er this part it's quite obvious I used the er er the er like 'limited the ability' 'delayed reactions' and er 'confound the outcomes of the second challenge' yeah it's a kind of er I think it's a kind of crit criticising yeah (yes) yeah erm and this part 'the major flaw of this study'

S.   yes that's a very strong criticism isn't it 'major flaw'

J.   yes yes yes I think it's not very good if it's published (why) in articles

S.   why do you think that

J.   if the authors of that study er read my article they may think yeah it's
        not very comfortable to see such a comment yeah

S.   so if you were publishing it would you keep that criticism or would you
        remove it

J.   er maybe I would er change to an indirect way instead of saying 'the
        major flaw of this study' for like for assignment for the purpose of
        submitting an assignment yeah I think it would be okay yeah

S.   aha why why is it okay in an assignment do you think

J.   because it's more obvious to read

S.   aha so you want to make your criticism obvious to your supervisor

J.   yes

S.   so that she sees the criticism is there

J.   yes yes I don't know if er it's right or wrong yeah but I think so

From this exchange it seems that Jenny is very aware of some of the differences

between writing an academic assignment for one or two tutor readers and writing a

review article for publication in a journal which may be read by scientists who

conducted some of the research discussed in the review. She understands that

direct criticism may cause offence, but in this case, what seems to be important to

her is that the critical evaluation is 'obvious' to her tutor. Although it is true that I, as

the interviewer, am the one who actually says 'so you want to make your criticism

obvious to your supervisor', this comment is in response to Jenny's statement that it

is acceptable to include direct criticism in an assignment because 'it's more obvious'.

Therefore, it seems a reasonable deduction to make and Jenny does not contradict

me. Jenny's decision to include direct negative criticism may have been reinforced

by her supervisor's feedback on her formative assignment (and possibly other

assignments) since, as noted in section 6.2.4 above, her supervisor made a positive

feedback comment about this.

Interestingly, although Jenny's supervisor indicated in her feedback that direct

negative criticism was a valued practice, my lecturer interviewees did not appear to

regard it positively. One suggested that direct negative criticism was mainly

appropriate for researchers commenting on the limitations of their own work:

S.   For example on page five [of the tree nut allergy paper] (okay) erm erm she she makes quite a direct criticism of a particular study […] so she's directly (yes) criticising their methodology their methods (yeah) is that appropriate do you think

L.   It well er erm it is very difficult because er this kind of criticism is er usually is put forward when you are doing the research yourself

This lecturer also appeared to regard direct negative criticism as a face-threatening act, perhaps even an insult, to hard-working researchers:

L.   People who have done the original research each one of them is years of work people work very very hard anyway so reviewers always have this privilege of just sitting back and picking all those collating all those information (aha) together (mmm) but that by itself is not a very simple thing (mmm) because unless they are erm they are well er informed and er familiar with the area they can pick and mix the different information together and (aha) and the review will be rejected definitely (mmm) because it is very important that you put information that either complement each other and if you are thinking if your objective is to show erm the controversial different opinions about certain things you also have to select that very correctly you have to check the circumstance that this is done (aha) and that is done (mmm) and they have to be similar circumstances in order to say that this one goes to

right hand side and this one to left hand side (mmm) and you are also

will be in a position where you say why is that possible and you can if

there is no suggestion that has been done already (mmm) you can say

maybe there is a reason why these people have got this this must be

this this this

S.   So that would be the critical evaluation

L.   The critical evaluation yes it is

Here the lecturer participant suggests that review article writers are in the privileged

position of being able to critique hard-working researchers, but she also points out

that writing a review article is a challenging task. It is not simply a matter of finding

fault with others' research; rather, writers need to carefully compare different studies

to identify similarities and differences in research designs and then suggest reasons

for differences in findings. When I ask if this is what she means by critical evaluation,

she confirms it. However, this view of critical evaluation rarely seems to be

communicated to students.

S.   yes yes okay good it's very interesting erm what about critical

        evaluation yes (yes) students are always being told (yes) they need to

        be critical especially in the review paper erm where would you say

        these two writers are being critical would you

L2.　　erm well I think erm I really like people doing that in the form of either (pause) a gap which they see (aha) in the story (mmm) er not necessarily there is a gap but there is a gap of their review of literature (aha) it can be which they have to mention that (mmm) I mean they cannot claim that they have done all the extensive (mmm) review on that on that side so what they usually should say is they just have to give some kind of concluding remarks I just put it as a concluding remarks (aha mmm) er saying that okay or some of them call it recommendations or something like that though they just say 'okay such such such or the investigation or the findings by people who have been raised or discussed previously it shows such such such things but it will be interesting to see if such such things are also tested or evaluated (aha) or analysed' yeah so the thing is it's not a total commitment (mmm) they will not criticise what is there (mmm) they will not erm if there is something which they can criticise in confidence with confidence that's fair (mmm) enough (mmm) but what they can do is it's always nice to because each and every information that has been collated er to get that information people work very very hard (aha) yeah so as reviewers they have got a very important job in terms of collating the collating informations that are of similar picking the right information by itself is a great knowledge.

S.　　so when you say people work very hard is that the researchers the people doing the original research (yes) that work very hard yes

In two of the interviews with lecturer participants, the issue was raised of student critiques of self-report questionnaires. One of my participants, Anouk, had directly criticised several studies for using self-report questionnaires, and another student, whose essay was used in one interview with a lecturer, had also made a directly negative comment about a study where data had been collected via a self-report questionnaire. It is possible that these two students, who had both attended my academic writing classes, had learnt to make a basic criticism of this data collection method from the second edition of Swale and Feak's (2004) *Academic Writing for Graduate Students*, where a criticism of self-report questionnaires is included in an example of a critique of a research article. However, when I asked my lecturer participants about this type of criticism, they did not appear to view it positively. One described it as 'generic' and not 'particularly insightful':

S.   yeah and then it's about two thirds of the way down perhaps not quite two thirds where you've got 'they did not collect information about other stressors and eating behaviour which could influence the risk of obesity furthermore the collected data was self reported which could influence the data' […] erm so she makes those quite direct criticisms of studies what do you think about that as a an approach to critical evaluation

L3.   erm I think there are a range of criticisms which I get and people are always told kind of you know criticise instruments and stuff and it's okay I mean I don't object to it I just think I consider it to be frankly generic criticism (aha) erm and you you know it's like I often see

268

people saying and you know this questionnaire didn't do this this and this you know strangely enough the perceived stress questionnaire did not deal with the person's family history well it wouldn't really erm you know the general health questionnaire didn't deal with you know this and that well it wouldn't (yes) no questionnaire deals with everything erm you also get it with you know was only a self report questionnaire well it would be (aha) really so I mean in terms of criticism of method I don't consider I mean it's I mean on one level it's fair comment (mmm) but it's fair comment to the extent of being generically true (yeah) comment (yeah) so I don't consider it to be particularly insightful (aha)

Another lecturer participant pointed out that self-report questionnaires can be used to collect huge amounts of data which it would be impossible to collect by other means.

S. I suppose she says because she's used sort of 'probably influenced the results because it tends to overestimate the prevalence of food allergy' but she doesn't have any references for that (exactly) and I think self report data is quite often criticised isn't it (aha) I think but

L2. But this is something which you cannot escape from (aha) really in fact nowadays it's even more er self report is something that is one of the problems with the human population studies but the only way to overcome that is (mmm) that you use your subject numbers very huge (aha) so that will erm rule out all those erm issues you can exclude

include the subjects with er based on your criteria but there is always there's a huge diversity of genetic make-up a huge diversity of erm lifestyle erm population study is also all that taken into major trials in different countries and the number will just manage to overcome all the little differences diversities and everything and give you some kind of picture (aha) er which is a sensible picture (mmm mmm) so self report is something which you cannot because you cannot employ experts (aha) to do things for you which means by saying that by criticising self report then you are literally asking for the study to stop (aha) cos there is no way you will have the economics or the money the finance (mmm) where you er allocate er experts to go to individual people

S.   Aha mmm I mean she says it 'the study recruited sixteen thousand four hundred and thirty-four volunteers' (exactly) which is a large

L2.   It's a huge number and there is no way you can go through this er with professionals it has you have to rely on self report (aha)

Lecturer 3's comments highlight the inconsistency between teaching students to make direct negative criticisms of research, praising these kinds of criticisms in feedback on assignments and the way these criticisms might be viewed by expert readers. Lecturer 2's comments indicate highlight the nature of real world research. Also, the way lecturers respond to students' work in feedback comments versus the way they respond when given more time to reflect. This raises questions about students picking up on easy things in classes and then overusing them, teaching

students to understand critique as negative criticism, oversimplifying the concept of critique

6.4 Conclusion

The data analysis in this chapter suggests that for some participants, the sense of confusion around what exactly their lecturers expect from them appears to continue throughout the course, as evidenced by Ananthi's comments about still trying to work out her supervisor's expectations as she conducts her dissertation research alongside him in the lab. Although the Communication module is designed in theory to support students in developing their academic writing skills for all their modules through feedback on a formative assignment and a presentation, the interview data suggests that in practice written feedback may be so minimal and so focussed on use of English and study skills that it does not always facilitate students' understanding of critical evaluation in scientific writing. In particular, although some students receive some guidance on what they need to change, such as including more details about research designs, they are rarely told why these changes are necessary. While some participants requested and received clarification on the written feedback comments, others either felt unable to ask or did not receive a helpful response. As Chalmers *et al*. (2017) point out, the power imbalance between lecturers and students may make some students reluctant to engage in the potentially face-threatening act of asking lecturers to clarify their feedback comments. In addition, Jenny's brusque comment about her supervisor ('she's very busy') suggests that some lecturers may discourage students from approaching them.

It is also clear that the participants in this study subtly but consistently resist attempts to position them as 'weak' students. Whilst acknowledging their shortcomings, particularly in their ability to use English grammar with complete accuracy, participants construct identities as hard-working, attentive students. They do this through references to positive feedback comments alongside lists of negative ones, comments about their previous successful academic experiences and their ability to do better in their own language, and descriptions of their own systematic approaches to assignment writing and their attempts to clarify and respond to lecturers' feedback. In fact, although some of the participants did struggle and receive disappointing grades at the beginning of the course, most appeared to be relatively successful by the end of the course, if success is measured in terms of grades.

Participants' desire to be perceived as good students appears to have led them to focus their attention on their supervisors' requirements rather than on the instructions of the journal for which they were writing. Indeed, some participants entirely forgot that the assignment was a journal article. Even Jenny, who produced the most professional-looking assignment, clearly formatted as a journal article, chose to express critical evaluation in ways which she perceived to be preferred by her supervisor. This may be why most participants appeared to understand critical evaluation as mainly negative, sometimes direct criticism.

Feedback from lecturers seems to have been an influential factor in participants' approaches to writing their review article and expressing critical evaluation. However, it appears that for those students who were able to seek it out, face to face

dialogue with lecturers was generally more productive than written feedback. Even

so, both the written and dialogic feedback seem to lead to differing and partial

understandings of critical evaluation in scientific writing. For example, although both

Amanda and Padhma learnt that they needed to include their own opinion in their

writing, Amanda interpreted this as making recommendations for practice while

Padhma took it mean suggesting reasons for differences in findings between studies.

7 Practitioner identities in participants' review papers and interviews

7.1 Introduction

In the previous chapter, I presented my analysis of the 'relatively foregrounded' (Goodwin & Duranti, 1992) domain of the university context. As they write their review papers and other assignments, students seek to understand their lecturers' expectations. Their attempts to meet these expectations and thus be recognised as legitimate Master's students then lead them to engage in certain writing practices, such as including direct negative criticisms of previous research in their review papers, and limiting the length of their conclusion to comply with the word limit.

However, through my analysis of participants' review papers and interview data, it became apparent that other domains also influenced participants' writing practices. The most notable of these domains was the practitioner context, but some participants also indexed more personal and domestic concerns. In comparison to the academic context, these domains are relatively backgrounded (Goodwin & Duranti, 1992), perhaps even barely noticed by the Health Sciences tutors who supervise and mark the review papers. Nevertheless, for some participants they seemed to have a significant influence on their selection of a topic for the review paper and on the expression of critical evaluation within it. This may be because, as noted in the literature review, professionals in the field of health tend to develop a strong sense of identity as a practitioner quite early in their career (Adams *et al*., 2006).

Lesley's paper 'I'd landed on the moon'. Importance of participants' need to express identity which they are confident and comfortable with. Can speculate about this in the discussion chapter. Just check what I have already said in lit review and say it again here. In addition to the context of the Health Sciences master's programme and the associated student identities discussed in the previous chapter, the other aspect of the participants' contexts which featured heavily in the interviews was their professional concerns relating to the treatment of patients. As noted in the literature review, practitioner identity is quite strong (ref.…) Multiple contexts, lamination etc Although students are told to write a review article for a named academic journal, the guidelines for authors provided by the journals were rarely mentioned by the participants. Indeed, some participants seemed to have forgotten the requirement to select and write for a particular journal. In my experience, this is not uncommon: when I ask MSc students who attend writing tutorials which journal they are writing their review article for, I often receive a look of incomprehension.

In this chapter, I will present my analysis of the data related to participants' practitioner identities. Seven of the student participants indexed aspects of their context related to their practice as healthcare professionals in the interviews. In some cases, the practitioner identity is also very apparent in the review papers and in other cases the interview data shed light on how the participant's professional context had influenced their approach to the review paper. For the sake of clarity, I will present the data from each participant separately, beginning in each case with the interview data on their reasons for choosing the topic of their review paper. Since students were able to choose their own topic for the review paper, I asked all my interview participants and in responding to this question, most of the practitioner

participants said that they had chosen their topic based on questions which arose from their professional practice, while others related their topic to clinical practice, their future career plans, or the needs of practitioners and/or patients at other points in the interview.

7.2 Amanda

Amanda had begun the MSc in Clinical Nutrition shortly after graduating with a BSc in Clinical Nutrition and Dietetics from a university in her home country of Honduras. I began the interview by asking her why she chosen this particular MSc and whether it had met her expectations.

Am.   because of the programme it was more directed to the clinical nutrition part that I really like

S.   aha and do you think has the course met your expectations in terms of being a clinical course

Am.   erm yes I think it is okay but maybe we could do even like a little bit more things for practice like because there's a lot of people who don't know about nutrition or dietetics (aha) so maybe they're not going to go out with so much knowledge about how to work with patients

[…]

S.   so so do you think the course has been generally helpful has it met your expectations

Am.   the parts of the innovations they have over here and the different things or different methods to treat patients yes I do like

Like some of the other participants in this study and other students that I have spoken to during the time that I have been teaching students from MSc Health Sciences programmes, Amanda expresses the view that it might have been useful to have a practical element to the course. She expresses this view more cautiously than some others as if she does not really want to criticise the programme (*maybe* we *could* do like *a little bit* more things for practice), and also frames her criticism in terms of what other students might need rather than what she needs. This comment about students leaving the course without sufficient knowledge about working with patients suggests that Amanda regards practice as being at least as important as theoretical knowledge.

7.2.1 Selecting the topic

Amanda, whose review paper looked at various aspects of nutrition in chronic kidney disease, had worked with renal patients as part of her clinical practice during her undergraduate degree. She said that she had found treatment of these patients to be

more complicated and therefore more interesting and challenging than other patients:

S. […] so what about the topic chronic kidney disease erm why did you choose that

Am. I worked with patients with that back home so I think it's an area that I really like (aha) so that's why I decided to do it […] you would go to the hospital for one year and a half and we had patients with any kinds of disease […] so you actually know like all of them and I think this was like the most interesting

S. aha what makes it interesting do you think

Am. erm because I think it's the treatments of the patients with renal disease are a little bit more complicated than like normal patients so it makes it more challenging

Thus she had been influenced in her choice of topic by her experience as a trainee dietician, and here, she expresses some enthusiasm for the topic ('I think it's an area that I really like') (although the enthusiasm is slightly reduced by the 'I think') and positions herself as someone who would rather work on a challenging topic than pick something very easy.

7.2.2 Writing for practitioners

In addition to selecting her topic based on her practical experience, Amanda specifically identified recommendations for practice as a form of critical evaluation in her review paper on nutrition in chronic kidney disease. When I asked her if she could point to some examples of critical evaluation in her paper, she said 'er I usually put it at the end (aha) at the end of paragraphs (yeah) and then the conclusion […] is like mostly a summary and my ideas there as well.' In fact, at the end of her introduction, Amanda clearly indicates that her review paper deals with a clinical situation and the treatment of a health condition:

> This review paper discusses the role of the kidney in amino acid homeostasis and the catabolic effects encountered in *patients undergoing haemodialysis*. At the same time, the electrolyte imbalances increase the risk of death for these patients. For example, hyperkalaemia has been associated with adverse cardiac outcomes (Einhorn et al, 2009). Therefore nutritional and electrolyte problems will be discussed and *recommendations for the treatment will be provided*.

In addition, of the 17 paragraphs which make up the body of Amanda's review paper, 14 include direct or implied recommendations for practice, and nine include strong recommendations with 'should' or 'it is important to'. As she explained in the interview, these recommendations often appear at the end of paragraphs and include statements such as the following:

- Therefore, a simple question such as appetite levels has a significant impact in the prediction of the clinical outcome; thus it should be regularly assessed.

- Therefore, consideration of a protein supplement during haemodialysis might be beneficial to prevent further deterioration of lean body mass.

- Therefore, these patients should be closely monitored by a dietician to prevent malnutrition.

- Therefore, it is important to maintain potassium levels within the normal range or as the studies suggest, in the normal top limits.

Overall, Amanda's paper has a fairly categorical, almost didactic tone, and seems to be aimed mainly at readers who are healthcare practitioners rather than researchers. In the interview, she said she imagined her reader as 'somebody that understands a lot the topic so I don't have to be explaining a lot of things'. However, she does seem to explain things which an expert might be expected to know, such as the functions of the kidney in the introduction, and a definition of glucose in paragraph 2 of the main body:

The kidney is an organ which carries out many functions such as: waste product excretion, concentration and dilution of urine, maintenance of fluid

and electrolyte balance, regulation of blood pressure, vitamin D activation, and others (Kalista-Richards, 2011).

In adults, protein breakdown is the major mechanism used to convert amino acids into glucose, a molecule used as energy for normal activities.

Linguistic features which contribute to the impression that Amanda's paper is aimed at practitioners include the use of 'should' and 'it is important to' as noted above, as well as dialogically contractive reporting phrases to summarise research findings, such as 'the findings demonstrated', and 'found' (e.g. 'essential amino acids were found beneficial'; 'CRP was found to cause changes over time in albumin'). Thus, 'demonstrate(d)' and 'found', which are by far the most common reporting verbs in the paper, occur 13 and 15 times respectively. In addition, there is a relative lack of hedging, so 'may' and 'might' appear just 11 times, and 'suggest' occurs only four times. In contrast, Jenny's paper on atopic dermatitis, which has a much more cautious tone overall, contains 28 instances of 'may', 'might' and 'could' (24, 2 and 2 respectively), and 7 of 'suggest', while the dialogically contractive reporting verb 'demonstrate' occurs just 5 times, 'found' appears twice and 'reveal' is used 4 times.

The following paragraph is an extract from Amanda's review paper. In some ways, it is not typical of the paper as a whole but it does contribute to the categorical tone by presenting the evidence from the two studies that she discusses here as slightly stronger than it appears to be in the original papers.

Supplementation during Haemodialysis Sessions

Haemodialysis is one of the factors contributing to catabolism. Therefore, studies with dextrose, protein and fat supplements during the dialysis sessions have been increasing to determine if this intervention can reduce the catabolic effect. A study by Hiroshige et al (1998) analysed the effects of supplementation during haemodialysis sessions with parenteral nutrition. The solution consisted of 200 mL of dextrose –at a concentration of 50%-, essential amino acids -7.1%-, and lipids -20%-. After three months of receiving intradialytic parenteral nutrition (IDPN), the oral intake of protein and calories increased, along with albumin and transferrin levels (Hiroshige et al, 1998). On the other hand, levels of these parameters significantly decreased in those patients who were not receiving IDPN at month 12 after the initiation of the study. Moreover, significant increases in anthropometrical indices were observed in supplemented patients; conversely, a significant decrease was observed in the non-supplemented group (Hiroshige et al, 1998). This study demonstrates how nutritional intervention can help decrease catabolism in these patients and prevent deterioration. A more recent study by Pupim et al (2002), also supplemented patients with IDPN but with different amounts of macronutrient. Their solution consisted of 300 mL of amino acids, 150 mL of dextrose at a concentration of 50%, and 150 mL of lipids at a concentration of 20%. Control patients were found to have decreased amino acid plasma concentrations; on the other hand supplemented patients had a significant increase in the concentration of all amino acid groups (branched chain, essential, non-essential and total amino acids). In addition, during the post haemodialysis phase, supplemented individuals´ amino acid levels returned to baseline levels (Pupim et al, 2002). This demonstrates that supplementation during the haemodialysis session can decrease catabolism.

In this paragraph, Amanda seems to be arguing that nutritional supplementation during haemodialysis is beneficial for patients because it reduces catabolism. The statements beginning 'This demonstrates that…', which appear at the end of the summary of each study, seem to be indirect recommendations to practitioners to implement nutritional supplementation for haemodialysis patients. Amanda includes a number of details which seem designed to convince the reader of the value of these studies: both studies included a control group, the first was clearly a longitudinal study, and in both cases changes were found to be statistically significant. However, she omits to mention that these were both small scale studies (twenty-eight and seven participants respectively), and the two studies involved different populations: Hiroshige *et al* (1998) studied elderly (malnourished?) haemodialysis patients whereas Pupim *et al* (2003) investigated the effects of supplementation on stable haemodialysis patients who did not appear to be malnourished. Although both studies found significantly positive effects for nutritional supplementation in haemodialysis patients, they both indicate the need for further research before strong recommendations can be made. Pupim *et al* (2003: 491) state that 'Further research is needed to evaluate the metabolic effects of IDPN in different subgroups of CHD patients, as well as the long-term effects of this intervention, while Hiroshige *et al* (1998: 2086) argue:

> Current evidence justifies the use of IDPN in malnourished elderly
>
> haemodialysis patients as a feasible, effective method of nutrient
>
> supplementation. However, we cannot yet recommend IDPN as a routine

therapy with regard to its cost-effectiveness and cannot propose the optimal

composition of the nutrient regimen including vitamin supplementation.

It is interesting that Amanda omits the details of these specific studies, when for

most of the other studies that she discusses, she includes information about the

study design and the number of participants. This may be partly because these two

studies seemed to demonstrate very clear benefits for nutritional supplementation

during dialysis, but it may also be because she wants to construct an argument

emphasising the value of nutrition and hence the role of the nutritionist in treating

patients with chronic kidney disease.

Like the other practitioner participants in this study, Amanda also included

recommendations for practice in her conclusion. These are mainly a summary of the

recommendations that she made in the body of the paper. Her conclusion contains

only one reference to the need for further research:

> It is also important to consider a potential benefit from the use of protein
>
> supplementation during haemodialysis sessions. Although more studies are
>
> needed in this area, recent studies do suggest a decrease in the catabolic
>
> response caused by HD. Consequently, supplementation might be of greater
>
> benefit for those patients with malnutrition and wasting.

This recommendation for further research is fairly vague and as it is presented in a

subordinate clause amongst sentences which focus mainly on practice, it appears to

be less important than the recommendations for practice. Amanda ends her review paper with a reference to the benefits of good practice for patients, particularly improved quality of life:

> In conclusion, all these aspects previously discussed should be evaluated and treated to grant the patient a better quality of life and better survival rate.

This final sentence seems to serve as a reminder to the reader that patients are the key concern for practitioners.

7.3 Noy

7.3.1 Selecting the topic

In response to my question about how she had chosen her topic of nutrition considerations in coeliac disease, Noy stated that her choice had been influenced by the fact that she had some problems with her own digestive system:

> Noy   Yes yes because umm yes myself I have problem about like stomach and my digestive system and this one is quite new in Thailand but the prevalence is increasing as well so it's very few but it's increasing because previously Thai people consumed like Thai food but recently they adopt a lot of western food so yeah they have quite similar disease as well

Although her interest in the topic stems from a personal health problem, she located this problem in the wider Thai context by referring to the increasing prevalence of digestive problems in Thailand. She had also explained earlier in the interview, in response to my question about why she had chosen to study clinical nutrition, that in her work as a clinical pharmacist, she was often asked for advice about diet as her patients preferred to try to manage their conditions through diet rather than relying on medication:

Noy   Yes because from the experience when I worked er people are more like er they pay more attention to their food yes because they don't want to take much er more and more of the medicine

S.   Okay so the patients are more interested in

Noy   Because if they consume a good food then they think will have less disease

S.   Aha is that something specific to Thai culture do you think or

Noy   Ah I think it's it's a worldwide trend right

S.   Aha so to be more focussed on diet than medication (yes) aha are they worried about the side effects of medication (yes) or something

Noy   Yes mainly the side effects and they think the medicine is a chemistry a chemical substance so they want they don't want to consume

Later in the interview, she expressed enthusiasm for how her new-found knowledge about gluten and coeliac disease had practical relevance in her current part-time job as a waitress in a Thai restaurant as she was able to advise customers about gluten free choices from the menu. In addition, in response to my question about whether this knowledge would also be useful in her professional practice in Thailand, she positioned herself as a caring practitioner by emphasising the importance of understanding patients' suffering:

S.   yeah yeah okay erm do you think did you learn a lot from doing this did you learn

Noy   yes I learnt in this particular about the content yes yes er like these days when people talking about gluten or I work in a restaurant when er when the customers ask is this wheat based I'm gonna be very excited like oh yes it is you shouldn't have this if you have gluten sensitivity like something yeah if you have gluten sensitivity blah blah blah I can adapt it to my my like everyday life

S.   aha and what about for your practice when you go back to Thailand (erm) will it also

Noy   yes it is if I work in a hospital definitely yeah I hope so (aha) okay

because I will understand patients more of their symptoms and their

suffering about food it's gonna be hard living with this disease

7.3.2 Making recommendations for practitioners

Although Noy did not identify recommendations for practice as a form of critical

evaluation, some of her paragraphs in her paper on nutritional considerations in

coeliac disease follow a similar pattern to Amanda's with recommendations

containing the word 'should' at the end, and sometimes also at the beginning. The

following is an example:

Healthcare professionals should provide effective information about resources

of gluten-free food to coeliac patients in order to facilitate their lifestyle. A

Canadian questionnaire survey from the Quebec Celiac Foundation reported

that only 44% of respondents claim that they have received a large quantity of

information regarding coeliac disease treatment from dieticians and 57%

reported that they have high levels of confidence in the information they

received [21]. This may be due to the low quality of information provided; for

example, information is outdated. A coeliac disease national survey in the US

found that only 66% of the diagnosed patients have been referred to a

dietician [6]. However, 88% of respondents reported that they have received

more useful information from a coeliac support group than from a dietician.

Therefore, physicians and dieticians should be updated and heighten their role in helping coeliac patients to access more useful information.

Although Noy also makes frequent strong recommendations to the reader, with 'should' appearing 17 times in the main paper and once in the abstract, overall, her paper has a less categorical and didactic tone than Amanda's. There are a number of factors which contribute to this impression. Firstly, the main body of Noy's paper (excluding introduction and conclusion) consists of 26 paragraphs compared with 17 in Amanda's paper. Of these 26, eight contain one or more direct recommendations with 'should'. This means that there are quite long stretches of text with no direct recommendations. Secondly, three of Noy's recommendations are attributed to other authors with the dialogically expansive reporting verb 'suggest':

Researchers thus suggested that parathyroid hormone should be measured after the diagnosis to prevent bone metabolism disorder.

The researchers thus suggested that patients should be given knowledge about balanced diet in addition to the gluten-free food information.

Researchers suggested that iron supplementation is required in patients with symptoms of anaemia and it should be given for at least six months to normalise intestinal mucosa.

Finally, Noy uses more hedging than Amanda with 17 instances of 'may' and 11 of suggest.

In the conclusion, Noy, like Amanda, summarises the key recommendations from the main body of her paper and focuses mainly on what practitioners should do to ensure patients receive the best advice and treatment. However, in the final paragraph of her conclusion, she also makes some recommendations for research, both in terms of its relevance for practitioners and its future directions:

> For healthcare professionals, evidenced-based medicine should be used to gain accurate information. Types of study and methods used in each study should be taken into deliberate consideration. More prospective studies are required to ensure nutritional considerations in coeliac disease. Methods used to evaluate patients' compliance should be validated and standardized. Intervention studies are needed to confirm the efficacy of nutrient supplementation.

Here Noy constructs practitioners as consumers of research who are capable of making informed judgements about research designs and hence the quality of the data. Although her recommendations for future research are a little more detailed than Amanda's, they still seem quite vague, suggesting that she has more interest in practice than in research. Finally, in a similar way to Amanda, Noy ends her review papers with a reference to the benefits of good practice for patients, particularly improved quality of life:

Increased availability of information and awareness of coeliac disease can benefit patients to reduce the risk of late life complications and ensure their better quality of life.

7.4   Temilayo

7.4.1   Selecting the topic

Temilayo, whose paper, like Amanda's, also focused on renal patients, specifically those with diabetic nephropathy, was concerned with the question of protein requirements for these patients. At the time he wrote the paper, he was working on the renal ward. In response to my question about why he had chosen this particular topic he explained:

> T.   yeah I was working on the renal ward there so I was doing dialysis and everything so I know we tell patients who have diabetes erm diabetic nephropathy to sort of refrain from er protein intake but then there is some divided opinions about whether patients should er have protein how much whether it's helpful or not helpful.

Therefore, Temilayo locates his choice of topic within his professional practice, and he wrote his review with the aim of finding the answer to a problem which he faced as a practitioner: a sense that what practitioners do (advising patients to limit their intake of dietary protein) may not be fully supported by research evidence. This is briefly mentioned in the introduction to his paper where he notes that:

Treatment of DN requires good glycaemic control, management of blood pressure, as well as the incorporation of a healthy lifestyle which includes smoking cessation, and healthy diet. However, suggestions about the effect of low dietary protein intake in arresting the progression of renal failure in individuals with diabetes have elicited some controversies.

This suggests that there is some debate about the role of protein in kidney disease, and although this statement contains no reference to the human actors engaged in the debate, the reader is likely to assume that it is played out on the pages of academic journals. There is no reference to practitioners who may disagree with each other or whose practice may be contradicted by recent research findings yet in the interview Temilayo seemed to indicate that these considerations were as important as discrepancies amongst research findings from different studies:

> T.   I was trying to look into the hospital setting because it's really important that erm I mean when patients come for dialysis and then somebody is saying this and the other one is saying this you don't take protein don't take protein and that still happens

Unlike Amanda and Noy, Temilayo includes few references to practice in his paper on the effects of low dietary protein in diabetic nephropathy apart from the brief mention of treatment in the introduction, and some focus on the implications for practice in his conclusion. However, in the interview, it became apparent that Temilayo's concerns with practice were central to his academic work, perhaps

because, unlike most of the other participants, he was working full time whilst studying part-time.

7.4.2   Balancing compliance and resistance

His decision not to include references to practice in the main body of the paper may be partly attributable to the fact that he had been told by his tutor to write a systematic review in which specific details for each research study should be included. However, in the interview it became apparent that he had experienced some tension between, on the one hand, attempting to fulfil the requirements of the course and the tutor, which he saw as obligations, and on the other hand, seeking a way to exercise his own agency in pursuing interests related to his professional practice. This tension is illustrated in the interview extract below. The phrases which Temilayo uses to refer to obligations are underlined while the language he employs to discuss his own actions and decisions is in italics.

>   T.   it is a systematic review so I think <u>we had like a template</u> a kind of I think <u>it was like a template</u> first to say what kind of if you're doing a review like that and you want to sort of you <u>should</u> be able to know what kind of erm research it is I mean who are the participants and erm what did they find out you know in a structured way so that <u>that really guides</u> you so I think that is what I've done here (okay) that is what I've done here

S.   so the tutor actually told you to write a systematic review did he he or

        she

T.   well <u>he sort of told us that is the way it is</u> and <u>he gave us like a guide</u>

        although I did do that in all of my er essays here because er <u>for him it</u>

        <u>was a strict erm I mean guide</u> I mean that <u>you had to go through</u> erm

        all that I mean step by systematically erm <u>you should do</u> what kind of

        what is the design erm the the participants and so on until and then you

        go to limitations and everything so but erm like I said I it got to a point

        where when *I was reading some articles myself I noticed* that okay they

        didn't go that religiously the way that <u>they wanted us to do it </u>and so *I*

        decided to sort of erm sort of erm omit some of the things and *just go it*

        depends how much I wanted to talk on the on the on the erm research

        work (aha) and then well <u>the number of words I have to write</u> erm it's

        another thing <u>if it permits me</u> to write that much but *I think erm I need to*

        look for the most useful information from the article and include it so *if*

        it's not useful then I don't include it

S.   yeah yeah okay that's interesting I didn't know he'd told you to write a

        systematic review but erm most students don't do a systematic review

        (right) there are two different kinds of reviews there are systematic

        reviews and then I think they may be called narrative reviews I can't

        remember (okay okay) and yes systematic you have to do a systematic

        search (that's right) and include all the relevant studies (yes) erm but

                                                                                294

the other kind of review you have a bit more freedom in what (in what okay) in what you include and how you structure it

T.   right so I didn't know about the narrative well I might have I think I've heard of narrative but I didn't look closely into what narrative review is but I think erm I must have employed that erm system sort of in a way because *I gave myself some freedom* when I mean with time that *I didn't have to go through* all this having to go through everything this one does this and so on well more or less erm same structure so *a little room for freedom*

It is clear from this that Temilayo feels constrained by certain factors in the context, including the guidelines provided by the tutor, which he perceives as 'strict', and which mean that he 'has to' or 'should' structure his paper in a particular way. As he explained, for each study that he discusses in his paper he needs to include details about the research design, the participants and the limitations. The word limit for the assignment is another constraining factor which may prevent him from adhering strictly to the tutor's template, or which may not 'permit' him to include certain points.

In the interview, he noted that he had followed the tutor's guidelines for all his assignments on the MSc, not just the review paper, but then he contrasted these strict guidelines with the practice of professional writers, which he had observed through his own reading: these writers do not necessarily always include all the details that his tutor had specified. Here it is not very clear whether Temilayo was

referring only to published systematic reviews or whether he may have been influenced by his reading of narrative reviews without being fully aware of the differences between narrative and systematic reviews. However, his observation led him to see that he had a small space for freedom and resistance, and thus he felt able to focus on what he viewed as important for his topic rather than blindly following his tutor's template.

A little later in the interview, when we discussed the conclusion to Temilayo's review paper, the importance which he attached to practice became very apparent:

T.   yeah well the conclusion is to is a summary too and then I mean to suggest that to suggest a way of improving things in regards to what I've written so what we found and what we think what the future research should look into in terms of improving the I mean in terms of improving *practice* in relation to that

S.   aha so it's mainly about

T.   it's about application for practice and then what can we do I mean to improve on that

S.   aha erm why did you choose to focus on practice was that a recommendation from your tutor as well from

T.   well I actually didn't have I didn't have something to write about I think there was a bit of freedom you could do it as you want so and since I work erm I mean in the renal ward I was trying to look into the hospital setting because it's really important that erm I mean when patients come for dialysis and then somebody is saying this and the other one is saying this you don't take protein don't take protein (yes) and that still happens so erm and those are the people it's useful for so that is why I tried to focus and then it's I mean talk about implications for practice (aha) because yeah if something is done about that definitely it will help them help the patients

Here Temilayo again brings up the notion of freedom: since there were no specific guidelines on what to include in the conclusion, he felt he was free to focus on practice. He emphasises his own role in the process of making recommendations and taking action with his use of the pronouns 'I' ('I mean to suggest […] with regard to what I've written') and 'we' ('so what we found and what we think what the future research should look into'; 'what can we do I mean to improve on that'), and he links the action to his practical, professional role ('since I work erm I mean in the renal ward I was trying to look into the hospital setting'). He then stresses the importance of the research for clinical practice and the benefits for patients of receiving consistent advice based on research evidence. His language is quite emphatic and certain here: 'it's *really* important'; '*those* are the people it's useful for'; '*definitely* it will help them help the patients'. Thus, in contrast to lecturers who present the benefits of the Communications module in terms of developing skills for a research

career, Temilayo clearly sees the benefits for his professional practice and hence for his patients. In addition, with these remarks he constructs an identity as a caring practitioner.

Temilayo's conclusion is in fact written in a very impersonal style, focussing on the disease rather than the patient. In a conclusion consisting of two paragraphs and 345 words, the word 'patients' only appears once, in the first sentence: In conclusion, it is difficult to establish low protein diet in patients with diabetic nephropathy. Maybe add the rest of the conclusion and a bit more analysis if word limit allows.

7.5 *Padhma*

7.5.1 Selecting the topic

For Padhma, the link between her practical experience as a doctor and her choice of topic for the review paper was a little less clear. In fact, she described how her supervisor chose the topic for her after the module convenor had told her that her first choice of topic, phenylketonuria (a rare genetic disorder for which the main treatment is low protein diet) was not suitable because it was not related to obesity. As she had very little time to find a new topic, she asked her supervisor for advice:

> P.   he just erm searched into the google and then he asked why don't you
>   do something on physical activity and obesity then I said how do I do

> that one then he said with other treatments then I started doing this
>
> topic then I searched that is the thing

From this description, it seems that she had little input into the decision and little clear motivation for choosing it. However, earlier in the interview, she had said she was interested in bariatric surgery and I understood that she was considering training in that field:

> S. okay what is your main reason for doing this course?

> P. Actually I was interested in doing something in obesity er management so I just searched through internet and I just got only two universities and this one is very near to my home so I just selected this one thinking something on bariatic surgery so to do all those jobs I need to do my examinations over here so I just came

Since Padhma's review paper compares physical activity with other treatment strategies, including surgery, for the management of obesity, she seems to have found a way to orient her topic towards her future career path.

7.5.2   Applying theory to practice

As noted above, Padhma appeared to have little input in the selection of her review topic as it was a last-minute choice suggested by her supervisor. However, the chosen topic of treatment strategies for obesity was related to her future career plans as she expressed an interest in bariatric surgery. Although her review paper does not reveal the same interest in practice as the papers by Amanda and Noy, the interview data suggests that practice was a key concern for her. For example, at the beginning of the interview, in response to a question about her expectations of the MSc before she started, Padhma said that she had anticipated a greater focus on treating patients, particularly 'counselling' overweight and obese patients, which I took to mean advising patients on how to lose weight:

> P.   Erm my expectation was I was just thinking like erm you know erm I might know much about how to treat people how to counsel all those stuffs I was thinking that the course would be more into counselling people and er but everything it's like theoretical not very much counselling based so I thought it was a counselling kind of course it's like giving you information about what is obesity and how to prevent that one so with those knowledge I think we need to counsel people work in some NHS like that

> S.   so the course is less practical than you expected

P.   Yes (is it) it's mentioned that it's not a practical course but I just thought like it might be something around counselling people obesity people because after doing this course I think we need to go for some psychological counselling for obesity people I think so (aha) so erm it's just more of a theoretical

Padhma contrasts the 'theoretical' nature of the course with her expectation that it would have a practical focus related to treating and counselling patients. She then portrays the course as 'giving you information' and goes on to consider how this information and knowledge can be applied in a practical professional situation. Although Padhma did not use word 'practical' in relation to her expectations, her words seem to echo the disappointment that many students have expressed to me over the years on finding that their MSc lacked a practical, clinic-based element. This led me to summarise my understanding of Padhma's view as finding the course less practical than she had expected. She confirmed this understanding, repeating the word 'practical' as she noted that even though she had been informed that it was not a practical course, she had still expected it to include some training in counselling patients. It may be that for someone who has trained as a doctor, it is difficult to conceive of academic knowledge which does not have a fairly immediate practical application. She ends by saying that students will need to gain some practical training after the MSc course, implying perhaps that it has not fully met her needs or expectations. In addition, since she refers to 'psychological' counselling, she perhaps feels that the MSc course does not take the psychological aspects of obesity into account.

In addition, when I asked Padhma what the aim of her conclusion was, she presented it in terms of giving advice to a patient, which contrasted with the impersonal tone of the written text.

CONCLUSION:

Obesity is a preventable multifactorial disease and declining the disease burden seems to be one of the most important challenges of the present century. Sedentary behaviour and excess energy intake seem to be the major cause of positive energy balance and risk of obesity in adults. Energy expenditure with daily exercise seemed to be effective in reduction of obesity and associated complications in adults. This review compared the effect of physical activity of any type and intensity (low, moderate, and high) for ≥ 30 minutes duration either alone or with other treatment strategies (diet, medical, and surgical) for obesity management in adults. Studies indicated that engaging in more than 30 minutes per day of moderate intensity exercise is effective for the management of obesity and its complications in adults. The addition of physical activity to dietary, pharmacological, hormonal, and surgical treatment seems to be very effective compared to their individual effect on obesity management. Therefore, preventing the risk of obesity and its complications by engaging in more than 150 minutes per week of moderate intensity exercise is beneficial to decrease the rate of mortality and morbidity due to obesity and to improve the quality of life in adults.

This conclusion seems to be just a summary of the key points from the review article with a particular focus on the benefits of physical exercise. In the interview, however, Padhma indicated that what she had in mind when writing the conclusion was advice for patients:

S.   aha and what about the conclusion do you remember what you were trying to do in the conclusion in this one it's erm I don't know whether you remember what you wrote

P.   Yes this conclusion I just gave something like er very simple conclusion for this review to be honest like I just say this is obesity this is a problem and if you do physical activity erm sedentaryism is a problem and if you do physical activity it's going to benefit you then I said physical activity itself or with other treatments have shown a beneficial effect and from this one if you do a physical activity for more than thirty minutes er sixty minutes per day erm there is the studies are showing that more than this many hours of physical activity will decrease the risk of obesity that's what I think that's what I er wrote in the conclusion yeah therefore decreasing er increasing the physical activity level could be effective way of managing obesity (aha) that's the way I concluded er wrote my conclusion because when I put so much of er when I saw the word limit I can't take any information from my essay so I made my conclusion very small for this because it's a vast topic it's not only about physical activity so I need to put dietary management all the managements so then when I came to the conclusion and the word

> limit made me to write my conclusion small but but whatever the review everything said I just put in the conclusion very short

S.   So your conclusion's sort of really about is it about how individuals should avoid obesity or how medical practitioners should

P.   Er I didn't write that one

S.   no?

P.   No I just wrote on an individual level like I wrote an individual level like what my review states that's what I wrote from my review I mean to say like if you do more than one fifty minutes per week of physical activity then I think it will be beneficial

S.   so basically it's for the individual

P.   Yeah yeah yeah for the individual

This suggests that while she was writing the review and particularly the conclusion, she was considering how she could best advise her patients based on the research evidence. When I tried to ask if the conclusion might also be aimed at informing other practitioners, she denied this immediately, stating that she 'just wrote on an individual level'. Her use of the second person pronoun seems to confirm this, and in

the interview I almost felt as if she was advising me as a patient when she made comments such as 'if you do physical activity it's going to benefit you'. Thus, her expectation that the MSc course would include some element of 'counselling' seems to have influenced her approach to her review: although the review focuses almost entirely on summarizing research findings and does not make direct recommendations for practice, it seems that Padhma's main interest is in extracting recommendations which she can use in her own practice. This reflects something she said earlier in the interview about applying knowledge to counselling situations: '[the course] is like giving you information about what is obesity and how to prevent it so with those knowledge I think we need to counsel people'.

7.6 Anouk

7.6.1 Selecting the topic

Anouk had worked as a dietician for nine months after graduating. She then found herself unemployed as a result of cuts in government funding for certain health services, so she decided to do an MSc. She chose the MSc Stress and Health after being refused a place on the Clinical Nutrition programme, but she also added that it may be helpful for her future career as stress is a subject that many dieticians are not familiar with. She had written a short paper on the links between stress and obesity as part of her assessment for the summer pre-sessional course and decided to pursue this topic for her review paper because she had found it interesting.

7.6.2 Writing for 'busy dieticians'

Like Padhma, Anouk's review paper seems to focus mainly on discussing the findings from various research studies and it contains few references to practice except in the conclusion, which has a short paragraph on practice:

> Treatment of obesity is based on lifestyle changes for example change in eating habits and physical activity. Stress is mostly not taken in to consideration. From evidence in many studies as shown in this literature review, it could be helpful to assess the stress levels of obese individuals and examine the extent to which these individuals are emotional eaters. Chronically stressed individuals could lower their stress level and may benefit from this in their battle against obesity and overeating.

This can be linked to the last sentence in the abstract, where she states 'Health professionals may need to assess obese individuals for stress', which suggests that her article is aimed at practitioners. This conclusion, like those by Amanda and Noy, includes a statement about the benefits to patients of improving practice.

Although Anouk's practitioner identity is not very strongly evident in her writing, it became more apparent in the interview. For example, when I asked her whether she had a reader in mind as she was writing her paper, she said a little hesitantly, 'Well maybe I do I'm a dietician myself so I write like a dietician with a dietician's view'. She also stated, in response to a question about who might read review articles and

why, that busy dieticians or doctors could quickly learn about recent research on a topic without having to read large numbers of research papers. This comment echoes the explanation given in the first lecture that review articles are a way for busy doctors to 'get up to speed' on the latest research. Thus, she perceives the audience for review papers to be practitioners rather than researchers.

In response to my question about how she decided to organise her paper she said

Anouk: because I had in mind that I was writing for other dieticians I thought first I have to explain what stress response is and also for myself cos this was in the beginning of my course I still had to structure all the things about stress and how it works so I first wrote about that and then although now I'm reading the feedback maybe this was not a good idea then I started talking about studies who looked at chronic stress and obesity to show that studies show erm yeah show that erm there is a link between stress and obesity and then I explain *why* there may be a link between obesity and stress.

Here she states specifically that she considered her readers to be other dieticians and notes that in the early stages of writing the paper, she was also learning about the topic as she wrote, so she positions herself as someone writing for peers rather than an expert writing for a less knowledgeable audience. However, when she

describes how she tried to use research evidence to show that a link between stress and obesity exists, she shows awareness of the need to persuade her audience, and her use of the verb 'explain' implies that she possesses knowledge which her readers do not have, thus positioning herself as more expert than them.

Although Anouk had a clear rationale for explaining the stress response in some detail, this decision was criticised by her supervisor, who said:

C.   […] the discussion of stress and the physiology of the response again you know it's not that it's not right but it doesn't reflect to me a kind of fair enough this would be for a post-grad for an undergrad that's a different thing (aha) it doesn't reflect a very it reflects a good but not very good grasp of the process because it talks about two things happening now actually both of those two things are triggered by one thing so the clever way of doing it would be to tell me about the one thing

S.   okay okay so not really conveying completely the relationships between different things between cause and effect

C.   the difference between good and really very good is the ability to summarise it's the ability to concisely say how not just what how but why something happens and this does convey well but it's taking a lot of words to something well there is a simple way of describing this

S.   okay so is that I mean cos the section on stress response (yes) which

      is immediately after the introduction is that you think that is a bit too

C.   it's fine (aha) I'm not saying there's anything wrong with it erm it's what

      you get when you have people who are in a sense they're knowing this

      for the first time so it's not wrong it's just a bit clunky erm and it misses

      out pieces of information which aren't difficult to find and which

      therefore it's not a big deal

This is something which students could be told in feedback on a draft or perhaps on

their presentation. When I asked Anouk's supervisor about this, he responded:

      But you see, that judgement is part of what we're testing for you see the

      information the actual facts that's not difficult to access er knowing what to

      tell people that's the hard part.

When I asked Anouk about the conclusion to her review paper, she explained what

she had included and why:

S.   What about the conclusion?

Anouk   I summarised the main things from the essay I think I extended

          a little bit more that's very important and very yeah that it's a

          major problem I don't know what I did in the last part oh yeah

          the statement that it's important to treat in healthcare because

stress is not obvious thing to treat but it is important I think which I showed in my essay also with the dietician's view in mind we normally don't examine patients on stress or something but it looks like it's very how do you say that also contributing to obesity and my other essay about diabetes as well

S.   Okay so that paragraph is a focus on practitioners sort of what practitioners need to remember?

Anouk   yes and then further research

S.   and then finally a little bit about further research how did you decide to include practice and research in the conclusion

Anouk   erm

S.   was that based on what you've been reading other review articles

Anouk   Yes especially the further research part but this part about healthcare professionals I think it's more my opinion and my experience

Thus, like Temilayo, Anouk seemed to think it was important to include some discussion of the implications of research findings for healthcare practice in her conclusion although she has not observed such discussions in her reading of review articles. She emphasises that she considers the link between stress and obesity to be 'important' and 'a major problem', and reiterates her view that she is writing to inform other dieticians about this ('with the dietician's view in mind'). However, rather than positioning herself as an expert writing for a less expert audience, through her use of the pronoun 'we' situates her alongside other dieticians in learning about the need to include questions about stress in the assessment of overweight and obese patients.

7.7 Jenny

7.7.1 Selecting the topic

Of all the participants, Jenny was the one who presented the most 'professional' review paper in terms of content, language and overall layout. It is interesting to note that her paper, which appears less preoccupied with what practitioners should know and do than some of the other reviews discussed in this section, received the highest grade. However, like some of the other practitioner participants discussed here, Jenny explained in the interview that her interest in her topic arose from her professional experience: she had chosen dietary exclusions in the management of childhood atopic dermatitis as the subject of her review article because dietary exclusion is often recommended as a treatment for atopic dermatitis by practitioners of Chinese medicine. She explained that this recommendation is based on a theory

that certain foods produce heat, and these foods should be avoided by those suffering from atopic dermatitis:

> J.   yeah because erm dietary exclusion in the management of atopic dermatitis is quite popular in Hong Kong yeah and er it may be due to the er influence of Chinese medicine yeah because er er based on the theories of Chinese medicine er the patients of atopic dermatitis er are suggest to exclude some kind of foods in their diet based on their constitution yeah and so erm ah yeah and they will they are some will adhire to to a diet without some foods which will produce heat yeah it's a kind of energy and er so erm I'd like to to know more about from Western medicine perspective that whether there's a coincidence in the theory or in the suggestion yeah on the dietary advice on the patients with atopic dermatitis that's why I chose this topic yeah

Jenny was actually interested in whether Western theory coincided with Chinese theory in terms of dietary advice given to atopic dermatitis patients. However, this interest is not at all apparent in her review paper, which focuses only on Western theories.

7.7.2 Writing to learn

Jenny's desire to learn about the topic for the benefit of her own practice seemed evident when I asked her if she had a reader in mind as she was writing her review

paper. At first she replied with a very blunt 'no'. When I expressed surprise, she added 'yeah, I just want to get the information I think is important'. She then elaborated that she knew the audience for the paper should be readers with a medical science background and therefore the paper should not be 'too simple'. She sounded rather uncertain when I asked if she had this audience in mind when writing ('yes, maybe') and whether she saw herself as an expert and a scientist ('erm er yes'). However, as noted in the previous chapter, in a discussion later in the interview about the inclusion of direct negative criticism in her review paper, Jenny seemed to indicate that she was writing with her supervisor in mind. It is possible that she was on the one hand focused on learning from her assignment in order to improve her practice, and on the other hand conscious of what she needed to do in order to achieve a good grade. In fact, Jenny's statement that she just wanted 'to get the information that I think is important' reflects her earlier explanation of why she had chosen to do the course and her reasons for choosing to do a postgraduate diploma rather than an MSc:

> J.   I think knowledge on nutrition helps me to erm to give some advice to my patients especially for the patients with obesity […] I've already got a master's degree in Hong Kong in acupuncture so I think I just need to get some knowledge from nutrition and I don't want to go for a master's degree

This suggests that although Jenny had clearly put a great deal of effort into producing a review paper which closely resembled a published piece of work in

many aspects, her aim in doing this work was, like Padhma's, to extract knowledge which could be applied in practice.

In addition, like most of the other practitioner participants, Jenny chose to discuss the implications of research for practice in her conclusion. However, she was the only participant to write a substantial conclusion, almost a page and a half in length, divided into two subsections: 'implications for dietary advice in practice' and 'implications for research'. When I asked Jenny why she had chosen this structure, she explained that she had imitated the conclusion of another review paper because it was clear:

J. er because I wanna make it clearer and this structure was imitated from another paper yeah I think it it's quite clear and so I adapted it

[…]

S. erm was it important to you personally to talk about practice as well as research

J. er yes quite different because er positive results from research doesn't mean it can be er totally applied in practice yeah and so yeah er yeah because theory er doesn't mean er it is practical in practice yeah yeah

S.   aha okay do most do most articles include implications for practice or (er) do they tend to focus more on research or you don't know

J.   er I think the papers I've read er included both but if I make it into two sections it looks more readable I think it's more sim er clear to read yeah

In this extract, Jenny shows a critical awareness of the links between theory and practice, and she appears quite confident in her view that findings from research cannot always be applied in clinical practice. On the other hand, she seems a little less certain about whether review paper conclusions generally include implications for both practice and research. In fact, this style of conclusion is typical of Cochrane reviews, which are, according to the Cochrane Community website (2015), 'systematic reviews of primary research in human health care and health policy' designed to facilitate decision making by practitioners, policy makers and patients. It is not typical of the journal for which Jenny was writing her review article.

Add conclusion

It is evident from the above blah blah. These participants selected their topic based on professional interests. However, when lecturers were asked what students would need to do to write a successful, potentially publishable review paper, they suggested that a key aspect would be the selection of a 'hot' topic.

7.8 Personal identities

Two other participants, Noor and Benedito, also made reference to the relevance of practice in the interviews but their work also seemed to be influenced by other aspects of their identity. In Noor's case, this was her identity as a mother and as a woman concerned with weight gain while Benedito's choice of topic and his approach to it appeared to be influenced by his identity as a leader in the Angolan community in London as well as a public health professional.

7.9 Noor

7.9.1 Focussing on practice

When asked to what extent the course had met her expectations, she expressed disappointment that it was not more practical. Although she said she had enjoyed the independent study aspect of the course and had learnt a great deal, it was 'just learning from articles.' She had expected to gain practical experience through visiting clinics and observing practitioners treating overweight and obese people and perhaps also through the opportunity to read patient case notes. This had been her experience during her studies in Iran, where theory had been combined with practical experience, so she was quite strongly critical of her MSc, which only included one day of practical work in a laboratory, when students learnt to use some instruments for calculating food intake and BMI (body mass index).

In addition to her efforts to improve her English, it is clear from Noor's review paper that she also spent a great deal of time researching her topic area. The paper, which

focuses on childhood obesity, contains over 70 references. Overall, the paper is well presented with an appropriate layout for a journal article, including an abstract, a list of key words, and clear section headings. Noor seems to have been influenced by her reading of systematic review articles, which tend to follow the same structure as research articles (Introduction, Method, Results, Discussion), because her paper includes a section on the method used to search for relevant articles as well as a discussion section. These aspects lend the paper an air of scientific objectivity, but more detailed analysis of her paper and of the comments she made during the interviews suggests that her approach may have been rather subjective.

This lack of objectivity was particularly evident when Noor talked about the problem of overweight and obesity. Her views seemed to be very much influenced by her personal concerns about weight because despite the fact that she had clearly read a huge number of academic articles on this topic, in the interview she chose to illustrate her points mainly with her own experiences of weight gain and loss and her observations of other people's behaviour. Thus, rather than framing obesity as a biological disorder, Noor seems to be drawing on the two different media framings of obesity identified by Lawrence (2004): obesity as the result of individuals' irresponsible behaviour and choices; and obesity as the result of an environment which offers too many opportunities to consume unnecessary calories and too few opportunities for physical exercise.

7.9.2   Selecting the topic

For example, Noor explained in the interview that she had chosen to write her review article on 'the effectiveness of physical exercise in childhood obesity' because she was concerned about her one-year-old child who was 'a bit chubby':

> Noor. Er I have a little boy he's a bit chubby (both laugh) and I'm just a little bit scared mmm I'm really care about children at the moment more than anything else because I'm involved with a baby that's the reason I think I chose it

Thus, unlike most of the participants discussed above, who selected their review article topic based at least partly on their professional experience, Noor appears to have chosen her topic for personal reasons. Having explained the reason for choosing her topic, Noor then went on to discuss her views on parental choices regarding nutrition:

> Noor. […] and then when I see the babies here have for breakfast McDonald's I'm really fed I'm really angry it's the parents I think they seems they don't care but probably not but I think at the moment I'm not giving my child my baby any dessert babies' dessert even because it is the taste they use it and er the way I feed him is different from the when we going out even I don't taste it chips or er even he like it have er crisp I don't give him at the moment because he's just little

S.   How old is he

Noor. Nearly one

S.   Okay so he's still very small so he probably shouldn't have crisps

Noor. Yeah but I have seen people give him small people just pack of the
crisp er on the bus because just keep them quiet er and even drink I've
never seen children drink my baby even fruit because it's artificial just
probably he getting older and want it (both laugh) but at the moment I
can't handle it

In this interview extract, Noor seems keen to express her disapproval of the

behaviour of some British parents whom she had observed on public transport giving

their small children crisps and sugary drinks to keep them quiet, or taking their

children to McDonald's for breakfast. By blaming these parents for their failure to

make responsible choices and emphasising her own very different choices, she

positions herself as a responsible mother.

In addition to blaming individuals for their choices, Noor also discusses the role of

the environment, particularly the easy accessibility of cheap, unhealthy food. In this

response to my comment that in the UK, obesity seems to be more prevalent

amongst poor people than white middle-class people, she acknowledges that the environment has a role to play, but she again suggests that individuals could behave more responsibly and emphasises her own more appropriate choices:

Noor. Yeah but er sorry I'm not in a fin… I'm not in a good financial mmm situation but still I try to have keep down have less fat things depend on knowledge as well not just because financial and the lifestyle is when you change country the accessible cheapest food chocolate bar getting fatter when I came here because in my country chocolate is very expensive and not acceptable the I mean the taste of Iranian chocolate is not very nice we don't like it at all and the crisp here is more cheaper the drink is more cheaper even cheaper than the bottle of water just I'm drinking some that things and not exist in my country we haven't got original coca cola so it's very expensive the original one so when compare it here it's cheap and more accessible and the lifestyle at the moment I'm not buying any crisp not at all but when you're out say oh crisps cheap I think you can't afford it in my country have original I mean not original your own one you don't like it I think that's tastier and more available and the lifestyle here is more sedentary lifestyle because I have to go to work at least one hour take me to work even by foot or by taxi we normally use taxi like sharing taxi but you just always in rush but I think the I don't know but lifestyle is a little bit different and you adopt a little bit different lifestyle and back to the other one and you change because I'm not lazy in my country I walk but here still getting fatter I don't know why (both laugh)

Here Noor very clearly blames the environment in the UK, particularly the availability of cheap, tasty, calorie-laden food such as chocolate and crisps, for the problem of obesity. She also makes comparisons with Iran, suggesting that the environment is less obesogenic there because chocolate and crisps are more expensive and less palatable than in the UK. Finally, she used the example of her sister, whose weight gain she blamed on the consumption of fizzy drinks:

> Noor: And then some people for example my sister she's a student here she
> is size 10 when she arrive after 2 years she is size now nearly 14
> because she buy lots of fizzy drink she not eating so much she always
> says she's on a diet (both laugh)

7.9.3 Personal beliefs

Although these strong personal beliefs are not immediately apparent in Noor's review paper, it is possible that they do underlie some of the claims that she chooses to make. At the end of the introduction to the review paper, she states that her review 'focuses on studies which indicate that physical activity or exercise is associated with changes in body composition profiles'. This seems to imply that studies which did not find a positive relationship between physical exercise and body composition are not worth considering. I asked her about some of the categorical assertions she had made in her formative assignment, such as 'obviously physical

exercise is essential for weight control at an individual level' and 'benefits of physical activity in different levels must be considered'. In her response, she emphasised her personal beliefs which seem to be based on her own experience of gaining and losing weight. Although she did also make some references to her reading – for example in the extract below where she refers to the many articles she has read - it is difficult to tell whether her reading has influenced her beliefs or whether she interprets what she reads in ways which fit in with her beliefs:

N.   But I *believe* that one is gonna be help that's my part of my er belief probably use that because I believe I believe you have that if you modify your behaviour and your physical activity it's gonna be change that's my belief

S.   Yes (both laugh) okay and you've supported it with a reference as well so even though you're saying it's your opinion you know it's a strong statement but it's supported with a reference umm and I think ummm somewhere else umm like here we've got 'must be considered benefits of physical activity in different levels*' must* be considered umm so is that's another quite strong statement you know it's sort of is that again because it's um because it's your belief

N.   Yeah because er when I read the article I believed that will be change because I lose weight when I was gain weight but just not doing the diet just because ummm doing the more exercise and I have seen

many articles on that and people the way the people living when I looked there is something there the physical activity must affect in I say even in my articles both diet and physical activity not means going to the diet as a strict diet it means modifying your diet it's gonna be help

After the interview, I compared some of the categorical statements that she makes in her review article with the original articles on which those claims are based. I found that on the whole the articles contain far more hedging than Noor's essay does. For example, in her introduction (pages 1-2) she writes

Nowadays, children`s energy intake increases as a result of high-calorie foods and drinks which they use in school or at home (Anderson and Bucher 2006). In addition, energy expenditure is reduced because there is less likelihood of walking to school and more time is spent viewing television and using computers (Anderson and Bucher 2006).

In fact, the Anderson and Butcher article, which is a review paper on childhood obesity, is quite cautious about the evidence for links between physical activity, consumption of fast food and soft drinks and obesity. The authors cite several studies which found no evidence of a 'relationship between consuming snack foods (such as chips, baked goods and candy) and BMI' (p.26) and they state that 'studies of the link between physical activity and BMI have had mixed results' (p.27). On the

question of the link between television viewing and obesity, they discuss studies which used a variety of methods and conclude:

> More rigorous experimental studies consistently find that reducing children's television watching lowers their BMI. Because these experimental studies can establish causality while the others do not, it seems reasonable to conclude that watching television does contribute to childhood obesity, despite the overall mixed findings of past studies.
> (Anderson & Butcher, 2006: 28)

It is difficult to know why Noor seems not to have noticed this emphasis on mixed results as well as the hedging in statements such as:

> First [television viewing] *may* squeeze out physical activity. Second television advertising *may* increase children's desire for, and ultimately their consumption of, energy-dense snack foods. Third watching television *may* go hand in hand with snacking, leading to higher energy intake among children watching television. (Anderson & Butcher, 2006: 28, emphasis added)

It may be because she is reading the text in a way that fits in with her own strongly held beliefs, leading her to see the evidence that she wishes to see. On the other hand, it may be her struggles to avoid plagiarism whilst expressing herself in a foreign language that lead her to cut out what she perceives to be unnecessary

words. She noted that she finds writing in English so difficult that she sometimes omits research which would be relevant to her topic because she cannot find a way to summarise it without plagiarising. However, it should be noted that Noor had definitely read at least one paper which cast doubt on her strongly held conviction that reduced physical activity is the main cause of obesity: in the writing class, we analysed in some detail a review article by McAllister *et al.* (2009) which strongly criticised the overwhelming focus on food marketing practices and the influence of environmental changes on physical activity levels, which the authors refer to as 'the big two' (p.869). McAllister *et al.* argue that the appeal of the big two as the main causes of the obesity epidemic is so strong that even scientists may fail to treat them with an appropriate level of scepticism. These authors are not questioning the basic role of the energy intake/energy expenditure equation in weight gain or loss, but they do argue that there is insufficient evidence that factors such as increased restaurant dining, less favourable environments for walking and the amount of time given to physical education in schools are responsible for rising levels of overweight and obesity. Their review article then highlights other factors, including infections, mother's age at birth, genetics, endocrine disrupters and sleep debt, for which evidence is emerging of a role in weight gain.

Another point where Noor seemed to be either relying on her own beliefs or developing her own theory to explain a rather surprising statistic is in her introduction, where she states that '[a]mong preschool children, 43 million were evaluated to be overweight and obese, mostly from developing countries in 2010 and the worldwide prevalence of childhood overweight and obesity will reach 60 million in 2020 (De Onis et al, 2010)'. In the interview, I questioned the implication that

overweight and obesity appeared to be a greater problem in developing countries than in the developed world, and she offered this theory to justify her claim:

S.	… I was a bit surprised by this actually '43 million mostly in *developing* countries' is that right not

N.	Because the lifestyle is changing in developing countries and er I don't know that's my opinion when you er actually living the kind of lifestyle and then you adopt it with that and increase your intake actually it's not normal for your generation genetically I think a little bit you adopt with something but for example 200 years you're living that kind of food and living that lifestyle and you change suddenly maybe change in your body style body composition I think that's what I believe even I take my child to my country give them a bottle of the different food gonna be a reaction you see the reaction that means probably allergy or but it's not for me I'm adopt for that food I grew up with this taste it's different in Africa I think because the lifestyle is not changing when I look at the… I really like…if I have got if I have get an opportunity to get a research I really like to do about ethnic about immigration people who come to different countries because the minority people in here more fatter than English people white English people

S.	Are they? Is that…

N.   Yep really honestly I think the English people is fat the white people but many comparing the minority people more fatter because the lifestyle is completely changed

She seems to be aware that this theory may not be accepted by everyone because she prefaces it with 'I don't know that's my opinion'. I can hear the doubt in my voice when I say 'Are they?' Noor seems to hear it too because her 'yep' is rather quiet and followed by a long pause.

It is possible that she simply took the statistic from the original article without thinking about it too carefully, possibly as a result of being told that she needs statistics to illustrate the size of the problem under discussion in an essay or article, and that my questioning it prompted her to articulate this theory for the first time since she seems less certain about it than about some of her other theories. In fact, on reading the original article, I found that the authors had far more data from developing countries than from developed countries: 413 surveys relating to 124 out of 161 developing countries compared with 37 surveys covering 20 out of 45 developed countries. Therefore, although her claim is factually correct – the surveys analysed by De Onis *et al.* (2010) did identify more overweight and obese children in developing countries than in developed ones – it is also somewhat misleading. It may have been more useful to use the prevalence statistics from the same article: the surveys indicate that overall 11.7% of children in developed countries are overweight or obese whereas for the developing world, the figure is 6.1%.

I also asked Noor why she had tended to focus only on the findings of studies rather than including details about the study design. Tutors often tell students that they need to include more details about the studies they discuss. Although the tutors do not usually give a reason, this strategy seems to be an effective way of indicating the strengths and weaknesses of a piece of research to a knowledgeable reader without making a strong, direct criticism. It can also allow readers to judge the extent to which the findings from a study might be generalizable to other contexts. For example, Noor makes a strong recommendation in her conclusion that 'sedentary activities should be reduced by encouraging children and their parents to improve the level of physical activity not only during the week but also at weekends and holidays'. The reference given for this is a small-scale study by Mitsui *et al.* (2010), which measured children's activity levels in one small town in northern Japan and found that children were less active (as measured using pedometers) on holidays than on school days. In fact, the authors of this study point to a number of limitations which mean that no strong conclusions can be drawn nor generalisations made.

Noor has made little use of this strategy of including details of study designs in her review paper. According to her, this is because 'it's really important how much the programme affects the body profiles body composition profiles', reflecting her introductory statement that the aim of her review was to focus on 'studies which indicate that physical activity or exercise is associated with changes in body composition profiles'. This suggests that she is not critical of these studies as long as they appear to provide evidence to support her own view.

Noor clearly had some awareness of the way in which details could be used to convey critical evaluation because when I pointed out one instance where she described a study as 'small' she was immediately able to tell me that her intention was to criticise the study because she did not 'believe' the findings. This particular instance appears in a section of the review paper entitled 'Genetic Effects', where she discusses a small number of studies which have investigated the relationship between genetics and obesity. In this section, she seems to wish to cast doubt on the evidence for this relationship. Although there is some inconsistency in her use of hedging and reporting verbs, overall she conveys the impression that the evidence is weak.

Genetic Effects

[1]A number of genetic syndromes (Prader-Labhard-Willi Syndrome and Bardet Biedl Syndrome) can be present with obesity (Kiess et al, 2001). [2]There have been twin pair studies designed to explore the role of genetic predisposition and environment in childhood obesity. [3]There are monozygotic twins who share all of their genes and dizygotic twins who share half of their genes (Hopper et al, 2005) but both types of twins nearly always have a similar childhood environment. [4]Research shows that the heritability of BMI and abdominal adiposity (77%) were higher in children (aged 8–11 y) (Wardle et al, 2008) and also offspring of obese parents had less decrease in BMI compared with children of non-obese parents during the exercise programme (Nemet et al, 2005). [4]On the other hand, a study was conducted by Pietiläinen et al (2008), the results of which illustrate that the levels of activity in obese co-twins were less than half compared with normal co-twins. [5]Therefore, independent of genetic factors, an inactive lifestyle is associated with obesity. [6]The human gene pool could not have altered quickly enough, so the increase in the prevalence of obesity is not explainable purely in terms of genetics. [7]Therefore, changes in environment may be a cause of the epidemic of excess weight (Bouchard, 2007).

[8]However, genetic research has shown that β-adrenoceptor polymorphisms (mostly β2- and β3-adrenoceptor polymorphisms) may be associated with the onset and maintenance of obesity (Masuo and Lambert, 2011). [9]Sakane et al (1999) suggested that during exercise and diet treatment, obese participants with the BAR-2 Arg16Gly polymorphism had greater weight loss compared with the subjects who did not have the mutation. [10]Because in human fat cells, BAR-2 is a hydrolysis of lipids receptor, a high response may affect weight loss through BAR-2 in subjects with this polymorphism, and β3-adrenoceptor polymorphism may be a predictor of struggling to lose weight and rebound weight gain after significant weight loss has been seen in these subjects (Masuo and Lambert, 2011).

[11]On the other hand, Obregon et al (2012) have shown in a small control trial that eight obese children (aged 8–12 yr) carriers of MC3R 6Lys–81Ile haplotype which has been connected with childhood obesity, higher body fat percentage, and reduced fat oxidation, were compared with eight age-gender-matched obese non-carriers. [12]Body composition was calculated by dual-energy X-ray absorptiometry, total body water by the deuterium dilution technique, and total fat mass by air-displacement plethysmography and was a calorimeter was used to assess substrate oxidation in response to moderate exercise (60% VO2 max). [13]The results illustrated that there are no significant differences in anthropometrical and body composition measurements between carriers and non-carriers. [14]The Carriers of the 6Lys–81Ile haplotype had a significantly higher glucose oxidation in response to moderate exercise than non-carriers. [15]Therefore, exogenous factors (environmental) may have a significant effect on the development of obesity in early life (Kiess et al, 2001).

Analysis of this section of Noor's essay seems to contradict her assertion that she referred to the study by Obregon *et al.* as small because she is not convinced by its findings. She seems to be arguing that there is little evidence for a link between genetics and obesity, a claim which the Obregon study appears to support. This section of the review paper can be divided into two parts, with the first paragraph forming one part and the final two paragraphs forming the other, both with a similar structure. This structure consists of evidence for the link between genetics and obesity followed by counter-evidence suggesting that the environment is more likely to blame for the obesity epidemic. Both sections end with a claim that environmental factors may be important. In the first section, the categorical claims in sentences five and six appear to serve as a critique of the (not entirely clear) research findings presented in sentence four.

Although Noor's use of hedging, dialogically contractive reporting verbs and categorical claims in this section does not consistently reflect her view that the environment rather than genetics is responsible for obesity, it is interesting to examine it in detail and to compare it with other sections in her review paper.

In the section entitled 'Exercise and Obesity Treatment', Noor includes references to approximately 17 papers but only for two of them does she include any details of the study design. Both of these seem, at least as the findings are presented by Noor, to provide strong evidence to support her belief that physical activity is important in managing weight. In the first example, she begins by citing two groups of researchers who have indicated that reduced levels of physical activity may be the result of obesity rather than the cause. She then provides some counter-evidence

from a study by Yang *et al.* (2006), including the fact that it was a longitudinal study over 21 years, which is likely to be judged positively by readers:

> Furthermore, there is growing evidence that obesity is the cause rather than the result of physical inactivity (Metcalf et al, 2011; Ness et al, 2007). However, Yang et al (2006) evaluated physical activity over a 21-yr follow-up and results illustrate that 33.1% of males and 32.0% of females were categorized as active, and 11.5% of men and 7.4% of women as inactive. Therefore, participants with decreased activity and who were inactive were more likely to have higher abdominal obesity, especially among women, after adjustment for confounding variables. Therefore, maintaining the level of activity plays an important role in keeping weight unaltered.

In the second example, she includes some detail on a study by Henderson *et al.* (2010), who used counselling to increase physical activity levels in an intervention study:

> In a study conducted by Henderson et al (2010), thirty-three obese juveniles aged 14 to 18 were divided in two groups (intervention and control). Then all subjects were categorised based on their enthusiasm to participate in exercise (stage 1 (pre-contemplation), stage 2 (contemplation), stage 3 (preparation), stage 4 (action), and stage 5 (maintenance). The intervention group received one-to-one session counselling in physical activity. After a 3-month follow-up the results illustrate that the intervention group had considerably greater physical activity levels, lower weight, BMI z-scores and

hip circumferences compared with control groups and also their stage of exercise behaviour had changed.

The details that Noor chooses to include indicate to the reader that this was a carefully designed study which took into account participants' psychological readiness to participate in an exercise programme. The findings as presented by Noor appear to offer strong evidence for the role of counselling in increasing individuals' participation in physical activity, and in her conclusion, she makes the claim, based on this evidence and supported by a reference to the authors of this study that 'Physical activity counselling is an inexpensive and effective technique which is increasing physical activity in the long term (Henderson et al, 2010)'. However, what Henderson *et al.* actually say in their paper is that the intervention group had significantly higher levels of *light* physical activity as well as significantly lower weight, BMI z-scores and hip circumferences. Differences between the two groups in levels of moderate and intensive physical activity were not significant. Therefore, although the authors are positive about the benefits of counselling they are rather more cautious than Noor: in their introduction they state that 'Previous studies have considered the use of physical activity counselling interventions as an effective and inexpensive method of enhancing physical activity with long-term benefits [11–13]' (p.1); and in their discussion they say 'The results of this pilot study suggest that exercise consultation is a promising strategy to increase physical activity levels and decrease weight and BMI in obese adolescents' (p. 4).

In summary, Noor's choice of topic for her review article was influenced by her personal concerns as a mother, and her approach to the topic seems to have been

influenced by her own experiences of weight gain and loss as well as her observations of other people's behaviour. In addition, rather than paying careful attention to the strength of claims in research articles, she may be drawing on powerful media discourses which blame individual behaviour and changes in the environment for the increased prevalence of obesity.

7.10 Benedito

As noted in the previous chapter, Benedito was less successful than the other participants in his attempts to develop writing practices that met the expectations of his tutors, but the interview data offers few insights into the reasons for this. In fact, Benedito seemed to construct contradictory identities in the interview and in his writing. In the interview, he positions himself as a scientist who is able to critically evaluate both practice and research and as a professional public health officer who wishes to contribute to the development of his country and his community. On the other hand, in his review paper he positions himself as a rather careless student writer who struggles to engage critically with the literature or the target reader.

7.10.1 Professional or personal?

Like most of the other participants in this study, Benedito linked his decision to do a master's degree with his profession. He had worked as a nurse and a lecturer in health in Angola before coming to the UK to study for a BSc in Public Health. When I asked him why he had chosen to do an MSc in Health Sciences, he explained that

he wanted to make a contribution to health in his country, which had suffered a civil war and lacked local expertise:

A. okay I came here and because in Angola we have some gaps the war it affected the country the war it affected the country we have a gap in many fields not just in health and as a health officer a public health officer er I find I identified some gaps because I used to do some project relating to Angola like the impact of controlling malaria to young children in Angola and I did some work as well (unclear) I did some work er strategy for controlling malaria and the trypanosomiasis

[…]

B. and I find some gaps this it pushed me to come and to do this course of MSc in health studies or health science to gain more scientific way of thinking and criticising things and then to go back to work in Angola

S. aha so what kind of gaps did you identify

B. we don't have many people who they do the work in Angola most of the work has been done by foreign people is one of the gaps because the country cannot continue like that and also we don't have er many people with high experience who they are Angolan

In this extract, Benedito positions himself as a public health officer, although in the interview it emerged that although he studied public health as an undergraduate in the UK, he had not actually worked in this field. He also constructs an identity as a post-graduate student who understands the need to be critical of and identify gaps in research and practice.

Benedito referred again to his identity as a public health officer when I asked him why he had chosen to write his review paper on the impact of strategies for controlling and preventing sexually transmitted diseases in the community. At this point, other facets of Benedito's identity also emerged: a community leader in the Angolan community in London and an expert invited to conferences:

B. er as a public health officer and as Angolan in Angola community I'm one of the leaders I'm one of the leaders when there is a meeting people gathering sometimes they invite me to bring a topics relevant topics and I think er sexually transmitted infection is one of the great or the relevant topic especially among of youth today yes among of youth today and also I attended a conference in Benguela

S. in where sorry

B. Benguela in Angola I attended a conference as a key speaker

S. wow

B.   yes as a key speaker and I tried to teach for pre-conference course

and I find it was relevant people in the world to be aware about sexual

transmitted infection yes and sometimes in the community people they

come to ask advice to me […] and many of them they come to meet

me say oh I'm feeling this I have that they told me is gonorrhoea they

told me is chlamydia they told me is syphilis this is one of the reason

that I said okay if some Angola people they have always this situation

that means many communities they must have the same issues okay

let's try to do my work my essay on strategies for controlling and

preventing sexually transmitted infections

Here he links his identity as a public health officer with his identity as an Angolan in

London and seems to suggest that his professional identity is perhaps one of the

reasons for his being a leader in the Angolan community. In addition, by describing

how members of the community seek his advice on health matters, and how he is

invited both by the community and by conference organisers to give talks on health,

he positions himself as a respected expert. This 'expert' identity was also

emphasised again later in the interview when I asked Benedito about the introduction

to his review paper, specifically why he had chosen to begin with the following

sentence:

There is evidence of high prevalence and incidences of sexually transmitted

infections in developed and non-developed countries which can result in

serious complications and lead to behavioural, social, political and economic problems (Stein, 2011).

In response to my question, Benedito began by explaining that he had learnt in the academic writing class about the need to begin a paper with a problem 'which will attract the reader'. He then went on to say something which seemed to suggest that he may have based his claim on personal experience rather than on evidence gathered from the literature. He followed this with a description of his experience at a conference where delegates praised the usefulness of his talk:

B.   this is evidence of what I learned and when I said there is high evidence of prevalence incidence of sexually transmitted infections to developed countries and non-developed countries and which is a serious problem for public health or which affects the economics of the countries what that mean er regarding the investigation that I made (aha) and as a leader the numbers of sexually transmitted infections are increasing

S.   aha okay yes

B.   are increasing and this is affecting I went to Gabon Libreville to a conference as one of the key speakers of the conference after the conference some people they came to follow me saying oh if you was here before five years ago I was not supposed there were not supposed to be to the situation that they are

338

S.   aha what does that mean exactly they were not supposed

B.   they said your conference your topic it brought the enlightenment if we had that before maybe our view was supposed to change the way of thinking and the way of seeing things

S.   aha so do you mean they needed it five years ago

B.   yes

[…]

S.   and when did you go to that conference

[…]

B.   Yes it was last year and I started realising that there are a lot of issues on sexually transmitted infections not just in Africa even here in Europe because I attend some conference in Lisbon in Portugal it was the same thing the same issues that I found to Africa I found in Europe such as Portugal Spain and Holland […] it's the reason why I started my essay describing like that

At the beginning of this extract, Benedito states 'this is evidence of what I learned

[…] regarding the investigation that I made and as a leader the sexually transmitted

infections are increasing'. It is possible that 'the investigation' to which he refers

could be his reading of the literature, but his phrase 'and as a leader' suggests that

he is basing his claim at least partly on personal experience. He then positions

himself as a respected expert by referring to a conference where delegates informed

him that they had needed his wisdom five years earlier. Following my question about

the date of the conference, he explains how he has learnt from attending these

conferences that the problem of STIs is widespread in both developed and

developing countries. These claims are supported in his review paper with a

reference to an article by Stein. This article, which is actually by Stein *et al.* (2012),

focuses on the incidence of three specific STIs amongst a specific population:

hazardously drinking women who are in prison in the USA. The authors do indicate

that the incidence of the specific STIs under discussion is high, and that these STIs

can have an adverse impact on the health of women and any children they might

have whilst infected. However, the authors make no reference to any country,

developed or developing, apart from the USA, nor do they refer to any complications

or consequences of STIs other than those related to health. Therefore, Benedito

appears to have taken an article which partly supports the claims he wishes to make

and used it as a reference with the assumption that his reader will not question or

check its accuracy.

Benedito also emphasised his role as a leader when I asked for clarification on what

he meant by 'the Angolan community' and whether it was linked to an official

organisation. He confirmed that it was and added 'I'm one of the leaders in that

340

association'. He then went on to say 'and even by the time that I was doing my degree at university I was leading the Christian Union of our campus.' Thus he implies that his role as a leader in the community is not simply chance; rather he has experience of and perhaps a natural ability for leadership, and this again suggests that he is respected.

7.10.2 Generalising 'community'

The interview extracts discussed above illustrate how Benedito's sense of identity as a public health officer and as a respected leader and health expert in both his community and his professional field appears to have influenced his approach to his review paper. These extracts also offer insights into how he seems to have moved from awareness of the specific problem of STIs in the Angolan community in London to a generalisation of this problem to the whole world as a result of attending conferences in Europe and Africa. This generalisation is problematic because, as the literature cited by Benedito makes clear, each community or population is different. Of the 27 journal articles which Benedito includes in his list of references, 21 are clearly focussed on specific regions/countries and populations, such as female prostitutes in the Senegalese capital Dakar, German and Danish youth, the prison population in Pakistan, women in the American military, and the aforementioned hazardously drinking women in American prisons.

However, Benedito appears to have been unaware of the relevance of such details because he rarely includes them in his review paper. In the few instances where such details are given, the referencing is so inaccurate that it is impossible to trace

the original source of the claim. For example, in a section on screening, he states 'A study conducted by Nusbaum et al. (2004) on STIs among sex work in Republic Democratic of Congo revealed that participating in regular screening helped identify STIs'. In fact, the article by Nusbaum and colleagues is a review article focusing on STIs in the United States and the authors do not mention Congo. In addition, the fact that regular screening helps to identify STIs seems rather obvious and is therefore unlikely to have been one of the main findings of a research article. This kind of statement, which occurs frequently in Benedito's review article, seems to indicate a lack of critical engagement with both the literature and the notion of a target reader for his review.

In the interview, I asked Benedito whether the community to which he referred so frequently in his review paper (the phrase 'in the community' appears 34 times in just over 3000 words, approximately once every 88 words) was a specific or a generalised community.

B.   don't forget that my topic is relating to the community and when I don't use the community that's mean I'm getting out a little from the topic

[…]

S.   mmm so when you talk about community because you said the Angolan community and you meant the Angolan community in London is that the kind of thing you mean here when you say in the community

B.   yeah in the community

S.   you're talking about quite small communities are you

[…]

B.   yeah but do not forgot is not just as I said it's not just for Angolan
        (mmm) is an issue to all the communities (yes) we visit many
        communities (aha) and is the same thing (aha) it's the reason that I say
        in the community

This extract indicates that Benedito appears to have generalised the issues which he identified in the Angolan community in London to all communities worldwide. First, he states that the frequent use of the phrase 'in the community' demonstrates the relevance of his claims to his chosen topic. He then argues that the issue of STIs is the same for all communities. However, as noted above, the literature which Benedito cites in his paper reveals that both the problems faced by particular communities and the solutions to those problems may differ from one community or population to another.

7.10.3 A reader's response

In addition, John, the lecturer participant that I asked to comment on Benedito's paper was also sceptical about his notion of a generalised community. In this case, John was not the lecturer responsible for marking Benedito's paper, and the topic did not fall within his particular area of expertise. Thus, he was reacting to the paper as a reader who is an expert in some areas of health, and generally well informed about other areas, but not necessarily familiar with the literature discussed in the review paper. This means that John is, to some extent, a typical reader of a review article as suggested by Anne in her introductory lecture: a health professional or scientist who is using the review article to 'get up to speed' with a topic which is not entirely familiar to them. Therefore, John's comments are worth considering here as they highlight some of the problems with Benedito's attempts to generalise and his assumption that the target reader of his review article is someone who knows more about his topic than he does:

> Identifying groups of vulnerable people is very difficult when you're talking about the entire planet and one thing which is certainly in erm you know it varies a lot it just does it really does and you know there are plenty of places in the western world where basically being young is your main risk factor you know it's some version of being young and stupid used to be survivable and then it becomes a lot more risky when you get the nastier infections erm so it's it's that's very different from a situation which I know you can get in some of the African countries where er what you've got is you know actually it's about gender politics it's about you know the gender politics of those cultures

erm so I just it's a gross generalisation which I find it absorbs it just has your

time as well it takes up a huge amount of my time thinking is this actually true

In this extract, John points out that the causes of the spread of STIs may vary greatly

in different parts of the world from risk-taking behaviour by young people in the west

to gender politics in some African countries. This implies that the strategies

employed to tackle the problem are likely to vary from one community to another.

Therefore, John views Benedito's generalisation as both problematic and

unconvincing. John went on to say that Benedito had perhaps not been well advised

on his choice of topic. He added 'I think I would have said well how about you pick a

place cos I think you can say very useful things about this or any health issue

actually in a particular place at a particular time'. John's emphasis on 'a *particular*

place at a *particular* time' contrasts both with Benedito's attempts to generalise the

problem of STIs to all communities and with the emphasis which is often given in

science to the need to generalise research findings. In addition, John's comment

raises the question of why Benedito was not given this advice by his supervisor

following the submission of his formative assignment, in which he also takes a

generalised approach to the topic. It is possible, of course, that he may have

received such advice but ignored or misunderstood it, or that the grammatical errors

and lack of coherence in his paper made it difficult for his supervisor to engage

constructively with the ideas expressed in it.

John's final comment in the extract above, 'it takes up a huge amount of my time

thinking is this actually true', highlights Benedito's misunderstanding of his target

reader. As noted in the previous chapter, Benedito imagined his reader to be a university lecturer who was more knowledgeable on the topic of STIs than Benedito. This may be one reason why he did not perceive the need to support his claims with clear evidence from research studies: there is no need to explain and justify claims if the reader is already familiar with the claims and the evidence which underpins them. However, in addition to John's point above about doubting the validity of Benedito's generalisations, at another point in the interview he also questioned a specific claim which Benedito had made without providing any supporting evidence. This claim appeared at the end of the first paragraph of the introduction:

> There is evidence of high prevalence and incidences of sexually transmitted infections in developed and non-developed countries which can result in serious complications and lead to behavioural, social, political and economic problems (Stein, 2011). Sexually transmitted infections are serious issues of public health problems and are frequent in the community with high prevalence and incidence and result serious complications and sequel. <u>Furthermore, sexually transmitted infections are infections that facilitate the spread of HIV in the community</u> (Mayound et al., 2001).

On this particular claim, John commented:

> well that's a big statement right now I I my you know and what that does is trigger the is that actually true […] and I am not sure that all sexually transmitted infections that they would in any way change the spread of HIV I

do not know that that is true I can't see why it would be true for all sexually

transmitted infections I therefore believe it to be untrue

In fact, the second and third sentences in this paragraph closely resemble a

paragraph in the paper to which Benedito refers here: a paper by Mayaud and

McCormick (2001) entitled 'Interventions against sexually transmitted infections (STI)

to prevent HIV infection'. While Benedito presents the claim that STIs facilitate the

spread of HIV as unproblematic, Mayaud and McCormick (2001: 130) note that 'a

number of STIs have been identified as facilitating the spread of HIV'. They then

proceed to examine the ways in which HIV *may* interact with STIs before discussing

approaches to controlling STIs. Thus, like Noor, Benedito has ignored phrases in the

original text which reduce the strength of the claim (in this case 'a number of' and

'may'). He has also failed to recognise here that his reader may be surprised by the

claim that STIs have a causal role in the spread of HIV and will therefore need to see

some supporting evidence in order to be convinced. Problem of assuming the reader

already knows everything. Problem with view science as theory neutral – recounting

facts rather than constructing an argument to convince a sceptical reader?

Arrogance – leader in community, conference speaker etc? Lack of hedging in

Benedito's writing and use of boosters like 'it is important/relevant…'

Add a conclusion

Scott *et al.* (2014: 173) say that knowledge that is driven by personal or subjective

issues, and which is constructed in ways which draw attention to these, is at risk of

being discounted, and this is an example of how the student abides by rules of

the game or risks not succeeding in higher education. Most participants abiding by the rules on the surface but resisting them underneath. Other bodies of knowledge that the student might bring to their work are often invalidated if the student cannot construct that knowledge to fit in with the expectations of the institutional assessment frameworks. For example, students are often expected to frame their understanding not in terms of practical or professional knowledge but in relation to academic knowledge or the field. Complex processes of selection and regulation are rendered invisible through discourses of writing as skill or technique.

Although students are told to write a review article for a named academic journal, the guidelines for authors provided by the journals were rarely mentioned by the participants. Indeed, some participants seemed to have forgotten the requirement to select and write for a particular journal. In my experience, this is not uncommon: when I ask MSc students who attend writing tutorials which journal they are writing their review article for, I often receive a look of incomprehension.

8 Conclusions

8.1 Introduction

This research took an academic literacies approach to the writing of a review article by students on MSc Health Sciences programmes. From this perspective, in which writing is viewed as social practice, the researcher does not ask how individuals acquire particular disciplinary genres. Instead, the focus is on:

> how disciplinarity/interdisciplinarity is produced as participants take up and use the tools in situated activity, as they blend their multiple identities and manage multiple activity footings, and as they work to create some collective stabilized social formation and social representation of their practice through exclusions and inclusions, enculturation and enforcement, the foregrounding and suppression of contextualizations. (Bazerman and Prior, 2005: 154)

The findings from this study offer insights into how participants in a specific context – a Health Sciences master's degree programme in a UK university – blend multiple identities, including practitioner, student, novice research scientist and parent, and They also say (p.153) that social life/structure is 'deeply and routinely laminated'. According to Prior and Shipka (2003: 187) chronotopic lamination means 'the simultaneous layering of multiple activity frames and stances (Goffman, 1981) which

are relatively foregrounded and backgrounded (Goodwin and Duranti, 1992). Bazerman and Prior (2005) say that the notion of lamination is fundamental to Goodwin and Duranti's argument about multiple frames, and their foregrounding and backgrounding which occurs through dynamic and fluid contextualisations, rather than being static. And they add 'Lamination then suggests that disciplinarity is not a map of autonomous social spaces […] but a heterogeneous sphere of activity that partly constitutes other social domains of practice [e.g. family, government, community], whereas those other domains simultaneously co-constitute disciplinarity. […] It is this fundamental heterogeneity and lamination that most clearly distinguishes the notion of disciplinarity from that of disciplinary discourse community.'

This research adds to the academic literacies literature which investigates writing as a social practice influenced by context and identity. In particular, by investigating a specific context, a module on an MSc Health Sciences programme for which students were required to produce a genre more commonly written by research scientists, this study highlights the complexity of context and demonstrates that students and lecturers may differ in the extent to which they regard particular contextual factors as salient to the assignment. In other words, they have different mental models of the context.

One of the questions that initially motivated this study was why students, when given a model or detailed guidance for an assignment, often appear to ignore it and do their own thing. This study suggests that one reason may be that students' mental

models of the context surrounding the assignment may be very different from the mental models held by their lecturers.

8.2   Research Questions

8.2.1   How does context influence participants' writing practices, particularly their understanding and expression of critical evaluation?

As explained in earlier chapters, in this study the definition of context is taken from van Dijk (2008; 2009). According to van Dijk, contexts should be viewed as mental models. While individuals' mental models are likely to include their own identity, knowledge, goals and intentions as well as those of other discourse participants in any given situation, these models are subjective and vary from one individual to another. Van Dijk argues that it is this variation which accounts for variations in discourse between individuals who appear to be participating in the same context. In this study, it is to be expected that each participant's mental model of the context of the review article assignment will differ not only from those held by the other student participants but also from those of the expert researchers who are the more usual authors of published scientific reviews.

The use of van Dijk's definition of context allows for the possibility that research participants may regard as salient contextual factors not anticipated by the researcher. This fits with an academic literacies approach to research in which emic perspectives are valued and the importance of writers' identities and life experiences recognised. Both van Dijk (2008) and Lillis (2008) highlight the role of discourse analysis in identifying links between discourse/text and context. Therefore, in this

study, I used discourse analysis of participants' interview data and review articles in order to understand how context influenced the writing of the review article assignment.

Although individual discourse participants hold different subjective models of communicative situations, this study found some similarities across the nine participants. Specifically, all participants indexed certain aspects of the academic context with particular emphasis on their supervisors' expectations, and the eight participants who had experience of working as health practitioners also indexed their professional contexts. In addition, analysis indicated that several participants were also influenced in their approach to the assignment by aspects of more personal contexts and wider discourses on health and health-related behaviour. In the following sections I will discuss each of these in turn, starting with the academic context.

For eight of the participants, the MSc Health Sciences programmes was their first experience of studying in the UK. As Scott *et al.* (2013) point out, international Master's students have often been high achievers in their previous studies, but they may struggle on arrival in the UK due to a lack of familiarity with the rules and conventions of UK academia. As discussed in Chapter Six, several of the participants in this study highlighted the culture shock which they experienced as they moved from the familiar practice of assessment through examinations to the unfamiliar practice of assessment through essays and assignments which included the need to critically evaluate research. These participants appeared to really want to use the interview as an opportunity to tell me their stories of the struggle, confusion

and pain they had experienced at the beginning of the master's course. In telling these stories, they positioned themselves as active and engaged students, reflecting Koehne's (2006) finding.

Feedback

The module for which the participants were writing their review articles is designed in theory to provide substantial support to help students develop their academic writing skills. Students should receive feedback on two pieces of work related to the review article: a 1,000-word formative assignment submitted in the middle of the autumn term and a ten-minute presentation towards the end of the Spring term. However, according to participants' accounts and to the samples provided by some participants, written feedback on the students' work often appeared to be fairly minimal. In addition, as previous research on feedback has found, feedback comments tended to focus on study skills and language problems, and were sometimes incomprehensible to the students.

Participants appeared to be very focussed on finding out what individual lecturers required so that they could comply with the requirements, and the main way for them to do this was through the feedback on their written work. As other studies have found (Lea & Street, Lillis) much of the feedback given to these participants was brief and elliptical, with the result that participants could not always make sense of it. In the face of this confusing feedback, most participants exhibited a strong desire for dialogue, recounting how they had sought opportunities to ask their lecturers for clarification. In some cases, these conversations appear to have given participants significant insights into valued writing practices particularly with regard to critical

evaluation (e.g. Padhma 6.2.2). However, whether such dialogues take place or not depends both on the student being sufficiently confident to seek them out and the lecturer's willingness to engage. Although the Communications module, for which the review article was the main assessed piece of work, was in theory designed to facilitate such dialogues, with a table in the module handbook for students to record meetings with their supervisors, in practice they did not occur on a regular basis. Indeed, Jenny's comment 'She's very busy. She doesn't have time to read every paper' seemed to suggest that perhaps her supervisor actively discouraged students from seeking a more dialogic form of feedback. Similarly, Noy, who shared the same supervisor did not ask her supervisor about the feedback comments that she did not understand, and Anouk, who received very brief and unclear comments on her formative assignments appeared to have made little effort to engage with the feedback or seek further clarification, possibly because she perceived no encouragement to do so.

In discussing the feedback that they received on their written work and their responses to it participants also seemed to be doing identity work, resisting their lecturers' attempts to position them as deficient in language and study skills and instead constructing identities as diligent students. For example, when summarising the feedback they had received on particular assignments, several participants began with a positive comment before listing the more negative ones. Participants also described their responses to the feedback in some detail explain

For example, as a result of a comment by one of their lecturers, both Padhma and Amanda came to understand that they needed to comment on the research findings

that they were presenting rather than simply summarising them. However, while Amanda interpreted this to mean that she should evaluate the implications of findings for practice, Padhma understood it as a need to suggest reasons for differences in findings between studies.

Several participants appeared to view critical evaluation as negative criticism. For example, both Jenny and Anouk chose to make direct negative criticisms of previous research, while Noy and Noor appeared to be more comfortable with indirect criticism but also seemed to view evaluation as mainly related to negative criticism as they only included details such as the number of participants in the studies they were discussing if these details were likely to show the research in a negative light. Some identity conflict here? Noor – be soft and be critical. Noy 'I'm surely less expert' or something. Temilayo, on the other hand, attempted to achieve a balance between direct positive and negative criticism as he was following his supervisor's guidelines for writing a systematic review.

The feedback that participants received along with comments that lecturers made in class and in one-to-one conversations led them to certain understandings of the requirements for their written work. In addition, most participants tended to believe, unsurprisingly, that the main reader of their review article was their supervisor, whom they tended to perceive as a strict and knowledgeable expert. Several participants seemed quite pre-occupied with what they perceived to be their supervisors' strictness about the word limit, which is in fact a university regulation not an individual whim (find ref about this – article about MA Ed students, I think), and this led them to what. In addition, because they regarded their supervisors as extremely

knowledgeable, participants did not generally see themselves as experts writing for less well-informed readers. Rather, they perceived their primary reader to possess more knowledge than they did. Need to please, impress but not inform. Whether this view is accurate is open to question. Again these discussions serve to position the participants as diligent students. Check that there is not too much repetition here with previous section.

The practitioner context

Eight of the nine participants in this study had some experience of working as a healthcare practitioner and this experience appeared to influence their approach to the review article assignment. As noted in the literature review, practitioners often have a strong sense of identity (Adams *et al.*, 2006; Gourlay 2011a & b). This seemed to be the case with most participants in this study. For example, even participants who had worked in their chosen profession for only a short period of time (Noy and Anouk) frequently indexed their professional identity in the interviews and in their writing.

As demonstrated in Chapter 7, professional identity was particularly important in influencing participants' choice of topic for their review article with seven out of the nine participants indicating that there were links between their topic and their professional practice. In several cases, the choice of topic seemed to emerge directly from questions or doubts that participants had encountered in their work with patients, and they were therefore using the review as an opportunity to explore these questions. This orientation to practice means that participants approached the review paper from a different angle than that of a research scientist writing for publication. Although they generally mastered an appropriate academic style, the fact that they

were trying to answer their own questions rather than influence the direction of future research means that they did not necessarily select the kind of cutting-edge topics which one lecturer participant suggested would be suitable for a publishable review article (need to check this and also include it in at least one of the chapters).

This orientation to professional practice means that whether participants understood critical evaluation as involving discussion of the implications of research finding for practice or not, most participants included some references to practice in their review articles, and they appeared to regard this as more important than implications for future research.

8.2.2   How do participants negotiate the tension between writing (in theory) for an academic journal whilst (in practice) producing an assessed piece of work for a lecturer?

The review article assignment appears at first sight to be straightforward but in fact it is complex in a number of ways. Lecturers on the Health Sciences programme appear to view it an 'authentic' task: one which requires students to produce a real-world genre, making it 'more practical, realistic and challenging' (Torrance, 1995 cited in Bloxham and Boyd, 2007) than a standard essay.   However, because its authenticity relates to the world of academic research, in which review article authors are often engaged in research related to the topic of their review, rather than the kind of writing that health practitioners would normally do, the assignment requires students to take on an identity which is likely to be unfamiliar. Thus, in devising this task, lecturers appear to be 'constructing images of themselves' (Haggis, 2003),

viewing students as apprentice academics rather than as actual or aspiring practitioners. This was also evident in the first lecture, where students were told that the assignment was a 'dry run', a chance to practise writing a review article and to receive feedback which would be less harsh than that of journal peer reviewers.

Another factor which adds to the complexity of the task is the question of audience. In theory the students are writing for the journal readership. There is no ambiguity about this as there was with for example Lillis's (2001) law student participant whose assignment was to write advice for a client. In that case, the student was unsure whether to address the reader directly as 'you' or to write in a more impersonal academic style. However, with the review article assignment it may be unclear exactly who the target audience is because lecturers seemed to give contradictory messages about this. In the introductory lecture, students are told on the one hand that their target readers are 'busy doctors' and on the other that they are experts communicating with other experts. In this first lecture, students are also told that they should select a journal and follow its guidelines for authors in the writing and formatting of their article. This includes the word limit set by the journal. However, participants did not appear to have been alerted to the fact that journals have different target readerships with some aimed at practitioners and others at researchers. As noted in the literature review, authors adopt different stances with these readerships, addressing practitioners in a tone which is 'authoritative, categorical and assured' (Salager-Meyer, 2001: 72) but including more hedging and attribution when writing for fellow researchers (Latour and Woolgar, 1979).

Participants varied in the extent to which they seemed to be addressing either practitioners or researchers but in most cases, they appear to draw on various types of review article. For example some participants chose to include a section on their methods for selecting research papers for inclusion in their review, which echoes the style of a systematic review. However, none of the participants, not even Temilayo, who had been instructed by his supervisor to produce a systematic review, can be said to have produced a true systematic review. Others appeared to be drawing on reviews aimed at practitioners in their use of dialogically contractive reporting verbs such as 'demonstrated' and 'found' and their statements of recommendation for practice using 'should'. While Amanda's review seemed to be wholly aimed at practitioners, others were more mixed with some statements speaking to practitioners and others to a more research-oriented audience. This reflects Holquist's (1990: 68) claim that Bakhtin's 'centripetal and centrifugal forces interact most powerfully with each other […] at the level where a given discourse coalesces into recognisable genres'. Supervisors appear to expect a research-oriented review, but since participants seem to be unaware that the review article is not one monolithic genre, they pick and mix features from the various subgenres to create a kind of hybrid review. On the one hand, centripetal forces elicit an approximation of the style and structure of a research-oriented review article. On the other hand, participants' reading of a range of review article genres, along with other contextual factors such as their desire to please their supervisors and improve their professional practice, function as centrifugal forces, causing participants to diverge from the expected norms. Bakhtin (1986) argues that genres should be examined in their contexts of use to understand how users exploit their 'changeable, flexible and plastic' nature (p.80) for particular rhetorical goals. By examining the production of

359

review articles in the particular context of an MSc Health Sciences programme, this study offers insights into how these specific users manipulate the genre in order to achieve rhetorical goals which are somewhat different from those of the typical review article writer.

In addition to the confusion around the exact audience for the review article, some supervisors set their own requirements for the task, sometimes contradicting the guidelines from the first lecture and module handbook. For example, one participant in this study (Temilayo) was told to write a systematic review and others are given the standard assignment word limit of 3,500 words. Clinical Nutrition students cannot choose their own journal but have to write for a journal which is clearly aimed at researchers. These changes to the set task made by individual supervisors may serve to remind students that the actual reader of their article is their supervisor.

Certainly, most of the participants in this study appeared to be very focussed on working out how to please their supervisor and hence obtain a good grade. For example, despite being aware that indirect criticism might be preferable in a journal article, Jenny included direct negative criticism in her review because this form of expression had been praised by her supervisor on the formative assignment. Several participants noted that their supervisor was very strict about the word limit, and this sometimes led them to exclude features which they knew to be common in review articles. For example, Padhma did not include recommendations for future research in her conclusion; although she was aware that these were a standard feature of review article conclusions, it seemed more important to her to comply with what she perceived to be her supervisor's imposition of a strict word limit without cutting any of

her carefully crafted content. This suggests that she did not see herself as attempting to influence the direction of future research through a conversation with other scholars in her field.

On the whole, the participants of this study appeared to experience relatively little tension between writing (in theory) for an academic journal and writing (in reality) for their supervisor. This may be partly because the general conventions of academic writing are largely the same for their essays and for their review article. Most participants adopted a pragmatic approach, aiming to please their supervisor in order to obtain a good grade. Thus, the requirements of the journal were generally either seen as less important or ignored completely. Jenny, for example, was the participant who paid the most attention to the journal's guidelines, but she extended her word limit by 10% because her supervisor allowed this although the journal clearly did not. Noy appeared to focus mainly on the need to use a different referencing style, which she seemed to regard as an irritating detail to be completed just before submitting the assignment. Some participants selected a journal which used the Harvard referencing style specifically so that they would not have to learn a new style (check – who exactly?). Benedito, like many Health Sciences students that I have spoken to, appeared not to know that he needed to write for a specific journal. This all suggests that the participants of this study did not regard the production of a review article as an 'authentic' task which they would later perform for real in the workplace. Ananthi was the only participant for whom the review article might have been considered an authentic task because she was considering a research career. However, she struggled to find a sufficiently narrow focus for her review article

perhaps partly because she was not in the 'authentic' position of conducting research on the subject of her review paper.

In addition to managing the tension between actual and theoretical readers, which, as noted above, did not appear to pose any major problems, most of the participants in this study were negotiating another issue – how to pursue their own interests whilst meeting the requirements of their supervisor and an academic journal. As discussed in Chapter 7, in the interviews most participants related their choice of topic for their review article to interests in their professional or personal contexts. They appeared to be using the review article as an opportunity to find answers to questions about their own professional practice in order to better help their patients or, in Noor's case, raise her child. However, these professional and personal interests remain largely hidden from the supervisors' view, only becoming apparent through the interview data. The tension is particularly apparent in Temilayo's discussion (Chapter 7, section 7.4.2) of his supervisor's requirements for the review article and the small amount of freedom he perceived to focus on his own interests, implications for practice, in the conclusion. It is also apparent in Anouk's supervisor's criticism of her attempt to explain the stress mechanism in some detail to a readership of practitioners who would, she believed, be as unfamiliar with the concept as she had been until reading about it in preparation for writing the review. Her supervisor argued that this would be a taken-for-granted concept for an expert readership.

This seems to be repetition, including the quotation. Need to check and revise either this or the intro. The experiences of the participants in negotiating of the tension

between writing (in theory) for an academic journal and writing (in reality) for an academic supervisor whilst also pursuing professional and personal interests reflect Bazerman and Prior's (2005: 154) concept of disciplinarity, in which lamination, or simultaneous layering of multiple activity frames, is a key feature:

> Lamination then suggests that disciplinarity is not a map of autonomous social spaces […] but a heterogeneous sphere of activity that partly constitutes other social domains of practice [e.g. family, government, community], whereas those other domains simultaneously co-constitute disciplinarity. […] It is this fundamental heterogeneity and lamination that most clearly distinguishes the notion of disciplinarity from that of disciplinary discourse community.

For the participants of this study, the academic sphere of the MSc programme appears to be relatively foregrounded while their professional and personal spheres appear to be backgrounded but may at times be at the forefront in their approach to the review article. The sphere of journals and writing for publication may appear from the superficial formatting features of their review articles to be foregrounded but for the most part this sphere seems to be backgrounded in the minds of the participants. Some kind of transition using Bazerman and Prior multiple identities/footing etc. – at end of previous section or beginning of this?

8.2.3   What identity positions do participants construct for themselves in the interviews and in their writing?

As noted in the literature review (section 3.3.2), the concept of identity is a key construct in applied linguistics, viewed as social process, constantly constructed and

reconstructed through discourse, rather than a fixed product (Block, 2013; Bucholtz & Hall, 2010; Cameron, 2001). In this study, identity appears to be a key contextual factor in influencing participants' writing practices. In particular, participants' identities as students and as practitioners seemed particularly influential, with personal identities also playing a role for some participants. These findings reflect Bucholtz and Hall's (2010) argument that local identity categories may be more salient than macro-level demographic categories such as age, class and gender. Furthermore, analysis of the interview data suggests that participants position themselves as particular kinds of students and practitioner, notably attentive, hard-working student and caring practitioner. In this way, they resist their lecturers' attempts to position them as deficient in language and study skills or as novice research scientists.

In discussing the feedback that they received on their written work and their responses to it participants also seemed to be doing identity work, resisting their lecturers' attempts to position them as deficient in language and study skills and instead constructing identities as diligent students. For example, when summarising the feedback they had received on particular assignments, several participants began with a positive comment before listing the more negative ones. Participants also described their responses to the feedback in some detail explain

As noted in the literature review, practitioners often have a strong sense of identity (Adams *et al.*, 2006; Gourlay 2011a & b), and this seemed to be the case with most participants in this study. For example, even participants who had worked in their chosen profession for only a short period of time (Noy and Anouk) frequently indexed

their professional identity in the interviews and in their writing. In addition, just as participants constructed identities as diligent students in their discussions of the academic context, so they positioned themselves as caring practitioners when talking about the links between their review paper and their professional context. They did this by expressing sympathy for patients' suffering and desire to give patients the best possible advice and treatment. This caring practitioner identity is also evident to a certain extent in their writing when they focus on the implications of research findings for practice and the comments about improving patients' quality of life in the conclusions.

In writing participants construct a number of different identities for themselves. By failing to adhere to journal article conventions, such as the need to include an evaluative conclusion with clear suggestions for directions for future research, they position themselves as novice writers rather than expert members of a disciplinary community. Those who are unable to deploy reporting verbs appropriately to both distance themselves from certain propositions and indicate their own attitude to others (attribution and averral in Groom's (2000) terms) may (mis)represent themselves as lacking awareness of alternative points of view. However, it is clear from the interview with Noor and from tracing Benedito's gradually increasing use of a wider range of reporting verbs that the subtle differences in meaning between reporting verbs represent a challenge for students who may be struggling to express themselves with clarity and precision in English and their use may be regarded as a risky strategy.

Some participants attempted to take on an authoritative tone. For example, Amanda

made extensive use of dialogically contractive reporting verbs (e.g. demonstrate,

show) and modal verbs indicating strong obligation (e.g. should) to construct an

identity as an expert writing for less expert practitioners. Anouk also appeared to be

attempting to construct this identity when she explained the stress response in some

detail for her readers, whom she believed to be practitioners who would not be

familiar with the concept. However, this tone may be judged as inappropriate by a

supervisor who expects the review paper to be addressed to a community of

research scientists and hence to include more hedging and less explanation of what

would be regarded by experts as basic facts. Thus, in some cases, participants may

make attempt to position themselves as certain types of people through their writing,

but these attempts may be misconstrued or rejected by their lecturers.

Benedito provides an extreme example of this. He appears to take the theory neutral

view of science (Barron, 2003; Charney, 1993) discussed in Chapter 2 (see section

2.4) – that scientific prose presents a plain, theory neutral view of the world, and

hence that his job is to convey facts rather than evaluate theories and evidence. This

may also be why he believed that any Health Sciences lecturer who read his paper

would already be entirely familiar with the facts contained within it. It is possible that

this view, combined with a study skills approach to referencing where the emphasis

is on getting the technical aspects of referencing right rather than on referencing as a

social and rhetorical practice (Burke, 2002), may be what led Benedito to write what

he believed to be widely accepted facts about preventing STIs supported with

references which, while more or less technically correct, were not accurately

represented in terms of content. Benedito appears to be trying to construct an

identity as an authoritative expert but his practices may result in him being viewed by his supervisor as a student deficient in both disciplinary knowledge and study skills.

Including examples of direct negative criticism. Students construct identities as good students but not as disciplinary experts. As discussed in Chapter 2, genre knowledge is located in and hence learned in communicative activities. A student doing research with a team in a laboratory and writing a review paper for publication may have more sense of their audience as peers working on similar questions. As a result, they may be more likely to view direct negative criticism as a face threatening act (Myers, 1989) than the participants of this study, most of whom have their supervisor in mind as their primary reader.

Noy and Noor – trying not to be too strongly critical – not in tune with their sense of self. Noy – I have to criticise it's the assignment, but most negative criticism is quite indirect.

8.2.4 What are the lecturers' perspectives on the students' execution of the review article assignment?

8.3 Limitations

This study has several limitations. Firstly, it is a small-scale study of a very specific context in that it investigates the writing practices of practising or aspiring health

professionals on a master's programme where practitioner identities are generally side-lined or ignored by the lecturers. Therefore, some of the findings may not be applicable to courses where students are required to integrate practical and theoretical knowledge in their writing or to those where purely theoretical knowledge is valued by both students and lecturers. In addition to the specificity of the context examined in this study, the number of participants is small, all were non-native speakers of English and most had no previous experience of higher education in the UK. It would have been better to include some native speakers of English to see whether their experiences were similar to or different from those of the international participants.

Furthermore, since most of the participants were very focused on improving their writing to meet the requirements of their lecturers, they were generally quite successful by the end of the course despite their early struggles. It would have been interesting to include more students who consistently achieved failing or low passing grades in order to better understand the experiences of these students and to identify how they could be supported more effectively. However, the fact that most of the struggling students that I approached either ignored or refused my request, combined with the difficulties that I experienced in interviewing Benedito, suggests that being interviewed about their writing practices may be uncomfortable for them. Therefore, a different research approach may be needed.

A further limitation in this study may have been my own role as both researcher and academic writing tutor. As well as attending the two writing classes which I teach for all MSc Health Sciences students, all the participants in this study had either

attended the academic writing course for international post-graduate students or received some form of tutorial support from me (face to face or via email). Therefore, they knew me as their writing teacher, and this may have influenced their perceptions of the purpose of the interview and the responses which they gave to my questions.

Another way in which the study might be improved would be to spend more time analysing the participants' review articles before the interview. Although I did read each review carefully before the interview and identify issues for discussion, including examples of critical evaluation, when I came to do more detailed analysis later, I found other points which would have been interesting to explore with the participants. In this particular study, the structure of the academic year made this difficult. Students do not submit their final review article until late April or early May. Since they have very few classes in the summer term, they tend to spend little time on campus and may even leave the UK to collect data for their dissertation. Therefore, there was only a limited amount of time in which to conduct the interviews. However, in a different study with more time between submission of the assignment and the end of the course, it would be useful to do a more detailed analysis of the assignments prior to the interviews or to request further interviews with participants as the analysis progresses.

8.4   Recommendations for practice

An academic literacies approach to academic writing should be transformative. This means that academics should recognise the experience, knowledge and identities

that students bring to their studies and consider how these can mesh with expectations of academic work. In the case of the specific assignment discussed in this thesis, a review article written for a specific academic journal, the lecturers responsible for setting, introducing and supervising it appear not to acknowledge that many of their students are actual or aspiring practitioners and not aspiring research scientists. Some simple changes to the assignment could make it more clearly relevant to the students. Firstly, lecturers could explain the different types of review article and their readerships rather than giving conflicting messages about writing for busy doctors and expert researchers as if both groups read the same journals. They could then encourage students to write for whichever audience they feel most comfortable, recognising that students may learn more from approaching their topic from a practitioner's point of view if that is what they value most. – Fiona English affordances of genre

Another recommendation is for lecturers in general, not just in health sciences, to recognise that the students in front of them may be entirely unfamiliar with UK academic practices, such as essay writing and referencing. Most participants in this study were ultimately successful in their academic work, but their accounts of their culture shock when they began the course raise concerns about how less resilient students may cope when faced with alien practices and negative feedback. It is also evident from the lecturer interview data that some lecturers at least can explain concepts such as critical evaluation and could, if they chose, give quite detailed constructive feedback on students' drafts. However, my student interview data along with the examples of tutor feedback provided by my participants, suggests that this is not happening. I would suggest, therefore, that lecturers are trained to articulate the ways in which concepts such as critical evaluation and argument are expressed in

their disciplines and encouraged to convey these to students in ways which the latter can understand.

Stop giving conflicting messages about the target audience for review articles – a busy doctor vs explanation is too detailed for an expert reader.

They also need to recognise that international students may be completely unfamiliar with UK academic practices such as essay writing and referencing and provide more structured support/explicit feedback at the beginning of the course.

How to get this across to Health Sciences staff?

Teaching with genre – students need awareness of subgenres and of the choices available to them.

One to one feedback/dialogue. *Tutored* assignment – therefore lecturers should have workload points for this task.

8.5 Recommendations for future research

The question of practitioner identity is an interesting one. Need more research on both native and non-native speakers and the ways in which they position themselves, and how this identity is valued or disparaged by those teaching them

Also look at courses with a more explicitly practical orientation

Critical evaluation in different disciplines

Struggling students and how they can be supported, including those who struggle to make the transition from UG to PG level work.

References

Abell, J. & G. Myers (2008). 'Analyzing Research Interviews' in R. Wodak & M. Krzyzanowski (Eds) *Qualitative Discourse Analysis in the Social Sciences*. Basingstoke: Palgrave Macmillan

Adams, K., S. Hean, P. Sturgess & J. Macleod Clark (2006) 'Investigating the factors influencing professional identity of first-year health and social care students' *Learning in Health and Social Care* Volume 5, Issue 2, pages 55 – 68.

Andrews, R. (2010) *Argumentation in Higher Education: Improving Practice through Theory and Research* London: Routledge

Atkas, R.N. & V. Cortes (2008) 'Shell nouns as cohesive devices in published and ESL student writing' *Journal of English for Academic Purposes* Volume 7, Issue 1, pages 3 – 14.

Atkinson, P., A. Coffey, S. Delamont, J. Lofland and L. Lofland (Eds) (2001) *Handbook of Ethnography* London: Sage Publications

Bakhtin, M. (1986). 'The Problem of Speech Genres' in C. Emerson and M. Holquist (Eds) *Speech Genres and Other Late Essays.* Austin, Texas: University of Texas Press

Barnett, R. (1997). *Higher Education: A Critical Business.* Buckingham: SRHE/Open University Press

Barnett, R. (2007). *A Will to Learn: Being a Student in an Age of Uncertainty*. SRHE / Open University Press

Barrie, S.C., (2006). 'Understanding what we mean by the generic attributes of graduates'. *Higher Education* Volume 51, Issue 2, pages 215 - 241

Barron, C. (2003). 'Problem-solving and EAP: Themes and Issues in a Collaborative Teaching Venture'. *English for Specific Purposes* Volume 22, Issue 3, pages 297-314

Barton, D. and M. Hamilton (1998). *Local Literacies: Reading and Writing in One Community.* London: Routledge

Baynam, M. (1995). *Literacy Practices*. London: Longman.

Baynham, M. (2000). 'Academic Writing in New and Emergent Discipline Areas' in Lea, M. and B. Stierer (Eds) *Student Writing in Higher Education: New Contexts.* Buckingham: Society for Research into Higher Education & Open University Press

Bazerman, C. (1988). *Shaping Written Knowledge: The Genre and Activity of the Experimental Article in Science*. Madison: University of Wisconsin Press

Bazerman, C. (1998). 'Emerging Perspectives on the Many Dimensions of Scientific Discourse' in Martin, J.R. & R. Veel (Eds) *Reading Science: Critical and Functional Perspectives on Discourses of Science*. London: Routledge

Bazerman, C. & P. Prior (2005) 'Participating in Emergent Socio-Literate Worlds: Genre, Disciplinarity, Interdisciplinarity' in R. Beach, J. Green, M. Kamil & T. Shanahan (Eds) *Multidisciplinary Perspectives on Literacy Research* (2nd Edition) Cresskill, NJ: Hampton Press

Beaufort, A. (2004) 'Developmental Gains of a History Major: A Case for Building a Theory of Disciplinary Writing Expertise' in *Research in the Teaching of English* Volume 39, Issue 2, pages 136 – 185

BERA (2011) *Ethical Guidelines for Educational Research* WWW page available at: http://www.bera.ac.uk/guidelines (Accessed 11/11/2013)

Bereiter, C. and M. Scardamalia (1989) *The Psychology of Written Composition* Hillsdale, NJ: Lawrence Erlbaun Associates

Berkenkotter, C. and T. Huckin (1995) *Genre Knowledge in Disciplinary Communication: Cognition/Culture/Power* Hillsdale, NJ: Lawrence Erlbaum Associates

Block, D. (2013). 'Issues in Language and Identity Research in Applied Linguistics' *ELIA*, Volume 13, pages 11 - 46

Blommaert, J. (2006). 'Ethnography as Counter-Hegemony: Remarks on Epistemology and Method' *Working Papers in Urban Language and Literacies* WWW page available at: http://www.kcl.ac.uk/innovation/groups/ldc/publications/workingpapers/34.pdf (Accessed: 6/7/2013)

Bloome, D. (2012). 'Classroom Ethnography' in M. Grenfell, D. Bloome, C.Hardy, K. Pahl, J. Rowsell & B. Street (Eds.) *Language, Ethnography and Education: Bridging New Literacy Studies and Bourdieu* Abingdon: Routledge

Bowl, M. (2003) *Non-Traditional Entrants to Higher Education: 'They talk about people like me'* Stoke on Trent: Trentham Books

Boyd, P. (2010). 'Academic Induction for Professional Educators: Supporting the Workplace Learning of Newly Appointed Lecturers in Teacher and Nurse Education' *International Journal for Academic Development* Volume 15, Issue 2, pages 155 – 165

Bucholtz, M. & K. Hall (2010). 'Locating Identity in Language', in C. Llamas & D. Watt (Eds) *Language and Identities.* Edinburgh: Edinburgh University Press

Burke, P.J. (2002). *Accessing Education: Effectively Widening Participation.* Stoke on Trent: Trentham Books

Burke, P.J. (2008) 'Writing, Power and Voice: Access to and Participation in Higher Education' in *Changing English* Volume 15, Issue 2, pages 199 – 210

Cameron, D. (2001) *Working with Spoken Discourse* London: Sage Publications

Carroll, J. (2005) 'Strategies for becoming more explicit' in J. Carroll and J. Ryan (Eds.) *Teaching international students: Improving learning for all* London: Routledge

Casanave, C.P. (2002) *Writing Games: Multicultural Case Studies of Academic Literacy Practices in Higher Education* New Jersey: Lawrence Erlbaum Associates

Chalmers, C., E. Mowat & M. Chapman (2017). 'Marking and providing feedback face-to-face: Staff and student perspectives'. *Active Learning in Higher Education* Volume 19, Issue 1, pages 35-45

Chang, C.E. & P. Strauss (2010). '"Active Agents of Change?" Mandarin-Speaking Students in New Zealand and the Thesis Writing Process'. *Language and Education* Volume 24, Issue 5, pages 415 - 429

Charney, D. (1993) 'A Study in Rhetorical Reading: How Evolutionists Read "The Spandrels of San Marco"' in J. Selzer (Ed) *Understanding Scientific Prose* Wisconsin: The University of Wisconsin Press

Cheng, A. (2006) 'Analyzing and enacting academic criticism: the case of an L2 graduate learner of academic writing' in *Journal of Second Language Writing* Volume 15, Issue 4, pages 279-306

Clughen, L. & M. Connell (2012) 'Using Dialogic Lecture Analysis to Clarify Disciplinary Requirements for Writing' in L. Clughen & C.Hardy (Eds) *Building Supportive Cultures for Student Writing in UK Higher Education* Bingley: Emerald

Cochrane Community (2015) *Cochrane Reviews* [Online] Available at: http://community.cochrane.org/cochrane-reviews [last accessed 14th March 2015]

Cockcroft, R. and S. Cockcroft (2005) *Persuading People: An Introduction to Rhetoric* (Second Edition) Basingstoke: Palgrave Macmillan

Coffey, A. (1999) *The Ethnographic Self: Fieldwork and the Representation of Identity* London: Sage Publications

Coffin, C., M.J. Curry, S. Goodman, A. Hewings, T. Lillis and J. Swann (2003). *Teaching Academic Writing: A Toolkit for Higher Education*. London: Routledge

Cohen, L., L. Manion and K. Morrison (2007). *Research Methods in Education*. London: Routledge

Cotton, F. (2010) 'Critical Thinking and Evaluative Language Use in Academic Writing: A Comparative Cross-Cultural Study' in G. Blue (ed.) *Developing Academic Literacy* Bern: Peter Lang

Creswell, J.W. (2007) *Qualitative Inquiry and Research Design: Choosing among five Approaches* London: Sage Publications

Davies, W.M. (2008) '"Not Quite Right": Helping Students to Make Better Arguments' in *Teaching in Higher Education* Volume 13, Issue 3, pages 327 – 340

Dillon, E.L., W.J. Durham, R.J. Urban, & M. Sheffield-Moore (2010) 'Hormone Treatment and Muscle Anabolism during Ageing: Androgens' *Clinical Nutrition* Volume 29, Issue 6, pages 697 - 700

Dressen, D. (2003). 'Geologists' Implicit Persuasive Strategies and the Construction of Evaluative Evidence.' *Journal of English for Academic Purposes* Volume 2, Issue 4, pages 273-290

Dudley-Evans, T. & M.J. St John (1998). *Developments in English for Specific Purposes: A Multi-Disciplinary Approach.* Cambridge: Cambridge University Press

Duff, P.A. (2010) 'Language Socialization into Academic Discourse Communities' *Annual Review of Applied Linguistics* Volume 30, pages 169 – 192

Duron, R. (2006) 'Critical Thinking Framework for any Discipline' in *International Journal of Teaching and Learning in Higher Education* Volume 17, Issue 2, pages 160-166

Duschl, R.A. and J. Osborne (2002). 'Supporting and Promoting Argumentation Discourse in Science Education' in *Studies in Science Education* Volume 38, Issue 1, pages 39 – 72

Fahnestock, J. (1986) 'Accommodating Science: The Rhetorical Life of Scientific Facts' in *Written Communication* Volume 3, Issue 3, pages 275 - 296

Fahnestock, J. (1993). 'Tactics of Evaluation in Gould and Lewontin's "The Spandrels of San Marco"' in J. Selzer (Ed.) *Understanding Scientific Prose.* Wisconsin: University of Wisconsin Press

Fairclough, N. (2010) *Critical Discourse Analysis: The Critical Study of Language (2nd Edition)* Harlow: Longman

Findlow, S. (2011) 'Higher Education and Professional-Academic Identity in Newly 'Academic' Disciplines: The Case of Nurse Education' *Higher Education*, Volume 63, pages 117 - 133

Freedman, A. & P. Medway (1994). 'Locating Genre Studies: Antecedents and Prospects' in A. Freedman & P. Medway (Eds) *Genre and the New Rhetoric.* London: Taylor and Francis

Ganobcsik-Williams, L. (Ed.) (2006). *Teaching Academic Writing in UK Higher Education.* New York: Palgrave

Gee, J.P. (2004a). *Situated Language and Learning: a critique of traditional schooling* Abingdon: Routledge

Gee, J.P. (2004b). 'Discourse Analysis: What Makes it Critical?' in Rogers, R. (Ed.) *An Introduction to Critical Discourse Analysis in Education.* Mahwah, NJ: Lawrence Erlbaum Associates

Gee, J.P. (2014a). *An Introduction to Discourse Analysis: Theory and Method* (4th edition). London: Routledge

Gee, J.P. (2014b). *How to do Discourse Analysis: A Tool Kit* (2nd edition). London: Routledge

Gilbert, N. & M. Mulkay (1984). *Opening Pandora's Box.* Cambridge: Cambridge University Press

Gourlay, L. (2011a). 'New Lecturers and the Myth of 'Communities of Practice.'' *Studies in Continuing Education* Volume 33, Issue 1, pages 67 – 77

Gourlay, L. (2011b). ''I'd Landed on the Moon": A New Lecturer Leaves the Academy.' *Teaching in Higher Education* Volume 16, Issue 5, pages 591 - 601

Groom, N. (2000). 'A Workable Balance: Self and Sources in Argumentative Writing' in S. Mitchell & R. Andrews (Eds) *Learning to Argue in Higher Education.* Portsmouth, NH: Boynton/Cook Publishers Inc.

Gross, A.G. (1990). *The Rhetoric of Science.* Cambridge, Massachusetts: Harvard University Press

Guillemin, M. & L. Gillam (2004). 'Ethics, Reflexivity and "Ethically Important Moments" in Research', in *Qualitative Inquiry* Volume 10, Issue 2, pages 261-280.

Haggis, T. (2003) 'Constructing images of ourselves? A critical investigation into "Approaches to learning" research in Higher Education' in *British Educational Research Journal* 29 (4), pages 89-104

Haggis, T. (2009). 'What have we been thinking of? A critical review of 40 years of student learning research in higher education.' *Studies in Higher Education* 34 (4), pages 377-390

Halasek, K. (1999). *A Pedagogy of Possibility: Bakhtinian Perspectives on Composition Studies.* Carbondale, IL: Southern Illinois University Press

Halliday, M.A.K. (1978). *Language as Social Semiotic: The Social Interpretation of Language and Meaning.* London: Edward Arnold

Halliday, M.A.K. & Martin, J. (1993). *Writing Science: Literacy and Discursive Power.* London: The Falmer Press

Hammersley, M. & P. Atkinson (2007). *Ethnography: Principles in Practice* (3rd Edition). London: Routledge

Harris, R.A. (1997). *Landmark Essays on Rhetoric of Science: Case Studies* New Jersey: Lawrence Erlbaun Associates

Heath, S.B. & B. Street (2008) *Ethnography: Approaches to Language and Literacy Research.* London: Routledge

HESA (2015/16). 'HE Qualifications Obtained by Sex, Level of Qualification Obtained, Mode of Study and Domicile 2011/12 to 2015/16 (Table 10)'. Available at: https://www.hesa.ac.uk/data-and-analysis/students/overviews?keyword=586&year=620 (Accessed 04/01/2018)

Hoadley-Maidment, E. (2000). 'From Personal Experience to Reflective Practitioner: Academic Literacies and Professional Education' in Lea, M. and B. Stierer (Eds) *Student Writing in Higher Education: New Contexts.* Buckingham: Society for Research into Higher Education & Open University Press

Holquist, M. (1981). 'Glossary' in M. Holquist (Ed.) *The Dialogic Imagination: Four Essays by M.M. Bakhtin* Austin, TX: Texas University Press

Holquist, M. (1990). uist*q.* London: Routledge.

Hood, S. (2010). *Appraising Research: Evaluation in Academic Writing* Basingstoke: Palgrave Macmillan

Hunston, S. & G. Thompson (2000) *Evaluation in Text: Authorial Stance and the Construction of Discourse.* Oxford: Oxford University Press

Hyland, K. (1996a) 'Writing without conviction? Hedging in Scientific Research Articles' in *Applied Linguistics* Volume 17, Issue 4, pages 433-453

Hyland, K. (1996b) 'Talking to the Academy: Forms of Hedging in Science Research Articles' in *Written Communication* Volume 13, Issue 2, pages 251-281

Hyland, K. (1998) *Hedging in Scientific Research Articles* Amsterdam: John Benjamins

Hyland, K. (2002) 'Genre: Language, Context and Literacy' in *Annual Review of Applied Linguistics* 22, pages 113-135

Hyland, K. (2004) *Disciplinary Discourses: Social Interactions in Academic Writing* Michigan: The University of Michigan Press

Hyland, K. (2005) 'Representing Readers in Writing: Student and Expert Practices' *Linguistics and Education* Volume 16, Issue 4, pages 363 - 377

Hyland, K. (2007) *Writing in the Academy: Reputation, Education and Knowledge (Professional Lecture)* London: Institute of Education

Hyland, K. (2009) 'Corpus Informed Discourse Analysis: The Case of Academic Engagement' in M. Charles, D. Peccorari and S. Hunston (Eds) *Academic Writing: at the Interface of Corpus and Discourse* London: Continuum

Hyland, K. (2012) *Disciplinary Identities: Individuality and Community in Academic Discourse* Cambridge: Cambridge University Press

Hyland, K. & G. Diani (2009) 'Introduction: Academic Evaluation and Review Genres' in K. Hyland & G. Diani (Eds) *Academic Evaluation: Review Genres in University Settings* Basingstoke: Palgrave MacMillan

Hyland, K. & L. Hamp-Lyons (2002). 'EAP: Issues and Directions'. *Journal of English for Academic Purposes*, 1 (1), 1 – 12

Hyon, S. (1996). 'Genre in three traditions: Implications for ESL'. *TESOL Quarterly*, Volume 30, Issue 4, pages 693 - 722

Ivanič, R. (1998) *Writing and Identity: The discoursal construction of identity in academic writing* Amsterdam/Philadelphia: John Benjamins Publishing Company

Ivanič, R. & M.R. Lea (2006) 'New Contexts, New Challenges: The Teaching of Writing in UK Higher Education' in Ganobcsik-Williams, L. (Ed.) *Teaching Academic Writing in UK Higher Education* New York: Palgrave

Ivanič, R. and J. Simpson (1992) 'Who's who in academic writing?' in Fairclough, N. (Ed) *Critical Language Awareness* Harlow: Longman

Jones, A. (2009) 'Redisciplining Generic Attributes: The Disciplinary Context in Focus' *Studies in Higher Education* Volume 34, Issue 1, pages 85 – 100

Koehne, N. (2006). '(Be)coming, (Be)longing: Ways in which International Students Talk about Themselves'. *Discourse, Studies in the Cultural Politics of Education* Volume 27, Issue 2, pages 241 - 257

Koutsantoni, D. (2007) *Developing Academic Literacies: Understanding Disciplinary Communities' Culture and Rhetoric* Bern: Peter Lang

Krashen, S.D. (1981) *Second Language Acquisition and Second Language Learning* Oxford: Pergamon Institute of English

Kristeva, J. (1986). 'Word, Dialogue and Novel' in Moi, T. (Ed.) *The Kristeva Reader*. Oxford: Basil Blackwell

Kuhn, D. (1991). *The Skills of Argument*. Cambridge: Cambridge University Press

Kvale, S. and S. Brinkmann (2009). *InterViews: Learning the Craft of Qualitative Research Interviewing (2nd Edition)*. London: Sage Publications

Lang, T.A. (2010) *How to Write, Publish and Present in the Health Sciences*. USA: American College of Physicians

Latour, B. & S. Woolgar (1979) *Laboratory Life: the Construction of Scientific Facts* Princeton: Princeton University Press

Lave, J. and E. Wenger (1991) *Situated Learning: Legitimate Peripheral Participation* Cambridge: Cambridge University Press

Lawrence, R. (2004). 'Framing Obesity: The Evolution of News Discourse on a Public Health Issue'. *The International Journal of Press/Politics* 9 (3), pages 56 – 75

Lea, M.R. (2004) 'Academic Literacies: a Pedagogy for Course Design' in *Studies in Higher Education* Volume 29, Issue 6, pages 739-755

Lea, M. R. and B. Street (1998) 'Student Writing in Higher Education: An Academic Literacies Approach' in *Studies in Higher Education* Volume 23, Issue 2, pages 157 – 172

Lea, M. R. and B. Street (2006) 'The "Academic Literacies" Model: Theory and Applications' in *Theory into Practice* Volume 45, Issue 4, pages 368-377

Lillis, T. (1998) *Making Meaning in Academic Writing: Mature Women Students in Higher Education* Unpublished thesis: Sheffield Hallam University

Lillis, T. (2001) *Student Writing: Access, regulation, desire* London: Routledge

Lillis, T. (2003) 'Student Writing as "Academic Literacies": Drawing on Bakhtin to Move from Critique to Design' in *Language and Education* Volume 17, Issue 3, pages 192-20

Lillis, T. (2008) 'Ethnography as Method, Methodology, and "Deep Theorizing": Closing the Gap between Text and Context in Academic Writing Research' in *Written Communication* Volume 25, Issue 3, pages 353 – 388

Lillis, T. (2009) 'Bringing Writers' Voices to Research: Talk around Texts' in Carter, A., T. Lillis and S. Parkin *Why Writing Matters: Issues of Access and Identity in Writing Research and Pedagogy* Amsterdam: John Benjamins Publishing Company

Lillis, T. (2013). *The Sociolinguistics of Writing*. Edinburgh: Edinburgh University Press

Lillis, T., K. Harrington, M.R. Lea & S. Mitchell (2015). 'Introduction' in *Working with Academic Literacies: Case Studies towards Transformative Practice*. Colorado: The WAC Clearinghouse. Available at: http://wac.colostate.edu/books/lillis/ (Accessed: 28/08/2016).

Lillis, T. & M. Scott (2007). 'Defining Academic Literacies Research: Issues of Epistemology, Ideology and Strategy', in *Journal of Applied Linguistics* Volume 4, Issue 1, pages 5-32

Luuka, M-R. (2002). 'Social and Interpersonal Perspectives on Scientific Discourse', in Barron, C., N. Bruce and D. Nunan (Eds) *Knowledge and Discourse: Towards an Ecology of Language.* Harlow: Longman

Mann, S. (2008). *Study, Power and the University.* Maidenhead: Open University Press

Martin, J.R. & P.R. White (2005). *The Language of Evaluation.* Basingstoke: Palgrave MacMillan

Martinez, I.A. (2008) 'Building Consensus in Science: Resources for Intertextual Dialog in Biology Research Articles' in *Journal of English for Academic Purposes* Volume 7, Issue 4, pages 268 – 276

Marton, F. and R. Saljo (1997) 'Approaches to Learning' in Marton, F., D. Hounsell and N. Entwhistle (eds) *The Experience of Learning (2nd edition)* Edinburgh: Scottish Academic Press

Mason, J. (2002) *Qualitative Researching* (2nd Edition) London: Sage Publications

Mauranen, A. (1997) 'Hedging in Language Revisers' Hands'. In R. Markkanen & H. Schröder (Eds), *Hedging and Discourse: Approaches to the Analysis of a Pragmatic Phenomenon in Academic Texts.* Berlin: Walter de Gruyter, pages 115 – 134

Mauranen, A. & M. Bondi (2003) 'Evaluative language use in academic discourse' in *Journal of English for Academic Purposes* Volume 2, Issue 4, pages 269-271

Mayaud, P. & D. McCormick (2001). 'Interventions against Sexually Transmitted Infections (STI) to Prevent HIV Infection' *British Medical Bulletin* Volume 58, pages 129 – 153.

McAllister, E.J., N.V. Dhurandhar, S.W. Keith, L.J. Aronne, J.Barger, M. Baskin *et al.* (2009) 'Ten Putative Contributors to the Obesity Epidemic' in *Critical Reviews in Food Science and Nutrition* Volume 49, Issue 10, pages 868 - 913

Miller, C.R. (1984) 'Genre as Social Action' in *Quarterly Journal of Speech* Volume 70, pages 151-167

Mitchell, S. (1994) *The Teaching and Learning of Argument in Sixth Forms and Higher Education* Hull: The University of Hull

Montgomery, S.L. (2003). *The Chicago Guide to Communicating Science.* Chicago: The University of Chicago Press

Moon, J. (2008). *Critical Thinking: an exploration of theory and practice.* Abingdon: Routledge

Morrison, J., B. Merrick, S. Higgs and J. Le Metais (2005). 'Researching the performance of international students in the UK' in *Studies in Higher Education* Volume 30, Issue 3, pages 327-337.

Myers, G. (1989). 'The Pragmatics of Politeness in Scientific Articles'. *Applied Linguistics* 10 (1), pages 1-35

Myers, G. (1990). *Writing Biology: Texts in the Social Construction of Knowledge.* Madison: University of Wisconsin Press

Myers, G. (1991). 'Stories and Styles in two Molecular Biology Articles' in C. Bazerman and J. Paradis (Eds) *Textual Dynamics of the Professions.* Madison: University of Madison Press

Myers, G. (1993). 'Making Enemies: How Gould and Lewontin Criticize' in J. Selzer (Ed.) *Understanding Scientific Prose* Madison: University of Wisconsin Press

Noguchi, J. (2006). *The Science Review Article: An Opportune Genre in the Construction of Science.* Bern: Peter Lang

Norton, B. (2000). *Identity and Language Learning: Gender, Ethnicity and Educational Change.* Harlow: Longman

Nusbaum, M.R.H., R.R. Wallace, L.M. Slatt & E.C. Kondrad (2004). 'Sexually Transmitted Infections and Increased Risk of Co-Infection with Human Immunodeficiency Virus'. *The Journal of the American Osteopathic Association* 104, (12), pages 527 - 535

Oberhuber, F. & M. Krzyzanowski (2008). 'Discourse Analysis and Ethnography' in R. Wodak & M. Krzyzanowski (Eds) *Qualitative Discourse Analysis in the Social Sciences.* Basingstoke: Palgrave Macmillan

O'Donnell, V.L., J. Tobbell, R. Lawthom & M. Zammit (2009). 'Transition to post-graduate study: Practice, participation and the widening participation agenda'. *Active Learning in Higher Education* 10 (1), pages 26 - 40

Osborne, J. (2001). 'Promoting Argument in the Science Classroom: A Rhetorical Perspective' in *Canadian Journal of Science, Mathematics and Technology Education* 1 (3), pages 271 – 290

Parkinson, J. & R. Adendorff (1997). 'Two Streams of Literacy in Science: A Look at First Year Laboratory Manuals' in *Language and Education* Volume 11, Issue 3, pages 200 – 221

Pardoe, S. (1997) *Writing Professional Science: Genre, Recontextualization and Empiricism in the Learning of Professional and Scientific Writing within an MSc Course in Environmental Impact Assessment* Unpublished thesis: Lancaster University

Pardoe, S. (2000) 'Respect and the Pursuit of 'Symmetry' in Researching Literacy and Student Writing' in Barton, D., M. Hamilton and R. Ivanič (Eds) *Situated Literacies: Reading and Writing in Context* London: Routledge

Paul, D. (2000) 'In Citing Chaos: A Study of the Rhetorical Use of Citations' in *Journal of Business and Technical Communication* Volume 14, Issue 2, pages 185-222

Piqué-Angordans, J. & S. Posteguillo (2006) 'Peer Positive and Negative Assessment in Medical English Written Genres' in M. Gotti & F. Salager-Meyer (Eds) *Advances in Medical Discourse Analysis: Oral and Written Contexts* Bern: Peter Lang

Preece, S. (2009) *Posh Talk: Language and identity in higher education* Basingstoke: Palgrave Macmillan

Prior, P.A. (1998) *Writing/Disciplinarity: a Sociohistoric Account of Literate Activity in the Academy* New Jersey: Lawrence Erlbaum Associates, Publishers

Prior, P.A. & J. Shipka (2003) 'Chronotopic Lamination: Tracing the Contours of Literate Activity' in C. Bazerman & D.R. Russell (Eds) *Writing Selves/Writing Societies: Research from Activity Perspectives*. Colorado: The WAC Clearing House

QAA (2008) *The Framework for Higher Education Qualifications in England, Wales and Northern Ireland* [Online] Available at: http://www.qaa.ac.uk/en/Publications/Documents/Framework-Higher-Education-Qualifications-08.pdf [Last accessed 2nd January 2014]

Ryan, J. and J. Carroll (2005). 'Canaries in the Coalmine: International Students in Western Universities' in Ryan, J. & J. Carroll (eds) *Teaching International Students: Improving Learning for All.* London: Routledge

Ryan, J. & K. Louie (2007). 'False Dichotomy? 'Western' and 'Confucian' Concepts of Scholarship and Learning'. Volume 39, Issue 4, pages 404 – 407.

Salager-Meyer, F. (2001). 'From Self-Highlightedness to Self-Effacement: A Genre-Based Study of the Socio-Pragmatic Function of Criticism in Medical Discourse'. *LSP and Professional Communication* 1 (2), pages 63 – 84

Salager-Meyer, F., M.A. Alcaraz Ariza & N. Zambrano (2003). 'The scimitar, the dagger and the glove: intercultural differences in the rhetoric of criticism in Spanish, French and English medical discourse (1930-1995)'. *English for Specific Purposes* Vol. 22, Issue 3, pages 223 - 247

Salager-Meyer, F. & M.A. Alcaraz Ariza (2011). 'Expert Knowledge Holders, Knowledge Builders and Factual Reporters: Critical Voices in Medical Genres' in F. Salager-Meyer & B. Lewin (Eds) *Crossed Words: Criticism in Scholarly Writing.* Bern: Peter Lang

Samraj, B. (2002). 'Textual and Contextual Layers: Academic Writing in Content Courses' in A. M. Johns (Ed.), *Genre in the Classroom: Multiple Perspectives* Mahwah,NJ: Lawrence Erlbaum

Samraj, B. (2013) 'Form and Function of Citations in Discussion Sections of Master's Theses and Research Articles' *Journal of English for Academic Purposes* Volume 12, Issue 4, pages 299 - 310

Schryer, C.F. (1994). 'The Lab versus the Clinic: Sites of Competing Genres' in A. Freedman & P. Medway (Eds) *Genre and the New Rhetoric.* London: Taylor and Francis

Scollon, R. (2002). 'Intercultural Communication and Ethnography: Why? And why not?', in Barron, C., N. Bruce and D. Nunan (Eds) *Knowledge and Discourse: Towards an Ecology of Language.* Harlow: Longman

Scott, D., G. Hughes, C. Evans, P.J. Burke, C. Walter & D. Watson (2014). *Learning Transitions in Higher Education.* Basingstoke: Palgrave Macmillan

Sedgwick, C. (2011). *Crossing Borders: An academic literacies approach to the study of thesis writing on English Studies programmes in an Italian and a Hungarian University.* Unpublished thesis: Lancaster University

Shreeve, A. (2011). 'Being in Two Camps: Conflicting Experiences for Practice-Based Academics'. *Studies in Continuing Education* 33 (1), pages 79 - 91

Smith, C. & P. Boyd (2012). 'Becoming an Academic: The Reconstruction of Identity by Recently Appointed Lecturers in Nursing, Midwifery and the Allied Health Professions'. *Innovations in Education and Teaching International* 49 (1), pages 63 – 72

Stein, D.M., C.M. Caviness, & B.J. Anderson (2012). 'Incidence of Sexually Transmitted Infections among Hazardously Drinking Women after Incarceration' *Women's Health Issues* 22 (1), pages e1 – e7

Stierer, B. (1998). *Mastering Education: A Preliminary Analysis of Academic Literacy Practices within Masters Level Courses in Education.* Paper presented at the Higher Education Close-Up Conference. University of Central Lancashire. 6th – 8th July 1998. [Online] Available at: http://www.leeds.ac.uk/educol/documents/000000701.htm [Last accessed 4th January 2017]

Street, B. (1984). *Literacy in Theory and Practice.* Cambridge: Cambridge University Press

Street, B. (2005). 'Introduction: New Literacy Studies and Literacies across Educational Contexts' in Street, B. (ed.) *Literacies across Educational Contexts.* Philadelphia: Caslon Publishing

Street, B. (2012) 'New Literacy Studies' in M. Grenfell, D. Bloome, C.Hardy, K. Pahl, J. Rowsell & B. Street (Eds.) *Language, Ethnography and Education: Bridging New Literacy Studies and Bourdieu.* Abingdon: Routledge

Street, B., M.R. Lea & T. Lillis (2015). 'Revisiting the Question of Transformation in Academic Literacies: The Ethnographic Imperative', in *Working with Academic Literacies: Case Studies towards Transformative Practice*. Colorado: The WAC Clearinghouse. Available at: http://wac.colostate.edu/books/lillis/ [Last accessed: 28/08/2016].

Swales, J.M. (1990). *Genre Analysis: English in Academic and Research Settings.* Cambridge: Cambridge University Press

Swales, J.M. (2004). *Research Genres: Exploration and Applications.* Cambridge: Cambridge University Press

Swales, J.M. & Feake, C. (2004). *Academic Writing for Graduate Students*. Michigan ELT

Tardy, C. (2005). '"It's like a story": Rhetorical knowledge development in advanced academic literacy' in *Journal of English for Academic Purposes* 4 (4), pages 325-338

Teramoto, H. & P. Mickan (2008). 'Writing a Critical Review: Reflections on Literacy Practices' *Language Awareness* Volume 17, Issue 1, pages 44 - 56

Thompson, G. & Y. Ye (1991). 'Evaluation in the Reporting Verbs used in Academic Papers' *Applied Linguistics* Volume 12, Issue 4, pages 365 – 382

Turner, G. (2000) 'Developing Writing Skills: The Language of Critical Analysis' in Graal, M. and R. Clark (Eds) *Writing Development in Higher Education: Partnerships across the Curriculum.* Leicester: University of Leicester

Turner, J. (2004). 'Academic Literacy in Post-Colonial Times: Hegemonic Norms and Transcultural Possibilities' in A. Phipps and M. Guilherme (Eds) *Critical Pedagogy: Political Approaches to Language and Intercultural Communication.* Clevedon: Multilingual Matters

Van Dijk, T.A. (2008). *Discourse and Context: A Sociocognitive Approach.* Cambridge: Cambridge University Press

Van Dijk, T.A. (2009). *Society and Discourse: How Social Contexts Influence Text and Talk.* Cambridge: Cambridge University Press

Van Emden, J. (2001). *Effective Communication for Science and Technology.* Basingstoke: Palgrave Macmillan

Varttala, T. (1999). 'Remarks on the Communicative Functions of Hedging in Popular Scientific and Specialist Research Articles on Medicine'. *English for Specific Purposes* Volume 18, Issue 2, pages 177 – 200

Vold, E.T. (2006) 'The Choice and Use of Epistemic Modality Markers in Linguistics and Medical Research Articles' in K. Hyland & M. Bondi (Eds) *Academic Discourse across Disciplines* Bern: Peter Lang

Wenger, E. (1998). *Communities of Practice: Learning, Meaning and Identity* Cambridge: Cambridge University Press

Wengraf, T. (2001). *Qualitative Research Interviewing* London: Sage Publications

Westwood, B. & G. Westwood (2002). 'The Culture of Criticism and Argument in Health Education'. *Medical Teacher* 24 (2), pages 156 – 161

White, P.R.R. (2001). *Appraisal: An Overview* [Online] Available at: http://www.grammatics.com/appraisal/AppraisalGuide/Framed/Frame.htm [Last accessed 30th March 2013]

White, P.R.R. (2003). 'Beyond Modality and Hedging: A Dialogic View of the Language of Intersubjective Stance' in *Text* 23 (2), pages 259 – 284

Wingate, U. (2012). 'Using Academic Literacies and Genre-Based Models for Academic Writing Instruction: 'A Literacy Journey'. *Journal of English for Academic Purposes* 11 (1), pages 26 - 37

Wingate, U. & C. Tribble (2012). 'The Best of Both Worlds: Towards an English for Academic Purposes/Academic Literacies Pedagogy'. *Studies in Higher Education*, 37 (4), pages 481 – 495.

Woodward-Kron, R. (2002). 'Critical Analysis versus Description? Examining the Relationship in Successful Student Writing'. *Journal of English for Academic Purposes* 1 (2), pages 121 – 143

Woodward-Kron, R. (2003). 'Critical Analysis and the Journal Article Critical Review Assignment'. *Prospect* 18 (2), pages 216 – 232.

Yearley, S. (1981). 'Textual persuasion: The Role of Social Accounting in the Construction of Scientific Arguments'. *Philosophy of the Social Sciences* 11, pages 409-435