

**Reconceptualising critical thinking as a linguistic practice in a
Media ESP programme**



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For my boys

Declaration

This thesis has not been submitted in support of an application for another degree at this or any other university. It is the result of my own work and includes nothing that is the outcome of work done in collaboration except where indicated. Many of the ideas in this thesis were the product of discussion with my supervisor, Dr. Diane Potts.

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Abstract

The primary goal of this research study is to explore pedagogies that develop language through practices of critical thinking (CT). In recognition of the importance of CT in education, myside bias – a CT construct from cognitive psychology (Stanovich & West, 2007; Toplak & Stanovich, 2003) – is explored for its potential as a linguistic practice in the creation of a framework enhancing the development of language through the construction of meaning (Halliday & Hasan 1989). At the same time, research in critical pedagogy highlights the effectiveness of raising learners’ critical awareness through language in support of language learning (Luke, 2004; Morgan, 2009).

Situated in an English for Specific Purposes context, the design in this study derives from critical analysis of instances of myside bias identified in the language used in media texts. The design develops through an iterative process of data collection and analysis completed in a four-stage intervention informed by design-based research (DBR) methodology. The intervention includes three cycles of implementation, evaluation, and refinement of the design, which involves learners in instructional practices of identification, reconstruction, and critical discussion of the functions of specific linguistic resources in support of linguistic and critical thinking development.

Results highlight the effectiveness of the design in using a framework based on the construct of myside bias to create a purpose for engaging with language in critical ways.

Engaging with language through repetition of critical thinking practices, in which the use of functional metalanguage facilitates students' understanding of the potential of language in conveying opinion, develops learners' ability to appropriate and use these practices in critically approaching texts more independently. The design and principles developed in this study have larger implications for theory and practice, indicating a potential for future applications in other language contexts.

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Chapter 1: Introduction

Critical Thinking in Education

Critical thinking (CT) is considered a significant component of schooling in the 21st century as the information age has elevated good thinking into an important element of a successful life (Huitt, 1998). Recent research indicates that teamwork, problem-solving, and critical thinking are essential skills that top the list of the most desired attributes for the 21st century workplace (Billing, 2003; Robinson & Garton, 2008). At the same time, many studies highlight the unpreparedness of higher education graduates for the workplace and raise questions about whether students are being adequately “equipped with [the] general, transferable skills” required in fast-growing job markets (Robinson & Garton, 2008, p. 96).

Because thinking and learning have been regarded as lifelong interrelated processes, CT is often considered one of the primary goals of meaningful education (Bailin & Siegel, 2002; Chaffee, 1992). As such, educators and theorists acknowledge CT as critical in aiding learners to engage in purposeful self-regulatory thinking processes (Abrami et al., 2008), as well as the disposition to view things from various perspectives, challenge underlying assumptions and exploring alternatives (Halvorsen, 2005). The inculcation of CT in education has emerged as vital for a number of reasons, such as to equip students with skills to do well in their studies, help them think for themselves and enable them to lead a democratic life as adults (Buskist & Irons, 2008; Huitt, 1998; Siegel, 2010). In academic settings, CT encompasses acquiring new knowledge, transforming it and using it in new contexts, thus building the theoretical basis of each discipline (Amua-Sekyi, 2015; Jones, 2007).

Critical Thinking in Language Education

In language education, and especially at higher levels, these attributes have increasingly rendered CT an essential component of English as a Second Language (ESL) and English as a Foreign Language (EFL) curricula (Dooley, 2010). Additional reasons to incorporate CT skills into language learning include enriching learning experiences and making them more meaningful (Shirkhani & Fahim, 2011), as well as enhancing learning achievement and language competency (Masduqi, 2011; Rafi, 2010). In ESP (English for Specific Purposes) research, emphasis has been placed on the importance of developing critical thinking in vocational settings (Hammersley-Fletcher & Hanley, 2016; Whiley et al., 2017) and combining job-related skills and language training (Moore, 2017). Additionally, in ESP university contexts, the ability to exhibit CT presupposes familiarity with the way each discipline conceptualises knowledge (Jones, 2007) and supports the development of the field's deep knowledge by pursuing a coherent line of reasoning (Gibbons, 2009). Without this, according to Gibbons, students may not be able to participate in a discussion or take a critical stance towards newly acquired understandings.

Statement of the Problem

While there is widespread acceptance of the need to include CT in language instruction, uncertainty persists about how CT is best understood and how conceptualisations of the construct can consequently be reflected in the objectives, materials, and activities of programmes (Halonen, 1995; Halpern, 2002; Huitt, 1998). With regards to understanding CT, Siegel (2017) points out that for the term to have a significant impact on educational practice, it needs first to be defined with precision. While literature has discussed at length what constitutes CT (see Chapter 2), there is no common shared definition of the term. Consequently, the ways CT is used

by educators often depends on their own understanding of what it entails, as well as their ability to translate this understanding and transfer its potential into their teaching, which presents challenges even for educators who are motivated to teach their students to think critically. Reasons include educators' own challenges with CT, including, as already mentioned, uncertainty about what CT is, or even their own weaknesses in exhibiting criticality. Apart from these, practical impediments such as time constraints may make it difficult for teachers to develop intellectually challenging activities (Che, 2002) or activities that can be accurately assessed (Cotter & Tally, 2009). This is especially true in an ESP setting where teaching often requires a combination of researching, course design, and instruction. Finally, exam-oriented educational contexts make it hard for teachers to focus on student development in CT skills. As a result, we as language educators frequently put too much emphasis on transmitting the content of what we teach (language) to our students, but fail to teach them how to think critically (through language).

Adding to the challenges faced by educators in implementing CT in language instruction, students often enter university with language learning experiences and qualifications that do not reflect the required level of critical academic literacy i.e., the critical thinking skills “embedded in academic literary practices” (Amua-Sekyi, 2015, p. 90). Participating in academic literacy practices at university is thus often challenging for newly admitted students and graduates alike, due to “limited experience with English academic texts and limited knowledge of [academic] literacy expectations” (Ewert, 2011, p. 6). Rather than analysing, integrating, and applying the knowledge they receive (Buskist & Irons, 2008; Huitt, 1998), which are subcomponents of critical academic literacy, students may be accustomed to simply learning things off by heart. In ESP contexts, the ability to use discipline-specific language is correlated with an understanding

of how lexical choices are dependent on context and how the context in turn is dependent on the text or the content of the text (Gibbons, 2009). Learners in these contexts are expected to engage in critical reading to understand a text in context, to read between the lines, to interpret a text based on their personal experience, and so adopt a critical view of the text (Canagarajah, 2002), skills that go far beyond mere memorisation of information.

Other factors, such as socio-political background affecting an individual's predisposition to abide by rules, may also be detrimental to the willingness or ability to engage in CT. For example, learners may come from backgrounds where they were taught to obey instructions rather than actively engage in decision-making. In higher education, it is also very common for full-time students to combine their studies with a part- or full-time job, as well as family responsibilities, which may demotivate them from engaging with highly intellectual work that requires in-depth deliberation and decision-making. Even when CT skills are considered useful to secure a future job, university students may not always prioritise them in light of the more immediate pressure of their other degree course requirements.

The inadequacy of the language classroom and curriculum to address the issues above has implications for language development. While there have been numerous researchers advocating the re-examination and revitalisation of ESL curricula to promote learning that fosters critical engagement (Franken, 2012; Holvikivi, 2007; Hyland, 2002), there seems to be a lack of guidelines for the re-design of language curricula with a critical thinking focus oriented towards cultivating academic literacy and maximising academic performance.

Statement of Purpose

In order to address the ineffectiveness of university language curricula in reconceptualising CT as a crucial component of academic literacy development, this study

explores CT as a linguistic practice supporting and developing language through an understanding of how it contributes to the construction of meaning. More specifically, I explore myside bias (Chapter 2), a construct of CT from cognitive psychology, for its potential in creating the social context that can enhance the development of language (Halliday & Hasan, 1989). Towards that end, I use design-based research (DBR) methodologies to develop a pedagogic design targeting linguistic growth by engaging university-level media learners in practices of identification, analysis and reconstruction of language, while simultaneously promoting critical thinking practices. The design, initially informed by findings from a needs analysis (conducted with media students and faculty) and related theoretical inputs, is developed through three cycles of implementation, evaluation, and refinement as advocated by DBR methodology (Anderson & Shattuck, 2012). Each cycle consists of an enactment of designed activities, data collection, analysis, a review of the literature in line with the findings, refinement of research objectives, and a redesign. The study draws on data collected via student questionnaires, texts, reflections on activities, and focus groups. Data is also collected through my researcher/instructor journal, as well as instructional logs. The motivation to pursue this focus developed from my experience as a university ESP instructor and my growing awareness of the significance of advancing a more critical approach to language learning. In this effort, I foregrounded CT as a tool in developing the connections between language and meaning in support of both language and thinking. To my knowledge, research exploring CT as a linguistic practice in ESP, and specifically in the area of English for Media studies, remains scarce. The same I believe is true regarding ESP research published on conducting needs analyses and pedagogical designs on CT. Finally, very little research in language education has been informed by DBR methodologies, including ESP contexts.

Research Questions

Given the absence of studies on how CT may be reconceptualised as a linguistic tool in identifying ESP learners' needs and then in developing a pedagogic design to address both their language and critical thought, the following research questions guide the inquiry:

- 1) How can critical thinking practices be integrated into pedagogic designs in explicit support of ESP learners' linguistic development?
- 2) How might foregrounding the relationship between myside bias and targeted linguistic resources contribute to students' understanding of how language functions to convey opinion?
- 3) How can the pedagogical design, supporting the iteration of dialogic processes of language identification, analysis, and reconstruction in texts, facilitate the development of a critical mindset in support of learners' language and thinking?

Overview of the Dissertation

Following on from this introductory chapter, Chapter 2 presents literature on CT in education and cognitive psychology, along with a review of the language learning theory (systemic functional linguistics) and critical pedagogy I am using to connect language to (critical) thinking. In Chapter 3, I discuss the methodology selected for the study, the data collection methods and instruments, as well as the research design and analysis methods. In Chapter 4, I discuss my experience as an English language instructor in the context of the study, why it was important to conduct a needs analysis (NA) in the specific context, the NA findings, and how these informed the initial design. Chapter 5 presents a detailed account of the instructional and research design across three cycles. Following each cycle, I analyse the implementation and evaluation of the design. Chapter 5 also presents findings from the reflection

stage of the intervention. The findings from the implementation and reflection stages are discussed in relation to the literature in Chapter 6. In the concluding chapter (Chapter 7), I propose a number of design principles for the inclusion of CT practices in language curricula in response to the study's research questions, and finally, I discuss implications and directions for future research.

Chapter 2: Literature Review

In this chapter, the main research areas framing this study are discussed. First, definitions of critical thinking (CT), including related abilities and skills, are discussed in the areas of language education and cognitive psychology. Then, systemic functional linguistics (SFL) is discussed as a theory that can connect specific mental processes related to CT and language. Finally, a discussion of critical pedagogy (CP) focuses on how pedagogical approaches to language learning can enhance dialogic critical engagement and foster the development of both critical literacy and language.

Critical Thinking

This study discusses CT and certain cognitive propensities it encompasses in an attempt to reconceptualise them as practices that support learners' linguistic growth. As a concept, CT has been around for centuries and has been elaborated in several ways. In an early and groundbreaking definition, Bloom (1956) proposed CT as the deployment of a set of higher-order reasoning skills – knowledge comprehension, analysis, application, synthesis, and evaluation – when confronted with a novel situation. Ennis characterises the construct of CT as the correct assessment of statements (1962) and, later, as reasonable and reflective thinking (1987).

Despite widespread interdisciplinary recognition among theoreticians, researchers, and practitioners of the significance of CT, there is still no consensus on its definition. Cognitive psychology attempts to define CT by relating it to the types of behaviour critical thinkers exhibit. These are referred to in the literature as skills, procedures, mental processes, strategies, and representations used by critical thinkers to achieve a desired outcome (Burden & Byrd, 1994; Halpern, 1998; Sternberg, 1986). In another description of these behaviours, Willingham (2007)

defines CT as “seeing both sides of an issue, being open to new evidence that disconfirms your ideas, reasoning dispassionately, demanding that claims be backed by evidence, and deducing and inferring conclusions from available facts” (p. 8).

There are, however, areas of agreement. One common overlap in CT definitions concerns abilities, including judging the credibility of information, analysing and evaluating all aspects of an argument, re-examining and questioning personal views and assumptions, and making decisions or solving problems (Ennis, 1985; Facione, 1990; Halpern, 1999; Paul & Binker, 1990).

A second point of agreement concerns the dispositions that characterise critical thinkers. Dispositions include the desire or willingness to exercise critical thinking. Facione (2000) defines CT dispositions as “consistent internal motivations to act toward or respond to persons, events or circumstances in habitual, yet malleable ways” (p. 64). They also include open-mindedness, inquisitiveness, flexibility, the desire to be well informed and the willingness to explore other viewpoints (Bailin et al., 1999; Ennis, 1985; Halpern, 1998; Paul, 1992).

A common aspect of CT definitions, therefore, is that it entails more than the mere acquisition of knowledge or a collection of generic skills. Rather, it relates to an understanding of the various principles that govern good thinking in specific domains (Bailin et al., 1999; Barrow, 1991); this is also strongly related to an individual’s critical spirit (Facione, 1990).

While there is general acknowledgement that CT is comprised of a combination of specific abilities and dispositions, there is less agreement on which are essential. This uncertainty may be part of the challenge faced by educators with regards to the ways it should be taught.

Critical Thinking in Language Education

If, as mentioned earlier, CT includes dispositions or the inclination to engage in deep, analytical thinking, then we must also take into consideration that dispositions – unlike skills – cannot be directly taught; they can only be cultivated through practices of thinking or by exerting mental effort that is initiated, modelled, and scaffolded by educators themselves. Practitioners not consciously reflecting on CT, according to research, may be the cause of minimal or insufficient emphasis placed on such practices (Barnett, 1997). Difficulties may also arise from academics typically learning these practices intuitively, which makes defining and explaining them more challenging (Fox, 1994).

In a discussion around the implications of teaching CT at university, Gee (2004) maintains that the teaching requirements include acquisition processes that are rooted within specific study contexts, and which involve deliberate acts of “dialogue and interaction” (p. 54). These processes, according to Moore (2013), may require a learning environment and teaching activities in which CT requirements are clear and students are allowed to express views, ideas, and concerns on how these requirements impact their work.

Efforts to include CT requirements in learning practices can already be seen in the field of language education. Language teaching can play an important role in fostering criticality, since language deals with words, and words trigger reflection and action. For example, using inferential questions to develop students’ critical thinking in the teaching of reading and writing is not uncommon. Eskey and Grabe (1988), define critical reading as the evaluation of an author’s arguments. Similarly, Shih (1992) lists “critically react[ing] to the content” as one of the requirements for ESL students of academic classes, together with “recall[ing] main points and synthesis[ing] information from reading” (p. 290). Elder and Paul (2004) emphasise the

importance of engaging oneself in constant questioning in the reading process. Following Elder and Paul (2004), Paul (2005) states that “a critical mind improves reading by reflectively thinking about what and how it reads” (p. 32). Cook (1991), who regards reading primarily as a thinking process, stresses the significance of engaging students in talking about texts they read. Of particular importance in the theoretical framework of this study are explorations of the concepts of criticality and dialogue in the field of language education, as well as the role of critical pedagogies in developing language (Benesch, 1999, 2001; Luke, 2004; Morgan, 2009).

Thus, CT has a longstanding role in engaging students with language. Given the language requirements imposed by the ESP university context in which my research is situated, I consider theorising or developing a clear and distinct understanding of the term CT as very relevant to the study.

Critical Thinking in Cognitive Psychology

Literature from the field of cognitive psychology demonstrates that certain activities related to critical thinking, namely, thinking biases or tendencies to generate or evaluate evidence based on existing beliefs and preconceptions, relate more to issues of rationality and are not directly dependent on an individual’s intelligence or cognitive ability (Stanovich, 2011; Stanovich, West & Toplak, 2012; Stanovich & West, 2000). In essence, research has shown that, in argument-generating tasks, individuals of both high and low intelligence tended to give more arguments in favour of their position than against (Stanovich & West, 2007, 2008a; Toplak & Stanovich, 2003). In contrast, studies in which participants were specifically instructed to ignore prior beliefs or viewpoints in performing the same task, showed that intelligence did play a role in generating arguments (Stanovich & West, 2008b). Thus, intelligence is an important factor in

successfully completing a critical thinking task only when people are asked to ignore pre-existing beliefs and biases.

Furthermore, there is a view of critical and rational thought among researchers in this area that highlights individual differences in important components of cognition (Johnson-Laird, 2006; Johnson-Laird & Byrne, 1993). Specifically, evidence points to a dual-process system of cognition responsible for performing processes such as judgement and decision-making (Evans & Frankish, 2009; Evans, 2003, 2008; Frankish, 2007; Lieberman, 2009; Schneider & Chein, 2003; Stanovich, 1999, 2011). Although there are different definitions of the two systems, this study draws on the work of Evans (2008; Evans & Frankish, 2009) and favoured by Stanovich (1999). In this work, the two systems are designated as Type 1 and Type 2 processing. Type 1 processing is presented as autonomous, fast, and mostly intuitive when faced with a stimulus. It involves processes such as behavioural regulation by emotions and implicit learning. In contrast, Type 2 processing is non-autonomous, relatively slow, deliberative, and computationally more demanding. It comprises processes such as reflecting, conscious problem-solving, and paying attention to detail. One of the most crucial functions of Type 2 processing, however, is to override Type 1 (autonomous) processing in cases where a response demands more intellectually advanced (or higher-order reasoning) processing or analysis. This is necessary because autonomous and intuitive processing (Type 1) can result in irrational responses if not interrupted and overridden by algorithmic, reflective (Type 2) processing. To illustrate why overrides are necessary, Stanovich (2009) characterises human beings as “cognitive misers”, who are likely to choose the easier or less demanding option in tasks or decisions that they consider trivial. In situations, therefore, in which people need to evaluate an important risk, assess a person’s intentions, or make a life-or-death decision, Type 2 processing is critical. Similarly, although the

presence of thinking biases might be universal (Stanovich & West, 2008b), people's ability to make non-normative choices seems to differ between individuals mostly as a result of Type 2 overriding and processing. However, description of the typology of processes does not by itself explain how bias functions.

The ability of the analytic, Type 2 "mind" to suppress and override Type 1 processing is dependent on a better alternative response. This ability is also related to hypothetical reasoning which prevents us from confusing reality with representations of imaginary situations especially in cases where other important parameters are partialled out (Evans & Stanovich, 2013).

This point has been the subject of a number of heuristics and biases studies, which seem to indicate that the degree of rationality individuals exhibit largely depends on three important parameters: cognitive decoupling, thinking dispositions, and the process of override. Cognitive decoupling operations – a central feature of Type 2 processing (Stanovich, 2009, 2011) – relate to an individual's ability to evaluate and generate evidence independently of any prior beliefs, opinions, or attitudes (Stanovich, 2011; Stanovich & West, 2008a). Cognitive psychology research on critical thinking indicates that cognitive decoupling – the ability to deal with evidence in an unbiased manner by calibrating beliefs and considering multiple perspectives – is an essential reasoning skill (Baron & Brown, 2012; Evans, 2003, 2008; Kuhn & Udell, 2001; Norris & Ennis, 1989; Paul, 1983; Perkins, 1995; Toplak & Stanovich, 2002).

The second parameter consists of thinking dispositions or cognitive styles that concern an individual's beliefs, as well as their structure, and attitudes towards forming and changing these beliefs. They also relate to goals, as well as goal regulation and prioritisation. Researchers have attempted to examine open-minded thinking (Stanovich, 1999, 2009), the tendency to think a lot (Cacioppo et al., 1996), consideration of future consequences, superstitious thinking, and

dogmatism (Kruglanski & Webster, 1996; Norris & Ennis, 1989; Schommer-Aikins, 2004; Sternberg, 2003). Of interest here are the thinking propensities that these disposition measures reflect. These have to do with tendencies such as collecting information before making one's mind up, seeking various points of view before drawing conclusions, or thinking extensively about a problem or issue before responding. Other examples include calibrating the degree of strength of one's opinion in relation to the quality of evidence available, as well as seeking nuance and avoiding absolutism and biased thinking. It is worth noticing here that these propensities are teachable.

The third parameter relates to the override process. As explained earlier, one of the main differences between Type 1 and Type 2 processing is that the latter can override the former in situations where more advanced or higher-level thinking is required. Psychometricians use two types of performance assessments to evaluate Type 2 processing: typical performance assessments, which are measures of critical or rational thought and behaviour, and optimal performance assessments, which measure cognitive capacity, such as intelligence (e.g., through IQ tests) (Ackerman, 1996; Ackerman & Heggestad, 1997). An important distinction between the two types of assessment is that typical performance tasks allow high-level personal goals and their prioritisation, as well as tendency to change beliefs in light of new evidence to become implicated in performance. In addition, in typical performance situations, instructions are not clearly defined, so as to allow the participant to act autonomously in interpreting and performing the task. In contrast, in optimal performance situations, task interpretation is determined externally: the participant is instructed to maximise performance and receives feedback on how to do so. Both types of assessment are potentially of interest to educators but outcomes of optimal performance assessments are particularly germane to research on CT. In an argument

evaluation task, a typical performance assessment studied by Stanovich and West (2008a), participants were asked to evaluate an argument on a very controversial issue (abortion) without being instructed to exclude personal opinions from their reasoning process. In a similar task designed by Toplak and Stanovich (2003), participants were instructed to assess a stated proposition by providing arguments in support of and at least some arguments against their own opinion. The results of these studies indicate that there is a positive correlation between bias avoidance and cognitive ability when instructions are given.

Data collected from studies in heuristics and biases indicates that rationality requires activation of the three parameters discussed above (Stanovich, 2011; Stanovich & West, 2000, 2008a). Irrational behaviour can therefore occur when cognitive capacity is insufficient to sustain a Type 1 system override, when the appropriate thinking dispositions are not available, and lastly, but most importantly, when the individual does not decouple or distance themselves from prior beliefs, opinions, and attitudes. The significance of the role cognitive decoupling plays in fostering rational thinking is supported by research conducted on the tendency to avoid myside bias, a specific critical thinking skill, which shows virtually no dependence on intelligence. (Macpherson & Stanovich, 2007; Sá et al., 2005; Stanovich, 2009, 2011; Stanovich & West, 2007, 2008a, 2008b; Toplak & Stanovich, 2003).

Before discussing myside bias, it is useful to highlight the relevance of the distinction between Type 1 and Type 2 processing as well as the parameters that enhance rationality to educators and more specifically language educators. Many of the thinking dispositions and abilities included in cognitive decoupling described earlier are very similar to acquisition processes that are rooted in good understanding and effective use of language as a means of acting and reflecting. Myside bias, a component of the multifarious concept of rational thought,

is the tendency to generate evidence, test hypotheses, and evaluate arguments in a manner biased towards one's own opinions (Baron, 1991, 1995; Greenhoot et al., 2004; Nussbaum & Kardash, 2005; Perkins, 1985; Perkins et al., 1991; Stanovich & West, 2007; Toplak & Stanovich, 2003) and offers a further useful refinement for informing the ways both critical thinking and language are taught. Researchers have identified the importance of ignoring pre-existing beliefs when calibrating the strength of an argument towards the evidence available in studies where individuals of both higher and lower intelligence were asked to generate or evaluate information (Sá et al., 2005). Macpherson and Stanovich (2007) investigated myside bias and belief bias (what people think they know about the world) and found that, even when the subject of reasoning is related to personal opinions (myside bias), rather than factual knowledge of the world (belief bias), even individuals of greater cognitive ability have difficulty overriding their personal opinions. For example, in a study of university students, those with higher IQs were equally likely to process information from an egocentric perspective as those with relatively lower IQs (Stanovich, 2011, p. 356). Similar results were found in reasoning-related studies with subjects other than university students. Sá et al. (2005), for example, examined mature students seeking to complete their high school education in a task requiring the generation of evidence and counter-evidence. Similar responses were provided by participants of high and low cognitive ability.

Here, and in other studies, the presence or absence of instructions to decontextualise reasoning was key to differences in performance. A positive correlation was found between bias avoidance and cognitive ability for example in experiments where participants evaluated an argument and drew rational conclusions while under explicit instructions to decouple from prior beliefs (Stanovich, West & Toplak, 2013). In contrast, bias was more evident in participant

responses when no such instructions were given. Stanovich and West (2007) used two experiments to investigate participant perspectives on four variables; their sex, smoking habits, alcohol consumption, and strength of religious beliefs. The results exhibited very little evidence that participants of higher cognitive ability displayed less myside bias, again leading to the conclusion that instructions to the participants to detach from their own perspectives was a factor in mitigating bias. In studies conducted by Klaczynski and colleagues, where informal reasoning tasks were not accompanied by specific instructions, it was possible to predict several aspects of myside bias – albeit independent of cognitive ability – based on thinking dispositions such as belief identification and re-orientation, categorical thinking, and regulation of personal goals (Klaczynski, 1997; Klaczynski et al., 1997; Klaczynski & Robinson, 2000). Thus, cognitive ability appears to be more important when instructions are provided, whereas in the absence of instructions, thinking dispositions seem to play a determining role in guiding an individual's reasoning (Sá et al., 2005). This does not suggest those of lower cognitive ability are less capable of mitigating bias when so instructed, only that it may be more challenging.

One concern with studies from the field of cognitive psychology is their use of psychometric tests to measure cognitive ability and its correlation to individual performance in reasoning tasks. Very little reference is made however to central dimensions of how these experiments are carried out. Participants, for example, receive instructions to detach from their views and evaluate evidence in an unbiased manner, yet they are not provided with strategies and language to express themselves in that manner. Worth exploring are the factors that might enable reasoning to take place; dimensions such as the thinking strategies employed, the language used, and the context provided to facilitate reasoning. In a language learning environment, such reasoning processes could be fostered through explicit attention to specific language forms and

an appropriation of linguistic practices targeted at mitigating bias. A relevant point made by Stanovich and Stanovich (2010) is that, in some situations, rational thinking might be facilitated through changes in the environment or the context. This is illustrated in a 2006 cross-national study of organ donation rates by Johnson and Goldstein, which demonstrates that the considerably higher percentage of organ donors in Sweden (85.9%) over the UK (17%) is due to the divergence in public policy on the matter (see Stanovich & Stanovich, 2010): In Sweden, the default value on organ donation is presumed consent, whereas in the UK the default is the opposite, with explicit action required to opt in. Decision-making in this case is not based on psychological, cognitive, rational, or any other reasons, but is merely the result of the environment (public policy). Based on this consideration, one could infer that individuals of different cognitive capacities may perform better in reasoning tasks in an environment which not only opts for decoupling from personal opinions and avoiding bias, but also provides participants with support for doing so. The need to create such an environment is more evident in educational contexts, which could prove extremely beneficial for learner development, provided that specific practices of CT are facilitated through the appropriate pedagogy.

Ramanathan and Morgan (2009) suggest advancing literacies and competencies by linking concepts/ideas with the concrete practices, settings, and real-world connections in which these will be necessary. Transferring findings from cognitive psychology into the field of language education may open possibilities for investigating the language required for learners to manage bias in specific situations and for dealing with the challenges faced by educators in teaching thinking skills. Providing learners with a combination of thinking strategies and language they need to meet situated, real-world requirements can potentially provide more meaning to the learning experience.

Perhaps progress could be made in this respect if teaching methodology treated rationality and critical thinking as separate, albeit malleable concepts. Critical thinking needs to be viewed not as the development of any *higher-order* reasoning skill that may or may not be easy to develop in an individual in language education, but rather as learners' *engagement* with a set of guided linguistic practices. This involves developing language to critically reflect on one's opinions, and participating in discourse within a contextualised framework informed by specific literacy objectives, situated to reflect learners' needs and responsibilities.

To this end, educators should be encouraged to pedagogically endorse teaching within optimal performance situations, where the default value on critical reflection or bias avoidance would be positive rather than negative or neutral. In other words, educators should be providing learners with instructions to decouple from pre-existing views and consider opinions opposing their own while evaluating evidence in argument generation tasks. Creating an environment that nurtures this kind of development would require language educators to provide students with the linguistic understanding required to perform within and across contexts. A focus on talking about language itself through a theory that recognises its role in literacy development would enrich both teaching and learning of critical thinking.

Systemic Functional Linguistics (SFL)

In this study, systemic functional linguistics (SFL) is the theory used to identify and connect language to the literacy practices and competencies required for understanding and mitigating bias. A social-semiotic perspective on meaning embodies a view of language as a social system of meanings (Halliday & Hasan, 1989); such an orientation entails the study of the ways language or metalanguage are used in expressing and negotiating meaning. In this, SFL offers a sophisticated way of analysing the relations between language and social contexts

(Halliday, 1996), specifically by studying how language as a system of linguistic features offers users choices for performing particular functions in discourse. Halliday notes that language learners not only use these systems to build meanings, but also, through their language use, come to understand the potential of the systems.

SFL represents grammar as “networks of interlocking options” (Halliday, 1985, p. xiv) rather than a collection of rules to be followed. In creating spoken and written texts, speakers and writers make choices from grammatical systems that enable making sense of their experiences and acting out their social relationships. The ways in which human beings use language for these purposes are classified in SFL in three broad categories or *metafunctions*. The first category is known as the *ideational metafunction* and relates to how language is used to organise, understand, and represent our perceptions of the world and of our own consciousness. This is further divided into the *experiential* and the *logical metafunctions*. The experiential is concerned with content and ideas, whereas the logical deals with the relationship between ideas. The second category, or the *interpersonal metafunction*, enacts self/other dynamics in social interactions. In other words, it enables us to participate in communication with other people by understanding and expressing feelings, attitudes, and judgements. Finally, the *textual metafunction* involves the use of language to manage the flow of information in a text and make discourse coherent. The Hallidayan perspective theorises that the meaning potential of one’s semiotic system increases through these three metafunctions that construct meanings sensitive to the contexts in which they are used. In this study, the experiential metafunction will be used to explore the potential of language in mitigating myside bias, in other words, in evaluating evidence and generating arguments in a manner unbiased towards one’s own views.

Language as a Social Semiotic

As a theoretical framework that offers its own analytical apparatus, SFL allows for the explanation and operationalisation of a fundamental relationship between language use and context. In understanding this relationship with regards language learning, the constructs of culture, social action, meaning, and semiotic activity embedded in SFL theory are important.

To begin, language is theorised as part of culture. This means that linguistic choices are informed by the context in which they are made; at the same time, language helps in reproducing and transforming context. Moreover, language, as a repertoire of different possibilities, is used in social contexts to achieve specific purposes. SFL models language and social context as semiotic systems in a relationship of realisation with one another. Similarly, meaning and form are viewed in a dialectic relation to each other, as meanings do not exist before the wordings that realise them (Hasan & Martin, 1989). Finally, SFL gives priority to language over other semiotic systems related to human experience (e.g., gestures). What this means is that learning of any subject matter is ultimately linguistic in nature, as learning is an expansion of an individual's meaning-making resources in which grammar plays a crucial role (Halliday, 1993a, 1998). According to the theory, early on in life, as well as in our everyday lives, we have a common-sense, specific realisation of our experiences (*congruent semiosis*), which transforms into more abstract and *incongruent semiosis* in more advanced, public, or academic settings. The advanced levels of language associated with incongruent semiosis expand how we may construe experience and allow us to act and interact in our context in many ways. SFL studies have identified this progression from common-sense to abstractness, and then to technical language). This progression as a result of both an individual's need to learn how to mean through language and the development of language itself because of the social needs and processes it must address,

is in an important sense the key process for the evolution of language in both ontogenesis and phylogenesis (Halliday 1993a, 1998; Halliday & Matthiessen, 1999).

SFL research has been motivated by the recognition that when students study different subject areas, they must extend their linguistic repertoires in order to acquire control of the types of texts and the linguistic features that comprise the registers of particular genres that are relevant to their educational and professional contexts (e.g., Christie, 1985, 1986, 1991, 1998; Coffin, 1997; Halliday, 1993b; Halliday & Hasan, 1989; Halliday & Martin, 1993; Jones et al., 1989; Martin, 1983, 1989; Veal, 1998; Wignell, 1994). Researchers have explored several genres expected in school settings, including sharing time narratives (Christie, 1985; Michaels & Collins, 1984), recounts (Heath, 1983), descriptions (Schleppegrell, 1998), definitions (Snow, 1990), expository essays (Martin, 1989), and research papers (Swales, 1990). Research using SFL has further investigated the development of language from early childhood to adolescence (Christie, 2002; Painter, 2005; Williams, 1998), explored what is valued in student writing (Christie, 1999; Macken-Horarik, 2006), and assessed the effectiveness of using instructional texts in presenting information (Unsworth, 1997, 2001). In the present study, consideration of the media context together with the text types and grammatical features that are common to that context and that reflect the purposes for which language is typically used were very important in highlighting myside bias as the construct informing both the research and pedagogic design.

Any pedagogy that supports students in decoupling from pre-existing beliefs before they evaluate evidence and generate arguments, will require a metalanguage for discussing how this might be done. Here, prior educational research informed by SFL can offer insights. From an SFL perspective, teaching academic literacies involves critically apprenticing language learners to identify and use a variety of registers. To do that, they need to understand how ideas are

constructed through these registers, how the flow of information is managed through the different communication modes (oral, written, computer-mediated) and how relationships are enacted. In this process, the three metafunctions (ideational, interpersonal, and textual) provide a lens for critically analysing how language varies in relation to who is communicating with whom, what they are communicating about, and the modes through which they are interacting (Halliday, 1996).

The *curriculum cycle* was developed by researchers (Feez, 1998; Macken-Horarik, 2002) to operationalise SFL in educational practice. Consisting of three phases, the cycle starts with the deconstruction of a text to develop learners' understanding of how language functions to construe meaning through specific organisational and lexicogrammatical patterns. The second phase involves learners and the teacher in a co-construction of text in support of further understanding and consolidating knowledge. Finally, learners are encouraged to independently use that knowledge to construe meaning for a specific purpose by moving beyond linguistic features. Schleppegrell's (2013) classroom research conducted in US primary schools is another illustration of (a) how meaningful metalanguage can support learners in accomplishing challenging tasks, while at the same time raising awareness of the language itself, and (b) how explicit attention to its variability can develop competence.

Context in SFL

Halliday (1999) maintains that, as we get older, the cultural contexts in which we interact become more diverse, creating more meaning potential and possibilities within our personal meaning system, as well as potentially within the totality of the language system. Central to this theory is the way texts and contexts are socially constructed by individuals through interactions within the cultural contexts in which they participate. Halliday proposes that any instance of

language must be understood both in the broader context of culture and in the immediate context of situation (1999, p. 4). While the context of culture relates to the semiotic potential of the system as a whole, the context of situation refers to the immediate context and the specific choices of phonological, lexicogrammatical, and discourse features that characterise it. To capture linguistic variation at this level of context, SFL uses three variables: field, tenor, and mode. Field refers to the nature of the social semiotic activity, tenor relates to the roles played by those taking part in the activity, and mode is concerned with the role of language and other semiotic systems in the situation. In relation to the metafunctions discussed earlier, the field of a text is realised in ideational meanings, the tenor is realised in interpersonal meanings, and the mode is realised in textual meanings.

SFL's metalanguage can thus provide teachers and students a means of being explicit about the ways different meanings are realised through linguistic choices prevalent in their contexts of study. It also allows for a focus on how meaning is expressed in specific types of discourse by foregrounding associated language patterns while expanding linguistic awareness. This deepens and refines learners' understanding of the knowledge construed in a text, so as to enable them to evaluate texts, participate in the disciplinary discourses evoked by them, and ultimately contribute to shaping the knowledge and discourses. SFL metalanguage in this study provides the means for explicitly discussing the connections between ways of critical thought intrinsically related to the expression of bias and the linguistic choices made in this context.

Critical Awareness and SFL

Of particular interest to this study is the exploration of the value of SFL's metalanguage in raising learners' critical awareness about form–meaning relationships and facilitating participants' understanding and acquisition of new language resources through provision of a

meaningful context. In this process, the concept of linguistic socialisation is important.

Linguistic socialisation relates to our lived linguistic experiences, and how these shape our preferences for making meaning in particular ways (Halliday, 2003; Hasan, 2005). Coffin and Donohue (2014) explore and discuss three first-year students' views on the academic challenges involved in meaning-making. The responses of these educationally, culturally, and linguistically diverse students lead the researchers to conclude that "how individual students orient to academic learning and knowledge is in part tied to the linguistic resources they have available to them and that this in turn, is influenced by their linguistic socialization" (p. 20).

An individual's linguistic resources or repertoire i.e., an individual's access to the linguistic system is shaped by their identity, consciousness, and culture. It is not just a tendency, but a preference for making meaning in particular ways and a mental disposition to readily engage in the negotiation of specific ideas (Hasan, 2009). Individuals bring to the meaning-making process their own background, knowledge, and sense of understanding based on experience. Using these distinguishing characteristics to question and explore the connection between linguistic choices, and the socialising context that guides them, is a form of literacy that relates to the potential of language to create meaning. *Reflection literacy* refers to individuals developing habits of mind pertaining to the interrogation of the relationship between linguistic variation and the requirements of the social context in which meaning is construed (Hasan, 1996). In her definition, Hasan (2011) distinguishes reflection literacy from recognition and action literacies, as one that is meant to produce knowledge. As such, if reflection literacy is successfully implemented through an appropriate pedagogy, it can develop within learners an inquisitive mind, a type of knowledge that would enable them to question pre-existing beliefs, cultural norms, and educationally established discourses. In their attempt to apply this approach,

a number of researchers (Achugar et al., 2007; O'Hallaron et al., 2015; Moore & Schleppegrell, 2014) extend the notion of reflection literacy into the teaching of history from textbooks, which tend to present factual information through objective language. Researchers found that the approach gave learners the tools to understand how information is organised to construe specific meanings.

In their study on raising history teachers' awareness of the linguistic features characterising historical texts, Achugar et al. (2007) take a reflective literacy approach. Borrowing Hasan's definition of the concept as a reflection on the potential of semiotic resources to construe and challenge ideology, they distinguish between students whose socialisation so far enabled them to recognise and act upon the assumptions of the texts they encountered, and those who are less advantaged in that respect. The researchers' claim that enabling this type of literacy by arming these students with a focus on language through tools for deconstructing meaning in texts is a powerful resource; empowerment can be achieved if teachers themselves become conscious of the power of language to construe the knowledge they are trying to transmit. In the specific study, the researchers engaged teachers in developing tools for challenging that knowledge and constructing new ways of interpreting the material they use in their classes. They also drew on Hasan's work to emphasise the need for teachers to raise learners' awareness of how their choices construe experience and enact social processes. Discussing the teacher's role in developing such awareness, Hasan suggests that by teaching grammar in its traditional form – isolated from its functional role – teachers deny their students both “the power of reflections of how meanings are transacted in their communities” (Hasan, 2011, p. 374), as well as the ability to capture the reality of language as experienced by its users.

O'Hallaron et al. (2015) also draw on Hasan's work on teachers' and young children's development of critical awareness when introducing the notion of *author attitude*. Their study using science texts which like history texts are highly informational, recognises the need for teachers to evaluate the functionality and appropriateness of different language choices in order to enable this type of reflection literacy. To that end, researchers aimed at engaging children in thinking, discussing, and questioning texts and their authors. To support teachers in developing this questioning position in students' literacy practices, the study used SFL to identify and analyse ways of expressing interpersonal meaning in science texts (e.g., to present judgement and evaluation, to draw readers' attention to something for emphasis, and to engage in dialogue with the reader). Using these, the researchers developed lessons guided by highly interactive reading and discussion prompts in which functional grammar theory and metalanguage enabled analysis and discussion of information and the author's attitude. In their findings, the researchers report a developing view of the informational texts as including more than just facts. They also report on students' growing awareness of authorial presence through their signalling of the importance of events or people for the author as well as for the readers. Although a number of challenges were observed in this study, classroom discussions, supported by a focus on language through the use of SFL, were considered a very encouraging step towards developing students' critical awareness.

Similar findings were recorded in the ACCELA Alliance (Access to Critical Content and English Language Acquisition) programme which required participants to use SFL tools to design case study curricular interventions aligned with state standards and students' investments. Analysis of the data indicated a development in both teachers' understanding of disciplinary knowledge and learners' ability to produce more coherent texts (Gebhard & Martin, 2010;

Gebhard et al., 2010). In another programme, Brisk and Zisselsberger (2010) reported on the gains made by 11 teachers in their ability to teach writing to bilingual students. According to the findings, the teachers developed greater confidence in teaching a variety of genres, as well as in their ability to plan, enact, and revise writing lessons based on specific organisational and linguistic markers. In this study, focusing on the linguistic features required for identifying and discussing the expression of personal opinion in media texts facilitated my evaluation of the texts students read and wrote, both as teacher and researcher. This helped me identify and deal with challenges texts can pose for learners.

Other SFL-inspired research offers empirical data in support of language form–meaning connections in dialogic interaction to achieve content goals. In this work, the teacher takes different roles in facilitating discussions, depending on the learning context and its goals. Regardless of these differences, emphasis is placed on developing a structured and meaningful way of understanding the choices an author has made in creating a text. Williams (1998) demonstrates how children can be apprenticed to reflect critically on language through texts with the use of conceptual tools offered by SFL. Findings indicate that children’s literacy development depends on raising their awareness of the relations between language and images, as well as their understanding of language as a meaning-making tool in specific contexts related to schooling practices. In a later study, Williams (2004) explores how children can develop abstract thinking by using SFL: the study asks six-year-olds to talk about procedures and 11-year-olds to reflect on how their texts are structured. Findings show that SFL offers conceptual tools for reflecting on language through a focus on grammar that supports critical thinking about text. Quinn’s (2004) case study introduces SFL metalanguage in a science classroom and demonstrates the improvement shown by a “poor writer” in comparison to some of the stronger

students. In another science-related learning context, Gibbons (2006) demonstrates how explicit attention to language – in this case around magnets – supports the development of both scientific and linguistic knowledge. Similarly, Polias and Dare (2006) use metalanguage in dialogues connecting language to meaning to demonstrate an improved ability in children to incorporate advanced language features typical of sequential explanations, narratives, and arguments in their writing. Finally, Moore and Schleppegrell (2014) were able to show how SFL supported learners' talk about figurative language by enabling them to make sense of characters' feelings through their actions. This was achieved through dialogue emphasising both the experiential and interpersonal meanings in the texts. Apart from language development, the researchers also observed higher levels of engagement and participation.

Research is sparser in the context of higher education, where mostly genre and register research has been aimed at building an understanding of meaning-making through specific sub-disciplines at the undergraduate (Donohue, 2002; Drury et al, 2006; Ravelli, 2004; Wignell, 2007) and postgraduate (Macken-Horarik et al., 2006) levels. An SFL area in which there has been extended interest is the interpersonal dimension of academic discourse. Some examples include Lee's (2010) investigation of student efforts to balance respect and authority when writing for lecturers, an analysis of intertextual resources and linguistic strategies used by students in arguing and persuading (Coffin, 2010), and explorations of evaluative meaning (Coffin & Hewings, 2004; Hood, 2010). Further studies (for example, Chen & Foley, 2004) have focused on developing both first- and second-language speakers' use of discourse markers to coherently organise discourse and texts.

Whatever the focus, aims, or context, these studies repeatedly demonstrate that a functional grammar provides a metalanguage for analysing language that can be used to

highlight issues of overall organisation and voice, and that goes beyond structural categories to show the meanings that can be derived from different language choices. This process offers teachers and researchers detailed insights into the ways learners use the systems and resources available through language to respond to different contextual demands. This can in turn, as indicated in the literature, enable more powerful and systematic support of learners' language development.

With greater understanding of the functional value of different language choices, researchers can provide more detailed register-specific information to teachers about the language that constructs the disciplines they teach and develop and assess the effectiveness of approaches that link grammar with meaning for struggling learners.

Approaches to language analysis that link form and meaning also have the potential to illuminate developmental pathways, recognizing the ways complex language systems evolve and shedding light on questions such as what language features students are ready to take up, and when, and the rate of development of different language features and systems. (Schleppegrell, 2007, p. 126)

In this study, functional grammar will be used to focus on the language writers in media texts draw on to express personal opinion. Having students identify, reflect on, and critically discuss linguistic choices made in relation to the expression of myside bias, is expected to (a) enhance their understanding of the connections between the expression of personal opinion and different language forms, and (b) develop their linguistic repertoire.

Academic Literacies

Despite its potential, SFL has received varied criticism. One argument against is that, as a linguistic lens, it can span across texts from the same discipline or from specific individuals, and

ultimately produce generalisations with regards text structure of language choice that may not be relevant to or characteristic of other contexts (Coffin & Donohue, 2012). On the other hand, Gee (1992) posits that generalising patterns is important to human thinking, while Macken-Horarik et al. (2006) argue that it is pedagogically important for learners to use generalised descriptions to make sense of different texts. Another point of concern raised with regards the use of SFL in education is its focus on language use/texts in context, rather than on the meaning that the writer may have intended but did not ultimately achieve (Lillis & Scott, 2008).

While SFL is focused on how knowledge structures are developed within subject areas, a focus on individual knowers is advocated by *academic literacies*, another ethnography-based approach that looks at participants' writing practices and their perspectives on these (Coffin & Donohue, 2012).

The recognition of the different ways participants interpret a context and perhaps even the individual identities, experiences, and perspectives they bring to an instance of socialisation are highlighted by the academic literacies approach, which is more practice-based compared to the text-based SFL approach (Coffin & Donohue, 2012). In an academic context explored by Coffin and Donohue (2014), the researchers look into the learning experiences of three university students who reflect on how they identify themselves while coping with the challenges presented by academic meaning-making. Concluding on the value of drawing on SFL in researching semantic variation, they propose that it is possible to engage meaningfully with issues of identity and power that are prevalent in higher education.

To go beyond the exclusively linguistic focus on text, in her work on semantic variation, Hasan (2009) argues that meaning-making is a primary factor in our understanding of the role of language in social structure. To illustrate this, she gives the example of a mother-child

interaction through which she relates features of meaning to social setting (the activity, the social relationships, the mode of linguistic or semiotic communication) and then to grammatical features in the discourse. This tendency to make meaning in particular ways and as a consequence use language in certain ways, or semantic orientation as defined by Hasan, is transferred into the context of schooling, in which it is realised through the identities of teachers and learners:

The primary point of interest for educators has to be the learner's "mental disposition" - the pathways of the brain used habitually for engaging with new information- because it is such "habits of mind" which will deal with the information presented as educational knowledge. (Hasan, 2011, p. xii)

The view of language as a system with meaning-making potential is of particular importance in this study, one that nevertheless is not aiming to reconcile the differing views of language held by cognitive psychology and social semiotics. Recognising the incompatibilities between theories of language – for example, between SFL and the view of language (in cognition) as a passive reflection of the feelings and ideas in the mind of a speaking subject (Halliday, 2003; Senft, 2007) – I merely borrow some ideas from my side bias to ground the design in support of language development. Therefore, while ideas from cognitive psychology are used to connect specific ways of thinking to language, the view adopted in this study draws on the active role of language in construing human experience over its referential functions as discussed by Halliday. Drawing on the abovementioned theories, meaning is not made in individual minds independent of concepts or ideas, but derives from people's need to communicate, reflect, construe, and enact reality (Halliday, 1992, 2003; Halliday & Matthiessen, 1999).

In this study therefore, the idea that an individual can evaluate an argument and generate a conclusion based not on evidence but rather on what they want to be true (myside bias) is used specifically to develop students' understanding of the possibilities offered by language in construing meaning when engaging in this type of thinking. The idea serves to explore the ways in which language or certain linguistic resources may function when an individual expresses an opinion influenced by this type of thinking. It also provides a framework for thinking about language that allows me to draw on specific processes related to the ways individuals choose to express meaning when influenced by myside bias, and which I develop into linguistic practices that may ultimately be transformed into pedagogy in support of language development. Furthermore, I use the ideas I borrow from myside bias to identify and target specific linguistic resources related to the expression of unjustified personal views.

As already mentioned, research from cognitive psychology discusses a number of thinking processes related to myside bias (Stanovich & West, 2007). These include the evaluation and interpretation of evidence, as well as reasoning in and out of conclusions to confirm individuals' own motives and prior beliefs and to refute opinions contrary to their own. Without attempting to explain the processes involved in externalising this type of thinking, in this study I focus on the ways language may be used, in particular the choices in language that allow individuals to express reasoning that is biased towards one's own opinion. SFL provides the language for discussing the expression of unjustified views in media texts – in relation to the linguistic choices made in this context – to foreground how meaning relates to what is chosen and what is not. For example, SFL can support discussion on how specific linguistic resources in texts can function to represent events by emphasising or de-emphasising specific information in

support of promoting a personal view that is not necessarily based on verifiable or objective evidence.

Drawing on SFL theory, I use texts as language functioning in context, and the context is framed by the concept of myside bias. To achieve this, I consider specific processes involved in expressing myside bias in relation to the literacy requirements of the media context in which this study is situated and translate these into practices that would support discussions of language–meaning connections in the classroom. These include identifying opinions in media texts, questioning information in relation to these opinions to uncover biased thinking, analysing and connecting specific linguistic resources to the ways unjustified opinion or biased thinking is expressed, and discussing these connections by foregrounding and explaining different possibilities in meaning.

Unlike many other studies in the field employing the use of SFL, this study does not require developing students' understanding of the characteristics of different genres or their ability to write in a specific genre. Drawing on the concept of myside bias and focusing on the targeted development, the use of SFL in the classroom focuses on developing students' understanding of the connections between language and the expression of opinion/bias through a genre that is relevant to their discipline i.e., media texts. The use of concepts like *participant* and *process* – from the experiential metafunction of SFL – facilitates discussion on the connections between unjustified views expressed in texts and the events portrayed or the roles of the entities taking part in the events. Foregrounding these connections allows me to highlight and explain the functions of specific linguistic resources in creating meaning or, in this context, in expressing views biased towards the author's own opinions. For example, an author's use of the passive voice or a nominalisation is foregrounded and analysed in instances where omission of a subject

involved in an event has an impact on the specific view promoted or angle of the event discussed (Simpson, 2003; Sušinskienė, 2010). Reported speech and modality are also examined for their potential in encoding an author's personal view (Bednarek & Caple, 2012). In short, SFL is used in instruction not to replace traditional grammar but to build on it (Derewianka & Jones, 2010); it does so by developing students' understanding of how these resources function to provide choices in meaning through explanations of the ways different participants (subjects) affect or are affected by experiences (events) in different roles realised by process types (verbs).

Critical pedagogy (discussed in the section that follows) informs the development of the instructional practices; supported by SFL, these draw explicit attention to the connections between the functions of specific linguistic resources and the expression of unjustified views in media texts.

Critical Pedagogy in Teaching English to Speakers of Other Languages (TESOL)

Often grounded in the work of Paulo Freire (1970), critical pedagogy (CP) is concerned with the development of *critical consciousness*. This, for Freire, starts with a recognition of a system of oppressive relations and one's own place in that system. The task of CP is to bring members of the oppressed group to a critical consciousness of their situation as a starting point for a liberatory praxis that involves both reflection and action. The classroom, as a reflection of society, is infused with the same injustices and restrictions (Giroux, 1983). One of the hallmarks of an oppressive society – and, by extension, the classroom – is the biased and unfair distribution of voice. That is, the ideologies of those who design and implement educational programmes are expressed, whereas others' voices are marginalised or silenced. Against such a backdrop, one of CP's prime missions is helping the oppressed to regain their lost voices (Akbari, 2008; Norton & Toohey, 2004). Freire believed that all education was part of a project for freedom because it

offered students the conditions for self-reflection, a self-managed life, and particular notions of critical agency (Giroux, 2010). In his analysis of Freire's work on literacy and critical pedagogy, Aronowitz (2009) explains that self-management can only occur when someone fulfils three educational goals. The first is to know oneself and one's worlds better through constant reflection. The second is to become aware of the forces that have shaped one's life and thinking. And the third, perhaps resulting from the other two, is to aim at producing a new life through a new set of conditions.

A common aspect of critical pedagogy is the intention to foster public spaces in which learning within schools and higher education is not distinct from society, but rather engages with society through creative and transformative dialogue. In higher education, where according to Giroux (1992) disciplines tend to perpetuate exclusive forms of knowledge and discourse, CP argues that we need to consider new and different forms of knowledge and new and different ways of creating knowledge. But for such knowledge to be valuable, higher education needs to provide the space for complex ideas to be debated and generated, while also being linked to wider society. Parker (2002) views a discipline as something that is "practiced and engaged with" (p. 375); like a society, it is a creative and evolving space within which students and teachers as citizens can interact critically. Similarly, in discussing Giroux's fear that disciplines can impose particular forms of knowledge, McArthur suggests that "disciplines are, and should be, sites of contestation and challenge; of competing and conflicting 'takes' on knowledge. What disciplines have internally in common is a shared discourse in which to undertake such conflict, and to do so with rigor" (2010, p. 308). According to Pennycook (1990), CP aims to investigate how knowledge is produced and legitimated within educational institutions and how those forms of knowledge can be critically confronted in an attempt to produce new forms. Advocates of CP

further contend that education, which includes literacy programmes, is never neutral and encourages a certain direction of development in human beings (Shor, 1999). Drawing on these views, the language classroom is transformed in this study into a space of critical reflection on information, interaction or exchange of ideas, and generation of new knowledge.

In education, literacy practices – the cognitive and semiotic processes associated with the reception, decoding, and (re)production of texts – provide the means for the construction of meaning (ideas, values, identities) which can be negotiated, agreed upon, or even resisted. Critical educators seek to create opportunities for such an engagement with knowledge within wider contextual domains. In the 21st century, critical engagement may entail mastery of skills and competencies required for coping with a broader range of text types and modalities. In this sense, we should orient ourselves towards a pedagogy fostering not only a dialogue of ideas but also a dialogue of media (Cope & Kalantzis, 2000; Hunter & Morgan, 2001; Kress, 2003; Morgan, 2009). The present study explores how literacy practices of identifying personal opinion in media texts, reconstructing text, and critically discussing the potential of specific linguistic resources in expressing bias can develop learners' understanding of the different ways language functions to construe meaning. These literacy practices are informed by the linguistic and critical thinking needs of media students in the ESP context of the study.

Critical Literacy

Critical literacy (CL) generally deals with an understanding of the relation between an orientation to meaning – realised in a reader's interpretation of texts or an author's choice of words – and broader social and political contexts (Pennycook, 2001). In a more traditional conceptualisation, literacy requires that someone acquires the knowledge and skills to read, interpret, and reproduce specific types of texts, and develops the intellectual tools and abilities to

fully participate in their own culture (Kellner & Share, 2005). Luke (2012), on the other hand, identifies these skills and abilities as considerations that are ultimately defined by a curriculum. They are determined by questions about pedagogy and teaching, and about whose version of culture, history, and everyday life will count as official knowledge. Luke also includes: “which modes of information and cognitive scripts, which designs and genres, shall be deemed worth learning; what kinds of tool use with reading and writing will be taught for what social and cultural purposes and interests” (Luke, 2012, p. 5). In this understanding, CL aims to evaluate and transform dominant ideologies in culture, economics, politics, and society through discussion and analysis of the way such issues are portrayed in texts and discourse to serve particular purposes and to promote the interests of specific groups. Reflecting different ideologies and serving specific purposes, texts cease to be considered infallible exhibits of human wisdom, and are instead seen as malleable artefacts that “can be constructed, deconstructed and reconstructed, to represent, contest and indeed, transform material, social and semiotic relations” (Luke & Dooley, 2011, p. 1).

Since the 1980s, TESOL educators have developed and implemented a number of pedagogic approaches to critical literacy. Critical reading, for instance, is taught through strategies of author bias identification resulting from the interaction of background knowledge and textual messages. Shor (1987) targeted critical literacy through language projects in which reading and creative writing facilitated tertiary-level students in the investigation of social issues and personal experiences. In a similar context, Morrell (2003) assigned his college students to critically research and report on possible causes of inequality in urban schools. Likewise, Canagarajah (2005) discussed raising learners’ awareness of how vocabulary choices and sentence form can influence meaning. The study looked at how choices in English grammar are

used to assume ideological positions contrary to the interests of others as well as students' explorations of linguistic alternatives in the expression of meanings. In another study, exploring CT in English essay writing, results indicated that critical thinking instructions in essay writing promoted participants' reasoning skills and improved their metalinguistic ability (Rafi, 2010). This study raises learners' awareness of how linguistic choices in a text relate to the author's personal opinions and/or bias. This is achieved through specific instructions to identify and critically consider linguistic resources directly related to the expression of personal opinion.

Even though the aforementioned studies demonstrate ways in which critical reading and writing can support the development of language and literacy, curriculum provisions to advance critical literacy have been contested. Aukerman (2012) offers a criticism of some divergent critical reading orientations and highlights a few of their problematic aspects. The orientations fail to acknowledge learners as the primary agents in exercising critical thinking, but instead treat them as auxiliary or intermediate agents who fundamentally adopt a critical stance through strategies and material already filtered out and scrutinised by someone else, usually the teacher or educator involved in the curriculum design. Furthermore, the issues selected to be used as a vehicle for social inquiry should be of both local and global significance, so as to enable learners to socially position themselves within a wider socio-political context (Benesch, 2001). A big part of the responsibility for this lies in the hands of teachers who need to extend learners' literacy practices beyond the boundaries of their immediate personal and educational contexts.

In response to these criticisms, an expanded notion of critical literacy, critical media literacy is explored in the pedagogic design of this study. This challenges traditional ways of teaching and learning and shifts teachers' and students' epistemic knowledge relations. In other words, educators' role in imparting knowledge is changed and their views and knowledge are no

longer considered the norm. Emphasising the immense influence of mass media and the abundance of information available in the 21st century, critical media literacy highlights the need for developing critical pedagogy that prepares learners to be critical of information from multiple sources and in various forms. Such a pedagogy would target the development of a critical eye toward how writers, illustrators, and text creators tend to use texts to promote or suppress particular views or ideas. Critical media literacy, then,

deepens the potential of literacy education to critically analyse relationships between media and audiences, information and power. Along with this mainstream analysis, alternative media production empowers students to create their own messages that can challenge media texts and narratives. (Kellner & Share, 2007, p. 60)

Critical media literacies, in this sense, would more explicitly include the expansion of language repertoires and skills required for participating in digitally mediated contexts. The same framing of literacy as a *family of practices*, in which multiple combined practices are essential, is advocated by Luke and Freebody (1999), and elaborated by authors in various disciplines and organisations around the world (Buckingham, 2003; Morgan, 2009).

It seems therefore that the need to develop critical media literacy provides another way of situating teaching and curricula by reconceptualising learners as active agents participating in global, technology-mediated contexts of shared interests, needs, and requirements as a vital step towards developing critical media pedagogy. The perceptions and insights of younger generations could be valuable in this development as students tend to be more media savvy than their teachers. Bearing this in mind, engaging students in critical discussions and analysis of their takes on different issues should be encouraged. In making curriculum decisions, teachers ought to be guiding students towards inquiry that deepens their critical exploration of issues that affect

them and the society or social context to which they belong (Luke, 1997). Or as Kellner and Share (2007) put it: “It requires a democratic pedagogy, which involves teachers sharing power with students as they join together in the process of unveiling myths, challenging hegemony and searching for methods of producing their own alternative media”. It appears then, that pedagogy should derive from within. It should be a process of transformation and decoupling from internalised ways of seeing and being, labelling, and conceptualising the world. As “subjects-in-discourse” (Morgan & Ramanathan, 2005, p. 154), teachers (and students) should critically reflect on teaching approaches, material, discipline orientations, genres, and socialising practices deemed important or necessary if such transformation is to be achieved. In Freirean terms, this means using dialogue to address everyday ideological representations of social issues (race, class, gender, religion, etc.). The pedagogy used in this study focuses on examining the ways language functions to express personal opinion in texts. Informed by the construct of myside bias, students’ engagement with language is supported through linguistic practices of identification and critical discussion aimed at enabling them to decouple from pre-existing beliefs, critically reflect, and share views in support of creating new forms of thought and knowledge. To achieve this the orientation of critical literacy as dialogic engagement is explored.

Dialogic Critical Engagement

Dialogic thinking, described as a feature of critical pedagogy in many educational papers on the topic, is a concept inherent to critical thinking. Shor and Freire (1987) define dialogue as “a moment where humans meet to reflect on their reality as they make and remake it” (p. 13). Critical thinking allows people to overcome the impact of their egocentric beliefs, and so dialogue should be fostered in which thinking as a critical process requires an individual to step away or “decouple” from the self and appreciate the position of others when reflecting critically

(Luke, 2004; Paul, 1983). *Dialogic critical thinking*, according to Gieve (1998) and Benesch (1999) is a form of dialogical discourse in which the taken-for-granted assumptions and presuppositions underlying arguments are examined and debated. In an example of such a discussion – taking place in an English for Academic Purposes (EAP) class linked to an introductory social sciences course – Benesch takes on the role of facilitator and intervener to encourage students’ “reflections on an issue of social practice”. Contrary to earlier views on EAP ideology (i.e., Atkinson & Ramanathan, 1995), she concludes that a dialogic approach to critical thinking can cater to both the development of students’ immediate academic needs and their right to negotiate the status quo by assuming new roles and responsibilities (Benesch, 2001).

Although this approach is hardly a “discursive utopia” as Aukerman suggests, it is powerful because it requires learners to elaborate on their own textual interpretations while critically encountering other learners’ perspectives. In this way, learners are essentially empowered to consider multiple perspectives by detaching from existing personal opinions and beliefs before interpreting a text. In other words, what is required of learners is to deal with evidence in an unbiased manner, a strategy very similar to the notion of cognitive decoupling as described in psychology literature; as such, this approach will be used to inform students’ engagement with language in this study.

Interesting examples of studies using dialogic engagement in support of critical pedagogy include Rhonda Hammer’s investigation (2006) of the use of dialogue in the creation of alternative media designed for a specific audience. To that end, she asks her critical media literacy students to create their own counter-hegemonic movies and websites that explore issues misrepresented in the mainstream media. The project engages students in identifying ideological codes and challenging common assumptions on a wide range of issues. In another context,

Macknish explores her Chinese students' critical reading discourse patterns through peer group discussions of texts. Overcoming several limitations, including the fact that their native culture and educational system do not favour criticality, critical reading is fostered through scaffolding of specific strategies. She highlights: "I attempted to empower students to publicly question and challenge the construction of texts by raising awareness of a range of critical reading processes and arming students with tools, resources, and opportunities for activating and displaying a critical stance" (Macknish, 2011, p. 460). Huang's (2012) study of university students in Taiwan investigates the development of students' critical social awareness through research-based writing projects in an EFL curriculum aimed at integrating both critical and literacy education. The success of the study, according to the researcher, relates to the practice of students co-constructing research components (topics, questions, experience) with their peers and teacher. In another EFL context, Mansoor and Mostafa (2013) develop Iranian students' argumentative writing skills through both writing instruction and dialogic critical thinking. The findings demonstrated the combination of writing instruction and dialogic critical thinking had a strong positive impact on learners' writing ability, as well their critical thinking competence in terms of self-direction, self-discipline, self-monitoring, and self-correction.

A common characteristic of these studies, that is further investigated in the present study, is that in creating the context and dynamics that will transform learning, a pedagogy of possibility, as opposed to certainty, is developed. Critical distancing seems to emerge from interrelated activities and is not the result of any one specific task. According to Morgan and Ramanathan (2005), this distancing arises:

when critical moments and memories briefly align in novel ways and when even seemingly mundane or compulsory reading/writing tasks can be decontextualized and

invigorated with an empowering potential, opening up new identity options and new opportunities to subvert or transform institutional power relations (p.155).

Strategies that encourage self-direction through fostering critically reflective thought and participating in discourse should thus be a key component of literacy programmes. This study develops practices of critical reflection to identify and discuss the expression of myside bias in media texts. These aim at empowering learners to uncover the connections between certain ways of thinking and language, as well as transforming their views of language and language learning.

Attempts to implement CP have nevertheless been criticised by researchers based on their cultural, social, cognitive, and linguistic complexity (Atkinson, 2003; Rowsell & Pahl, 2004). Specifically, CP has been unable to provide a detailed account of descriptive analyses of discipline-specific genres, as well as the cognitive processes describing learners' engagement with specialised structures of texts characteristic of the various academic discourse communities.

In response, researchers have suggested that practices of 'good' academic writing relating to the use of 'appropriate' linguistic and rhetorical elements or 'correct' textual organisation, are characteristics of all competent writers. Moreover, the occurrence of such elements is not always subjective or easily identifiable. Rather, they are co-created, enacted, and transformed through critical, creative, and situated practices of discourse communities in analyses of course texts (Casanave, 2002; Ramanathan, 2002). According to Canagarajah (2002), "it is the linguistic activity of the members in debating, revising and legitimizing the 'paradigms' that make sense to them that constitute knowledge" (p. 30).

Exploring the potential of an EAP syllabus to foster such practices of critical engagement, Morgan (2009) looks at the co-development of cognitive academic abilities and language awareness through meaningful social inquiry in two different research contexts. In the

first, Morgan examines the pedagogical potential of a research essay assignment, an EAP course requirement, to expose learners to a variety of print and image media, and to encourage collective questioning of established ideas. In the second context, Morgan devises a “social issues project”, intended for aspiring EAP and ESL teachers, to identify and explore the key elements in creating optimal conditions to foster transformative awareness. This awareness emerges through activities in which students are encouraged to assume responsibility and construct critical insights in relation to situated requirements (Cadman, 2005; Morgan, 2009) and their own needs and rights. In both studies, a critical potential is fostered through multiple readings of different genres of texts in the course of focused group work aided by teacher intervention.

Unlike the studies above, in which students were required to analyse different genres of text as a requirement of an EAP syllabus, in my study, situated in an ESP media context, I choose to focus the analysis at a more granular level and have students look at grammatical components that make up a text. This decision is informed by an investigation of the critical literacy demands placed on media students, which highlight the importance of critically considering information from various sources, distinguishing between fact and opinion, and questioning the expression of personal opinion in media texts. The needs analysis surfaced the need to develop learners’ understanding of how specific linguistic resources are selected by authors of texts because of their potential in expressing opinion and bias.

My needs analysis thus shifted the research focus of this study. While practices of text deconstruction and reconstruction remain important, students exploring different genres or even examples of texts from an entire genre is not essential. Instead, the focus of this study’s design is the need to identify and connect the critical thinking and language requirements of the media

ESP context to the linguistic components necessary for performing in that context. The concept of myside bias enables these connections, in essence providing the critical thinking framework around which learners' engagement with language can take place. With a focus on the cognitive processes that comprise students' engagement with specialised linguistic components (as opposed to any one genre), this study further differentiates itself from previous research and potentially offers a response to criticisms of CP as failing to provide detailed analyses of discipline-specific genres.

The cognitive processes explored in this study relate to critical practices of identification and discussion of the connections between expressing personal opinion/bias and language. In the activities designed to support these practices, linguistic and critical awareness is enhanced through the introduction of "metalinguistic resources" (Morgan, 2009, p. 314), empowering learners to develop a deeper understanding of how language and other multimedia components construe meaning. SFL which as discussed earlier provides the framework of field, tenor, and mode (Fang et al., 2006; Moore & Schleppegrell, 2014; C. Wallace, 2002; D. Wallace, 2020), enables the teacher and learners to focus on how discourse choices function to express opinion and bias. Specifically, the ideational metafunction is used to uncover and discuss the ways language functions to position information in support of authors' views. Given this study's focus on raising critical awareness, I draw on Hasan's definition of a literate person as someone able to question the meaning of any utterance to determine whose perspective is presented and whose is excluded (Gebhard & Graham, 2018). This type of critical language awareness is developed through critical reflection and joint or individual re-construction of language, in which students are empowered to rethink and revise previous assumptions on grammar as a means of transforming and creating knowledge. More specifically, I use the specific linguistic resources

(nominalisation, passive voice, reported speech, and modality) – as explored by scholars in studies that take a critical perspective on critical media literacy by demonstrating the communicative functions of linguistic choices made in the media – to develop the pedagogy that will foster students’ critical language awareness. Bartlett’s analysis of Martin Luther King’s speech for example, demonstrates how the speaker construes different perspectives according to the needs of their discourse at each point by discussing how participants are involved in events and activities (Bartlett, 2014). In her work on language and ideology, Lukin (2019) examines collocational patterns and patterns of frequency for *war* and *violence* as terms taken from the Oxford English Dictionary and the British National Corpus. Lukin reports that, despite the potential connection between the meanings of the two terms, war is much more frequently used. She argues that the choice to use war as opposed to violence suggests that the former term is not considered to be associated with bias or subjectivity, indicating a tendency to normalise or legitimise war. The same study reinforces this conclusion by finding that collocational patterns for war are largely neutral or positive, as opposed to violence, which was found to have mostly negative associations. For example, lexical items related to the notion of war, such as *invade*, *attack*, *bomb* etc. were largely nominalised in the dataset to make the human agency in acts of war less visible and thus to conceal the impact of these acts (Halliday & Matthiessen, 2014). Finally, Bednarek and Caple (2012) discuss how different types of reported speech and reporting expressions in news stories allow journalists to interfere with information as a way of encoding perspective. For instance, they make a distinction between direct and indirect speech and discuss how direct quotes may be used in news discourse to add objectivity and validity to information. Similar studies discuss the differences in meaning conveyed by reporting expressions, as well as the neutral choices in expression preferred by print news discourse (Garretson & Ädel, 2008).

Apart from framing the development of practices and activities, as well as the design of the study, the concept of myside bias is used to provide explicit instructions informing the context in which learners' critical engagement takes place. As mentioned earlier, the ability to avoid myside bias is positively correlated to an environment in which specific instructions are provided to an individual to step away from pre-existing beliefs before critically examining evidence and drawing one's own conclusions. This process requires a person to move away from the safety of what is known and assume responsibility in creating and establishing new knowledge. Reconceptualising "new roles and responsibilities" in questioning and creating "possibilities rather than certainties" is a phenomenon Luke (2004) identifies as an "out-of-body experience", a critical process that entails "an analytic move to self-position oneself as Other"; a process that in this study is reflected in the notion of cognitive decoupling. Practices of text deconstruction and reconstruction informed by SFL metalanguage are thus aimed at allowing learners to distance themselves from information in order to critically reflect on it. While distancing or decoupling, learners are apprenticed to recognise the connections between the ways information is presented to express opinion/bias and the language used towards that end. Providing learners with explicit instructions through the designed practices, on how to critically approach information aims at transforming both thinking and learning in empowering ways.

Drawing on the significance that CL education attaches to learners' life experiences (Chun, 2016; Hayik, 2015, 2016; Huang, 2011; Vasquez et al., 2019), the present study targets the development of language through content mostly related to social issues and concerns experienced by learners themselves. Drawing on new definitions of how to teach literacy, any topics and issues that capture students' attention, based on their experiences and the communities they engage in, become significant in designing activities and selecting texts. Towards that end,

activities informed by the concept of myside bias – and the optimal performance conditions it can cultivate – engage learners in reading, critically considering, and discussing multiple perspectives on current topics of their interest. Beyond classroom discussions, writing is also used in a number of studies to maintain learners’ engagement in critical reflection and analysis (Alford & Kettle, 2017; Hobbs et al., 2014). The pedagogic design of this study includes writing activities in which students rely on their critical analyses of diverse perspectives on an issue to (re)construct text by functionally using targeted linguistic resources to position themselves on the issue. Finally, a few studies on critical literacy development report the use of resources or scaffolds in support of the learning process (Abednia & Izadnia, 2013; Alford & Kettle, 2017; Morgan, 2009). In this study, learners’ critical engagement with language is supported by two different resources used as scaffolds. A linguistic resource that includes instructions and examples of the functions of targeted linguistic components with regards expressing opinion, and a critical thinking resource providing questions for learners to draw upon when critically analysing text in relation to opinion and bias. Repeated use of these scaffolds facilitates critical reflection and analysis in support of language and thinking development.

This study targets the development of language through critical thinking, and critical thinking through language, by bringing together critical thinking constructs from cognitive psychology, SFL and CP. In developing the research and pedagogical design for the study, while I recognise the need to engage and support learners in practices of text deconstruction and joint/individual re-construction as other researchers have done, I favour the use of myside bias, a critical thinking construct and not an entire genre. As theorised in cognitive psychology, myside bias and its potential as a linguistic practice is explored in instances of critical interaction between participants within the context of media studies in higher education. Research remains

scarce, however, on raising learners' critical awareness through dialogue in an ESP context. Furthermore, this study attempts a co-development of both thinking and language into habits of mind through an exploration of the possibilities language offers in the expression of biased thinking and, more specifically, myside bias in media texts. This endeavour is supported by SFL and informed by critical and literacy practices facilitating a dialogic pedagogy of interrogation, reflection, and empowerment. The role language can play in fostering a critical disposition towards biased thinking and its connections to specific linguistic components in this type of context has not, to my knowledge, been fully investigated.

Chapter 3: Methodology

The potential for having students explore language as a system of choices to support development of critical awareness has been explored by research in multiple contexts, although mostly in teacher and secondary education (Coffin, 1997; Halliday, 1993b; Halliday & Hasan, 1989; Macken-Horarik, 2002). In this study, I research the ways in which critical thinking practices, informed by the construct of myside bias, can be pedagogically explored to foreground the connections between language and thinking, in support of learners' linguistic development. The following research questions guide the inquiry:

- 1) How can critical thinking practices be integrated into pedagogic designs in explicit support of ESP learners' linguistic development?
- 2) How might foregrounding the relationship between myside bias and targeted linguistic resources contribute to students' understanding of how language functions to convey opinion?
- 3) How can the pedagogical design, supporting the iteration of dialogic processes of language identification, analysis, and reconstruction in texts facilitate the development of a critical mindset in support of learners' language and thinking?

The pedagogic design at the centre of this research targets linguistic growth through engagement in practices of identifying, analysing, and reconstructing language that simultaneously enhance critical thinking. The choice to draw on design-based research (DBR) – a research methodology that bridges the gap between practice and theory – reflects the overarching research aim of generating insights into pedagogic design that can contribute to language classrooms beyond the research site.

Design-based Research

DBR is a methodology designed by and for educators, that seeks to increase the impact, transfer and translation of education research into improved practice. In addition, it stresses the need for theory building and the development of design principles that guide, inform and improve both practice and research in educational contexts. (Anderson & Shattuck, 2012, p. 16)

DBR is a methodology that addresses theory as well as practice: theory is used to both frame research and develop the design of solutions to a problem. The resulting design is then empirically tested within the aim of refining theoretical understanding and evaluating the implications of specific dimensions of the design for practice beyond the research site. The results of this evaluation, or “proto theories”, are generated in the form of design principles (Cobb et al., 2003; Reeves, 2006).

Characteristics of DBR

There are five key characteristics of DBR. Firstly, it is situated in real educational contexts, which contributes to the validity of research results and their value for informing and improving practice in similar contexts. Secondly, it focuses on developing the design of an object, activity, or process that can solve a problem; this is what DBR studies refer to as an *intervention* (McKenney & Reeves, 2013; Anderson & Shattuck, 2012). The intervention typically develops from a needs assessment that has identified a problem or opportunity for improvement in local practice. For example, Reeves (2006) depicts the DBR approach as a process completed in four stages. It starts from the identification and analysis of a problem by researchers and/or practitioners and then goes through the development of prototyping solutions informed by theories or existing design principles. It then involves iterative cycles of testing and

refinement of solutions in practice and finally, reflection, to produce design principles and enhance solution implementation in practice.

The design elements or characteristics of the intervention, which may be instructional methods, tools, time allowed for activities, etc., need to be explicit and clearly documented so as to be studied and adapted easily by researchers in their contexts (Anderson & Shattuck, 2012). The intervention develops through processes of iterative analysis, design, development, and implementation, involving a collaborative partnership between researchers and practitioners.

All partners are engaged in the process of refining the design, but the partnership is a practical way of dealing with a teacher's lack of time or training to conduct rigorous research. It also addresses the researchers' lack of familiarity with the context, participants, learning situation and objectives, or other parameters influencing the intervention (Wang & Hannafin, 2005). Thus, all partners contribute their unique expertise to the project's success.

Another key characteristic of DBR is the methodology's focus on the evolution of design principles that can be operationalised in other contexts. Principles do not function as prescribed solutions, but rather enable understanding and development of learning beyond the immediate context. According to Anderson and Shattuck (2012), although these principles are derived from situated, real-world contexts and reflect the conditions in which they were generated, they are not designed to apply in the same way across contexts and should be adapted to inform, rather than determine or define other interventions. This last point refers to another characteristic of the methodology, the necessity for research results or principles to have a practical impact on practice. Barab and Squire (2004) argue that, in order for design-based research to adequately justify the value of the theory it has advanced, it must demonstrate the effectiveness of the design in addressing the learning requirements of the local context. A final characteristic of DBR is the

use of mixed research methods and established norms of sampling, data collection, and analysis (Collins et al., 2004). This allows researchers to select and integrate differing methods to address both the needs of the immediate context as well as the requirements of a future intervention.

DBR has increasingly been used in education to address the concern that the current emphasis on controlled interventions fails to account for factors such as the importance of context or the complexity of outcomes (Lagemann & Shulman, 1999). In the US, much of the research has focused on technological interventions. While most have been small-scale investigations of a technological tool, classroom practice, curriculum, or context, both the researchers' extended knowledge of the phenomenon studied and the effect on student learning and motivation have been central (Barab et al., 2007; Wang et al., 2014).

Application of DBR

As stated, design-based research goes beyond designing and assessing interventions; it requires understanding the relationships between (a) theoretical claims about teaching and learning, (b) designed artefacts, and (c) practice, so that research can ultimately contribute to theory. One example is BGuILE (Reiser et al., 2001), a research project supporting inquiry-led learning in biology. By following cycles of design, enactment, and analysis of the relationship between technological inquiry scaffolds and social scaffolds to support scientific discourse, the project led to improvements in the curriculum design that included discipline-specific instruction and tools to support students in scientific investigation. In another study, Hung (2015) used DBR to generate principles for using digital video to support reflective tasks for language learning in multimedia environments. Reflective tasks were iterated in a design process in which different task completion formats and tools were explored. The study reported promising results on

student engagement, performance, and satisfaction through the use of the flipped classroom approach.

In addition, DBR encouraged innovative interventions through the introduction of new theories, unusual learning conditions or less commonly used materials (The Design-Based Research Collective, 2003). One example is the learning environment explored by the Cognition and Technology group at Vanderbilt (Schwartz et al., 1997), which provided learners with opportunities to develop computational skills through real-life scenarios. Successive classroom trials of “anchored instruction” led to a better understanding of how social interactions influence metacognition.

DBR’s processes of continuous design, enactment, and redesign offer possibilities for responding to emergent and unexpected features. For instance, in their study, Edelson & Joseph (2004) used an emerging principle, that students develop competencies in adult-defined learning objectives through engagement in authentic work, to design an interest-based curriculum. This principle was integrated into the curriculum through four different types of authentic activities related to video-making (a common interest shared by the students), which were iterated and refined leading to the development of an interest-driven learning (IDL) framework (Edelson & Joseph, 2004). In another study, Moore, et al. (2018) discuss how an iterative DBR process enabled them to identify and address the misalignment between (a) the design principles they used in relation to systemic functional linguistics (SFL) theories (to support language learning) and (b) their final goals. As these studies illustrate, identifying and dealing with unexpected or emerging issues in the research were possible because of the iterative nature of the designed interventions.

Despite its potential to contribute to both theory and practice, DBR methodologies have been critiqued on a number of fronts, usually with respect to maintaining objectivity, reliability, and validity (Barab and Squire, 2004) (see section on Trustworthiness below). It is very difficult to ensure that researchers are making objective assertions if they are directly involved in conceptualising, designing, implementing, and assessing an intervention. Proponents of the methodology, however, claim that researcher bias is a challenge encountered in many forms of qualitative research, and that insights as well as deep knowledge can add to, as much as detract from, the validity of a study, arguing that, “the researchers themselves (with their biases, insights, and deep understanding of the context) are the best research tool” (Anderson & Shattuck, 2012, p. 18). Furthermore, as in many qualitative methods, it is possible to promote the reliability of findings and assessment measures in DBR using multiple sources and types of data, as well as detailed documentation of the development of the intervention.

While the formation of partnerships between researchers, designers, and practitioners in the research context also contributes to validity (The Design-Based Research Collective, 2003; Hoadley, 2002) maintaining a viable partnership throughout the project can be challenging, as the DBR requirement for multiple cycles of design, enactment, and redesign commits participants to research projects spanning over months or even years, limiting participants in pursuing professional plans and responsibilities of their own. This can act as a deterrent to engaging in the project in the first place or make it more likely that partners drop out in the course of the project. As partners are likely responsible for different components of the inquiry, the intervention can be impacted in different ways.

A final criticism relates to the dual potential of DBR to (a) refine locally significant innovations such as the production of useful products, e.g., educational materials, and (b)

simultaneously develop generalisable and globally usable knowledge and the accompanying scientific insights into how this knowledge can be used in education (The Design-Based Research Collective, 2003). Barab and Squire (2004) suggest that, in an applied field such as education, researchers should aim for specific results by developing tools, programmes, or theories that are generalisable in other contexts and can help education professionals systematically understand how learning occurs. Based on this understanding, design considerations could be used to formulate new research questions or inform the initial design of new interventions. DBR methodology can meet this challenge, according to Barab and Squire, with the generation of flexibly adaptive theories that maintain both robustness and usefulness in new contexts. This can be accomplished through rich descriptions of the guiding and emerging theory and/or design features and/or their impact on participation and learning. It should be noted, therefore, that although DBR can generate knowledge that may be usable in other educational contexts, the importance of the local context and the non-prescriptive nature of results and findings should be taken into consideration when generalising design principles.

DBR Methodology in This Study

The focus of the present study is the design of a pedagogic intervention that targets linguistic development through (a) direct instruction in critical thinking practices, and (b) foregrounding the connections between language and thinking and/or attitude. To support this development, there was a need for implementation, review and refinement of theoretical and practical considerations, which led to DBR. Iteration of this process in cycles over an academic semester allowed me as the teacher/designer and researcher to design, assess, and refine the intervention through systematic collection and analysis of different types of detailed data (Creswell, 2009; McKenney & Reeves, 2013). Systematicity was an important consideration;

due to the fact that I was assuming multiple roles in the study, researcher bias was a considerable concern. DBR offered a process for working with a multiplicity of data sources and collection instruments for triangulating data and for promoting reliability of findings. DBR addressed the need for rigor in academic research and provided a transparent basis for defending my findings.

The intervention in my study, as required by DBR methodologies, evolved over time through three iterations of investigation, development, testing and redesign. However, unlike in most DBR studies where the design is repeated across units or classrooms, my design developed through three cycles repeated within one unit. The focus of my study was to examine the co-development of language and critical thinking. This is done through a design that explores instructional practices supporting this co-development. It was therefore important for these practices to be repeated in the same context but with different objectives and activities in order to explore the effectiveness of the design. Although including three iterations of the design in one academic semester was important in exploring the development in students' language and critical thought, it presented a challenge in managing the analysis of data.

The fact that I was assuming multiple roles in this study also presented a challenge with regards the requirements of the methodology. As already mentioned, DBR assumes partnerships between diverse experts (i.e., teachers, designers, and researchers). This, according to the literature, helps in uncovering relationships between the variables that come into play in classroom contexts and in generating heuristics for enacting innovations in other contexts (Brown & Campione, 1996; McKenney & Reeves, 2013; Robinson, 1998). I, however, am both instructor and researcher in this study. While I don't dispute the benefits of working in a multidisciplinary team, the primary benefit of these collaborations is that they allow for the grounded, situated knowledge of the practitioner and the theoretical knowledge of the academic

to be brought together. In support of the deviation, therefore, relating to my roles as instructor and researcher in this study, I argue that the commitment, rigorous engagement and enthusiasm required in conducting DBR can be achieved when a teacher assumes additional roles (in this study, the roles of designer and researcher) as part of long-term research projects such as a doctoral degree. Such projects – as the narrative describing the development of the design will demonstrate in my analysis chapters – enable teachers such as myself to benefit from valuable insights and deep understanding of an educational context as they develop and refine research and design skills over a period of time, hence meeting the time demands placed by the requirement of multiple iterations. Cobb et al. (2003) argue that the requirement for diverse experts actually varies depending on the type and purpose of the experiment: “For example, it might be feasible for a single researcher who conducts the teaching sessions and a graduate assistant who records the sessions to carry out a one-on-one design experiment” (p. 11). This claim is included in the work of Herrington, et al. (2007), who discuss the temporal dimension of DBR while demonstrating use of this methodology in doctoral studies. PhD programmes, they argue, often don’t engage students in research early on and so fail to adequately prepare them for rigorous scholarly inquiry. DBR is especially valuable in addressing this weakness in disciplines like education that follow an apprenticeship model; its iterative nature is useful for bridging the gap between theoretical understanding and practical applications. Their work also illustrates how phases of DBR can be mapped against the typical requirements of a research proposal and highlights how, in environments such as a tertiary education, partnerships are less critical because experts from various disciplines already co-exist and collaborate. This is one of the reasons why I considered DBR methodology to be appropriate in the specific research study.

In this PhD setting, I bring deep knowledge and understanding of the research environment, as well as the technical competence associated with the academic researcher role. My experience as a teacher in the local context was especially important in the initial stages of the intervention as I am both (a) familiar with learners' general level of competence and expectations and (b) aware of the demands and requirements placed on these learners in the specific academic context. At the same time, I believe my additional role as researcher enables me to distance myself from practice and reflect on the theoretical and practical implications of findings in relation to other contexts; this allows me to develop a design that can meet local needs, while retaining the potential to further knowledge in other educational areas and settings.

For the same reasons, other methods/methodologies would be less appropriate for my project. Action research (AR), for example, is defined as a careful investigation of the effects from a small-scale intervention in the real world (Ebbutt, 1985) or "a form of disciplined inquiry in which a personal attempt is made to understand, improve and reform practice" (Rudduck & Hopkins, 1985, p. 33). AR and DBR are quite similar in that they follow one or more cycles of intervention in which one improves practice by systematically oscillating between taking action in the field of practice and enquiring into it. In that sense, both methodologies involve researchers in evaluating and reflecting on practice, as well as documenting both learning about the practices explored, and the process of studying them. Thus, the two methodologies are also similar in that they are both participatory and undertaken in situ.

However, I am interested in theory generation and innovation to resolve larger educational problems, both of which are beyond the scope of AR. My study is orientated towards generating theory on the co-development of language and critical thinking that may be transferred to other contexts. As such, my study requires a research methodology that not only

addresses a specific local issue, but can also contribute to a body of knowledge outside the research setting. The systematic development and evaluation of the intervention in DBR is a process that allows researchers to distance themselves from practice, reflect on the findings, and generate designs that can be adapted in other contexts. This is the key reason for designing this project using the principles of DBR.

My double role as researcher and designer of the intervention is the second argument supporting my choice of DBR as my methodology. In DBR, researchers take the initiative in the research process as both researchers and designers (Reeves et al., 2005; Wang & Hannafin, 2005). Although I first entered into the study as a researcher, it became apparent early on that I would need to assume the role of designer as well. The need to create, develop and connect a pedagogic/instructional design to the research design in this study was clear in the initial stages of the intervention.

DBR also has much in common with evaluation research. Both are process-oriented, iterative and emphasise the creation of a design. However, DBR goes beyond perfecting a particular artefact, product, or process, and enquires more broadly into the nature of learning in a complex system. The designed intervention and the context are both very important for the success of an innovation (Cobb et al., 2003). Similarly, in my study, unlike in evaluation research, context is conceptualised as an integral part of the intervention, potentially influencing the outcomes leading to improved theoretical accounts of teaching and learning.

Trustworthiness

In a research project where I am concurrently researcher, teacher, and subject, trustworthiness is a critical design criterion. This involves following specific steps to ensure that conclusions are drawn from the data analysis and represent what was studied. In quantitative

research, these steps are associated with the term *validity*, which primarily refers to numerical data, measurements and the adequacy of measures (Lub, 2015, p. 2). In qualitative methodology, similar steps are taken to ensure accuracy of results. These steps are aimed at (a) assessing the objectivity of the participants providing the data (i.e., questionnaires, interviews, reflections), as well as (b) safeguarding the researcher's ability to objectively interpret this data (Cohen et al., 2002). Guba and Lincoln (1981, 1989; Lincoln & Guba, 1985) use trustworthiness as opposed to validity as a criterion to ensure rigour in conducting qualitative studies.

To address the issue of trustworthiness, the present study has drawn upon three of these qualitative steps or procedures (Korstjens & Moser, 2018; Morse, 2015; Shenton, 2004), which have also been proposed as steps in DBR. Namely, documentation of the inquiry process, peer debriefing, and triangulation. First, I created a dynamic *audit trail* in each design iteration so as to document the inquiry process. In this trail, instructional logs, the researcher's journal, as well as participant texts and reflections provided a rich description of the context and events in the developmental stages of implementation and evaluation, as well as the challenges, implications, and conclusions.

As a second way of addressing trustworthiness, I used *peer debriefing* (Lub, 2015). Throughout the inquiry process, I organised a number of short informal meetings with peers during which I shared components of the design (e.g., objectives, teaching activities, materials, etc.) as well as data analysis, and discussed critical issues (e.g., criteria for assessing learner performance in activities, learner engagement with material, etc.). Because of my roles as designer/researcher and teacher, I also used these peer insights as a step towards controlling bias and aiding conceptual development (Morse, 2015).

As a third step in addressing trustworthiness I used triangulation, systematically combining data collected from various sources and through different methods (Cohen et al., 2002; Guba & Lincoln, 1989; Morse, 2015). In the design stage of the study, questionnaires and focus groups with learners and faculty were used as instruments exploring learners' needs, while in the implementation and evaluation stages, the same methods were used to explore learners' perceived development resulting from the intervention. As already mentioned, I also kept a researcher's journal and instructional logs, and collected participants' reflections on specific activities (see section on Data Collection below). Finally, to develop "converging lines of inquiry" (Yin, 2016, p. 87), I triangulated data related to the instructor's and participants' perceptions and evaluations of the design with students' writing activities as a way of capturing and documenting textual indications of the development.

I systematically used these strategies throughout the stages of my study to address trustworthiness and/or bias issues and safeguard the quality of my research. Monitoring trustworthiness through these strategies also allowed me to maintain a balance between my roles as researcher/designer and instructor. By safeguarding the quality of my research and verifying the value of my findings with participants and peers, I was also able to verify the value of my designed intervention and pursue possibilities for generating knowledge transferrable to other contexts.

Research Context

The study is situated in an English for Specific Purposes (ESP) course designed for students in the Department of Communication and the Media at an Eastern Mediterranean university. Though the formal language of instruction at the university is Greek, students are often required to attend lectures by visiting lecturers in English, to read and use material in

English for their courses, and to communicate and collaborate with foreign teachers and students using the English language. At a professional level, a command of English is one of the most common requirements of any local or international employer regardless of their area of expertise.

English language courses offered at the university are designed to cover needs related to students' university studies, future career and personal life. The primary aim of ESP courses is to familiarise learners with the content and skills necessary in their respective fields of study. The design, development, and implementation of ESP curricula are aligned with the Common European Framework of Reference for Languages (CEFR) descriptors. At the university level, the development of Information Communication Technology (ICT) skills is considered important, and so digital literacy constitutes an integral component of all ESP courses.

Depending on the discipline and the instructor's familiarity with information technology (IT) tools, various technologies such as processing tools, collaborative platforms, and/or social media can be used to promote collaboration, integrate the four skills in activities, provide feedback, or facilitate interaction with the instructor and between learners.

English for the Media

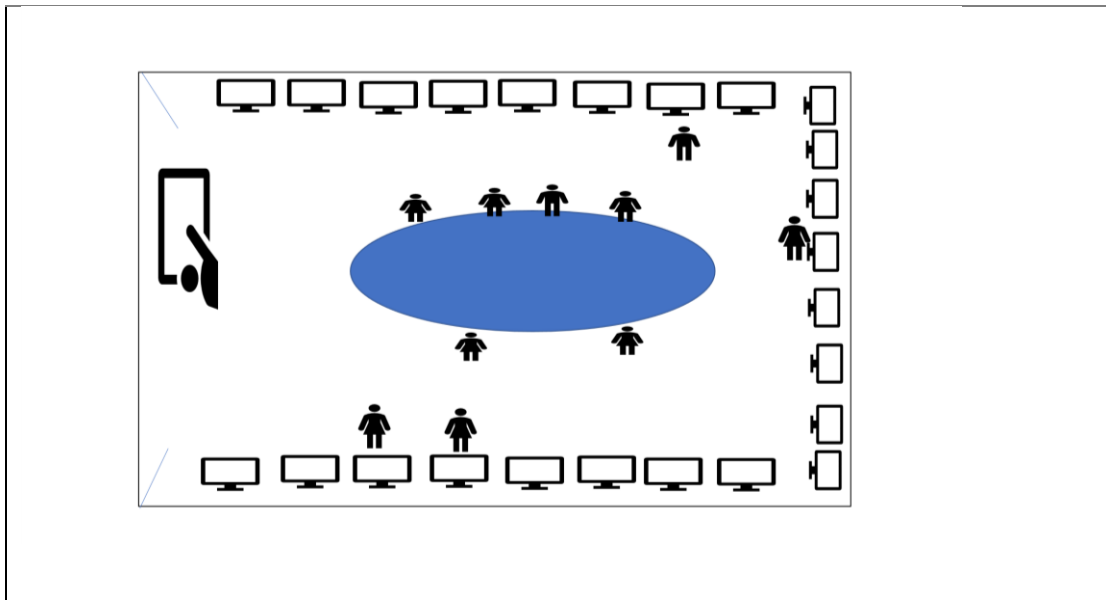
The English course researched in this study, hereafter referred to as English for the Media, is the last in a series of three courses designed to develop students' English language skills equivalent to levels C1-C2, as set out in the CEFR. The course runs annually over one academic semester (13 weeks) from January to May and students are required to attend classes twice a week; these are 1.5 hour-long sessions. Combining face-to-face with online learning, the course aims to expose students to discipline-related content knowledge and to develop their communicative competence for careers in areas such as journalism, web design, advertising, and marketing. Students must produce different types of text, such as correspondence (letters, emails,

etc.), advertisements, news broadcasts, articles, and editorials. Listening and speaking skills are also targeted in activities such as discussions, public speeches, seminars, and oral presentations. Students' assessment is based on a final examination, a mid-term project, classwork and homework, as well as attendance and participation in class. The Moodle learning platform is used for sharing and managing course material and activities, as well as submitting assessed tasks. Social media such as blogs and wikis are used to expose students to online writing and to enhance communication through sharing of information and public commenting.

In class, the students have access to desktop computers. When not using the computer, they sit around a big oval-shaped table, which allows them to move around so as to work in groups or pairs; at the same time, they have a clear view of the instructor, the whiteboard, and the projector screen. In-class activities are completed individually, in pairs or small groups, or by the whole class, depending on the activity taking place. A diagram of the classroom setting is shown in Figure 3.1:

Figure 3.1

The Classroom



The Needs Analysis

In March 2014, a needs analysis (NA) was conducted for the English for Media course, which evaluated the programme in relation to learners' needs, highlighting weaknesses with regards students' linguistic and critical thinking skills. As already mentioned, data collected from the needs analysis included (a) learners' and faculty members' answers to questionnaires and (b) faculty members' suggestions with regards to the results from the questionnaires. The findings from the NA were used to review the theoretical framework and research questions of the study. As the study focus is the evolution of a design fostering the co-development of language and critical thinking, conclusions from this review informed the redesign of the existing syllabus. In this design I included critical thinking and linguistic practices framed by the concept of myside bias. The DBR intervention in this study involved the iteration of the design in three cycles so as to explore its effectiveness towards different objectives, activities, and material (see Chapter 4).

Participants

There were two phases of data collection in this project, one in the needs analysis stage and another in the implementation stage. Table 3.1 below gives a summary of the participants in each stage.

Table 3.1

Participants in the Study

Stage	Participants	Participants' gender (F: Female/M: Male)
Needs Analysis (spring 2014)	45 2 nd year students	26 (F), 19 (M)
	7 faculty members	4 (F), 3 (M)
Implementation (spring 2016)	40 2 nd year students (37 Greek-Cypriots and 3 Erasmus)	22 (F), 18 (M)

Note. Students' English proficiency levels ranged between B1 and C1 (CEFR).

Participants in the Needs Analysis Phase

The 45 Greek-Cypriot 2nd year students who participated in the NA were all native Greek speakers. They had studied English for at least six years over the course of their primary and secondary education and had attended two ESP courses at the university. All were assessed at an upper-intermediate level of English (CEFR B2-C1).

Additionally, fifteen faculty members from the Communication and Media department were invited to complete an online survey and attend a focus group. Seven out of fifteen faculty members agreed to participate. Their teaching experience ranged from four to fifteen years.

Participants in the Implementation Phase

Thirty-seven Greek-Cypriot and three Erasmus students aged 19-21 participated in the implementation stage. One Erasmus student came from Poland and two from Denmark. They attended courses in English for the spring 2016 academic semester based on their specialisations (Journalism, Language, and Media Studies) and English language competence level (B2-C1).

The Greek-Cypriot students had already attended the two prerequisite ESP courses and were assessed as upper-intermediate B2-C1 (CEFR). All students had completed their primary and secondary education in Greek-speaking public schools, where the study of English is required from the age of 7 (2nd year of primary school) until around the age of 17 (6th year of secondary school) for an average of 2-3 hours per week. Ninety percent of the participants reported that they had studied English as a second language in a private institute; the average length of these studies was seven years. Twenty-eight out of forty participants reported that they had taken at least one international exam (e.g., IGCSE, TOEFL).

While a certain level of English language proficiency is expected of all students at the university, their assessed proficiency ranges from higher beginner to higher intermediate (B1-C1). Many are familiar with grammar rules and have a good knowledge of English vocabulary, but are less competent and less comfortable in speaking and writing. This can be partly attributed to their earlier education, which typically focused on achieving high test scores through memorisation of vocabulary and grammar rules, and written translations.

The Instructor

Having designed and taught ESP courses over the last eight years, I am very familiar with content and skills required by disciplines represented in my university, e.g., Engineering, Nursing and Rehabilitation, Shipping and Finance, and Communication and Media Studies.

Throughout my time at the university, I experienced the additional challenges that university students of varying language competence face when engaging with disciplinary discourses. Unlike general English language courses, which I have also taught throughout my 23-year career, the linguistic demands placed on university learners are much more specific and contextualised. In the last eight years of designing and teaching ESP courses at my university, I also experienced the value of understanding and using disciplinary content and literacy practices to support students in dealing with these demands. Among those practices, critical literacy is considered essential. This study originated with my interest in bringing together critical thinking/literacy practices that are key to students' university and professional success, and to do so in a way that simultaneously advanced students' language development.

Research Design

As stated above, to support students' linguistic development through the creation of a pedagogic design that theorises critical thinking as a linguistic practice, this study employed DBR as an overarching framework of inquiry (Anderson & Shattuck, 2012; Barab, 2006; Cobb et al., 2003; Collins et al., 2004; The Design-Based Research Collective, 2003; Hoadley, 2002; Reeves, 2006). The following terms will be used to discuss the research design and analysis. *Stage* refers to a specific phase in the evolution of the design (see Figure 3.2). In this study, Stages 1-4 include analysis (Stage 1), development (Stage 2), implementation (Stage 3), and reflection (Stage 4). In Stage 3, the design is implemented three times. The term *cycle* refers to an iteration of the implemented design (Cycles 1, 2, and 3). *Enactment* is the part of a cycle in which the design is put into practice. Following enactment, the design is assessed through data analysis, and then refined based on both the findings and review of the theory. The student-

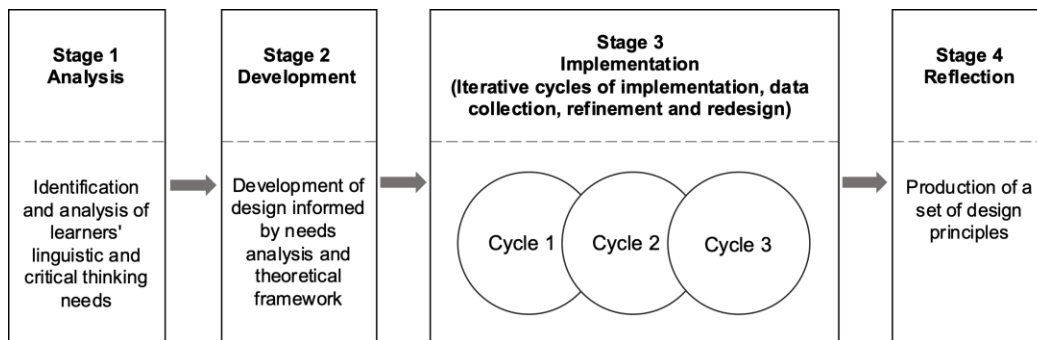
created texts that result from each enactment and are collected as data and analysed so as to evaluate the design's effectiveness are referred to as *artefacts*.

The inquiry in this study, which was completed in four stages was largely influenced by Reeves' (2006) DBR process. It started from the identification and analysis of a problem and it went through the development of a design to address this. In the present study, the design was informed by a problem relating to the need to develop thinking as well as language and the assumption that development of one can further develop the other. The study involved iterative cycles of testing and refinement of the design and finally, reflection to produce design principles.

Thus, to create the research design for the present study, I followed Reeve's (2006) four stages of DBR inquiry as adapted and illustrated in Figure 3.2:

Figure 3.2

Stages in a DBR Inquiry



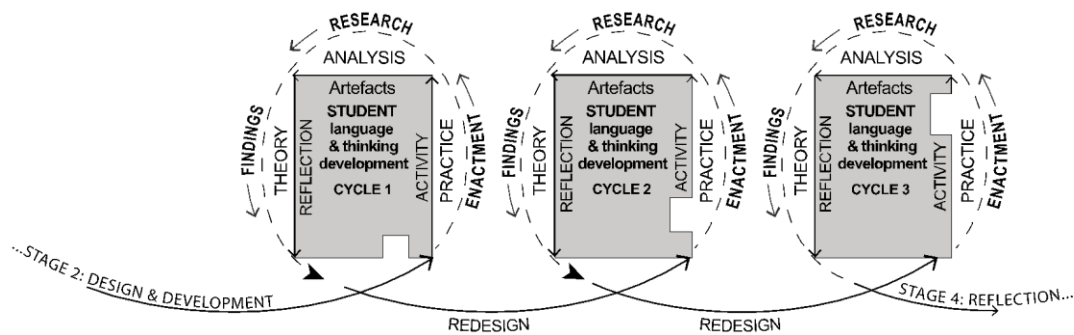
My initial design was also informed by the findings and conclusions drawn from the NA conducted with staff and students. In Stage 1 (Analysis), a review of the literature provided theoretical insights that shaped the understanding of the problem, context, and related issues. In Stage 2 (Development), I developed an initial design for the intervention based on the NA findings and a second, more targeted review of relevant literature. In this, critical thinking and language theories are used to establish the research objectives and guide the design of activities,

materials, and tools to be employed. I also designed the existing programme’s syllabus to systematically incorporate data collection into the cycles of implementation, evaluation, and refinement as advocated by DBR methodology. Following the requirements of this research methodology, the research questions and the affordances of particular methods were the primary determinants in method selection throughout the inquiry (McKenney & Reeves, 2013). Stage 3 (Implementation) included cycles of intervention, evaluation, and refinement of the initial design. Each cycle consisted of an enactment of designed activities, data collection, analysis, a review of the literature in line with the findings, refinement of research objectives, and a redesign. This process was informed by DBR’s requirement to conduct an orientation, literature review, and field-based investigation in parallel, and often even in interaction with one another (McKenney & Reeves, 2013). In Stage 4 (Reflection), I completed the analysis of data and, following Reeve’s (2000) recommendation, I carried out a “reflection to produce design principles and enhance solution implementation” (p. 9).

Figure 3.3 provides a closer view of Stage 3 and the evolution of the design across the three cycles.

Figure 3.3

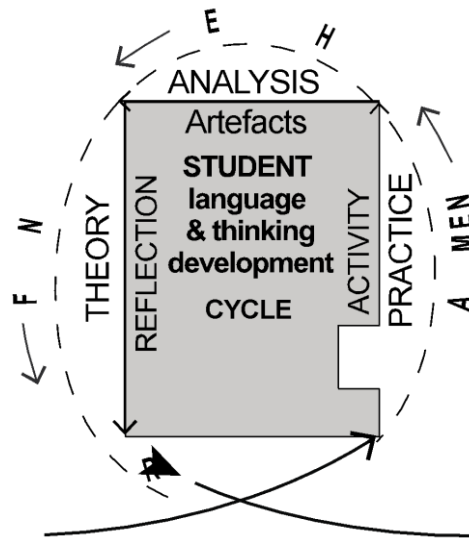
The Evolution of the Design in Cycles in Stage 3 - Implementation



The implementation stage (Stage 3), begins with the design, developed in Stage 2, which is iterated three times, as shown in Figure 3.3. Reading from left to right, the process begins with the first cycle. The design is implemented in the enactment phase, where I used designed activities to engage students with deconstructing and reconstructing language to uncover the connections between specific linguistic resources (nominalisation, passive voice, reported speech, and modality) and myside bias (Stanovich & West, 2007). These activities result in the production of student artefacts. In the research phase of the cycle, I analyse participants' artefacts and other data, and draw on the theory framing the study to review the objectives for the next cycle. In the redesign phase, I use new research objectives to review the planned tasks, materials, and tools and revise as needed. In the centre of each cycle, students' engagement in language and thinking practices moves the design by slightly shifting the orientation of each cycle through new research objectives. That movement of the design – achieved through the exploration of new or additional linguistic resources foregrounded for their relation to thinking and myside bias – is marked by the repositioning of a small cut in the interior of the loop which moves as the cycle carries the design forward. This is illustrated in Figure 3.4.

Figure 3.4

The Linguistic Perspective within Each Cycle



Ethical Consent

My double role as teacher and researcher in this study posed the primary ethical risk. As participants, students are considered “captive” if the research is conducted by researchers who are in status relationships with them e.g., their teachers (Moreno, 1998; Schuklenk, 2000). Captive participants are those individuals who are in dependent relationships with the researcher, which restricts, for example, their ability to consent (Silverman et al., 2001). This imbalance of power is often based on differences in knowledge, skills, and attitudes, as well as students’ desire to attain specific goals that require the assistance of their teachers. As a result, the social context, and more importantly, the researcher/teacher–participant/learner relationship may be vulnerable to abuse (Edwards & Chalmers, 2002; Moreno et al., 1999) and thus needed to be addressed in the research process.

Aiming for ethical consent, I prepared the documents in accordance with the Lancaster University ethics procedure and informed potential participants about the research study and their contribution to it before inviting them to participate. The documents (project description, consent form, questionnaire) were prepared in English and also translated into Greek to make sure that language would not impede participants' understanding of the requirements of the study or their rights as participants. I sent faculty members an email informing them about the focus and aim of the research study, the relevant ethics clearance procedures, their contribution, as well as the data collection requirements. I also informed them about their right to anonymity and their option to abstain or withdraw from the study, which I explained using a consent form they needed to sign and return to me electronically or by internal post prior to participation.

I invited my students to participate in the study at the beginning of the semester. I began by explaining in class that the study would involve them in specific language-learning activities included in the course syllabus that would also serve as data. I also explained that all students would be involved in the same activities and would be assessed using the same criteria regardless of their decision to participate in research. I went through the course syllabus to explain the type of activities they would be involved in as well as the assessment goals they would have to achieve. I knew that if students had clear and detailed descriptions of tasks, they would see that their academic assessment would not be impacted by research participation, thus they would feel more confident in deciding to abstain or withdraw from the study. As a second strategy, I talked to students about the benefits of the research study, for myself as the researcher, as well as them as the potential participants. I also reassured them that in the interest of obtaining trustworthy data in support of improving teaching and learning practices, I would value their truthful and objective input, even if it was negative towards teaching methods and approaches, activities,

materials and tools, or myself as the instructor and creator of the design. Based on the positive experience of teaching these students in the previous semester and the relationship established, I felt the students would have no reason to mistrust me.

Going further to ensure students would not feel unduly pressured to participate in the study, I provided two references, a student and a colleague (another instructor at the language centre), they could talk to if they wanted to discuss anything bothering them before or during the research process. Thus, participants could have anonymous discussions with these two individuals and I would see how the reported issues could be resolved.

In addition, I explained to the learners that I would safeguard their rights as participants by keeping the data collected confidential and maintain full participant anonymity upon publication of the study. Finally, I reassured students that confidentiality and their right to abstain or withdraw at any time would be safeguarded at all stages of the research. I provided this information in both Greek and English to ensure that language would not in any way impede learners' understanding.

Finally, I followed institutional panel reviews in which my research was scrutinised by impartial and more experienced individuals, thus ensuring that my research design adhered to established participant protection procedures. Before a study begins, it is important for students to be reassured that individuals outside the research project have identified and addressed potential conflicts of interest, with students' best interests in mind (Ferguson et al., 2004). To that end, I followed the ethics procedures required by both my institution and Lancaster University, at two different stages of the study: the NA (spring 2014) and the implementation/evaluation phase (spring 2016). After research descriptions and ethical considerations of the procedures pertaining to data collection, analysis, and research

dissemination were explained and provided in writing, all learners in the class consented by way of signing a consent form. I reminded students of their rights as research participants at different points throughout the study.

Data Collection

The needs analysis phase identified and explored student needs in relation to their present (academic) and target (professional) context. The implementation phase explored the development of students' linguistic and critical thinking which was assessed using (a) their perceptions of the design and (b) their performance in designed activities. I also drew on my own observations and reflections on the designed intervention as it unfolded in the classroom. A summary of the instruments used and the data collected in the two stages of the inquiry are shown in Table 3.2.

Table 3.2*Data Collection Instruments*

Research stage	Instrument	Number	Purpose
Needs analysis	Student questionnaire	36	To identify learners' self-assessed linguistic/critical thinking skills
	Faculty questionnaire	10	To identify participants' perceptions on learners' linguistic/critical thinking skills
	Focus group	1 group (7 participants)	To discuss findings from needs analysis
Implementation	Student artefacts	8 activities	To assess learners' use of targeted forms
	1. Three sentence-level activities	65	
	2. Three short answer activities	50	
	3. Two student writing activities	42	
	Student questionnaires	40	To assess design components
	Student written reflections	169 (for 7 activities)	To identify learners' perceptions of their English language development before and after the design implementation
	Focus groups	8 groups (2-3 participants)	To evaluate the intervention
Researcher's journal	Journal entries	To record and document important observations	

Research stage	Instrument	Number	Purpose
		Oct 2013-May 2016	and reflections on the evolution of the design
	Instructional logs	9 logs (3 cycles x 3 lessons)	To record students' reactions to activities, materials, tools etc.

Questionnaires

As indicated in Table 3.2, questionnaires were used in the NA and implementation stages of the study. For the NA, I used questionnaires to explore students' and faculty members' perceptions on the most important linguistic and critical thinking skills in the areas of communication and the media. The questionnaires were also used by participants to assess learners' competence in these skills (for the students' NA questionnaire, see Appendix A). In the implementation stage, students completed another questionnaire in which they assessed their competence in different linguistic and critical thinking skills. The questionnaire was administered before and after the intervention to explore learners' self-perceptions of their development (Appendix B).

Following Bryman (2016), the questionnaires complemented other instruments in answering the research questions guiding the study. Questionnaires are generally valuable data sources because they are efficient in terms of researcher time, effort, and financial resources, but they also have drawbacks, such as the simplicity of answers yielded, unmotivated or unreliable respondents, respondent self-deception and literacy, and fatigue in filling in long questionnaires (Dörnyei & Taguchi, 2009). As the questionnaire was not suitable as a primary source of data for

answering my research questions, it served as a means of triangulation, rather than a basis for generalisation.

In the NA phase of data collection, I administered questionnaires, to 36 second-year students and 10 academic staff in the department of Communication and the Media. The students completed the questionnaire (Appendix A) during class time, which ensured a faster and better response rate (Cohen et al., 2002). As all participants were Greek-Cypriot, the questionnaire was in Greek. Students rated (a) the importance of needs related to linguistic and critical thinking requirements in all four skills (listening, speaking, writing, reading) and (b) their proficiency in these skills. I mostly used closed (Likert scale) questions to combine measurement with opinion (Cohen et al., 2002; Landrum & Garza, 2015) but also included open-ended questions to provide respondents with the options of adding, explaining or qualifying responses to the closed questions.

The faculty questionnaire was similarly designed to identify the most important linguistic and critical thinking skills for learners in the Media department, but was administered using SurveyMonkey (surveymonkey.com). I opted to administer this task online, as it was more convenient and time-efficient. Additionally, faculty members did not need the same level of support students did in completing the questionnaire. Most questions were rank ordering, requiring the respondents to identify between priorities. This type of multiple-choice question, was preferred to uncover participants' preferences and priorities, while simultaneously maintaining the focus of the options relevant to the research (Cohen et al., 2002). Open prompts provided faculty with the opportunity to make additional comments. Based on the respondents' academic and professional experience, there was no need for a Greek translation, and so the survey was administered in English.

The questionnaire administered to students in the implementation phase (Appendix B) contained eight Likert-scale questions that asked students to assess of how frequently and effectively they were able to perform specific skills. The questionnaire also included questions about students' prior English language learning experiences. This questionnaire was in Greek for the same reasons as the students' NA questionnaire.

Semi-structured Focus Group (Academics and Students)

As indicated in Table 3.2, a focus group with seven faculty members was conducted in the NA stage. Participants discussed (a) the results of the student NA questionnaire and faculty online survey and (b) the design of a new language module. Focus groups were used for their potential to “develop unique emergent meanings through the ‘synergy’ of group interaction” (Rabiee, 2004, p. 656), but also because they provide a more natural context for discussion than an individual interview (Litosseliti, 2007, p. 2). Before we began, I reminded participants of the objectives of the study and gave them a report summarising the questionnaire results. Pre-determined general questions were supplemented with prompts for more detail. The protocol assisted me in moderating the discussion (Yin, 2016). Although I had originally planned to conduct the discussion in English, there were some instances of switching between Greek and English as all the participants were native speakers of Greek. I encouraged participants to express themselves freely as I wanted different views and suggestions to be heard (Bryman, 2016). The focus group was recorded and transcribed.

The eight focus groups conducted with students at the end of the implementation stage were held in Greek for the same reasons. These were an opportunity to evaluate the intervention, including its design, activities, and materials. Before starting, I reminded students of the objectives of the study and their contribution therein. I also explained the purpose of the focus

groups in addressing the objectives. To guide the discussion, I prepared and projected PowerPoint slides of the questions (see Appendix C); these were designed to frame and facilitate, rather than direct and/or confine the discussion. Participants were given a certain amount of control over the discussion, and use of Greek encouraged students to more confidently exchange views and comment on each other's answers to questions. The focus group with the three Erasmus students was held separately and was conducted in English. All focus groups were recorded and transcribed.

Researcher's Journal

Even before the beginning of my research, I used a journal to record teaching ideas, reflections, and decisions on activities that could impact learners' development. Once the research project formally began, this process became more systematic and I established a routine for recording more detailed notes related to the design, activities, materials, tools, and participants at least twice a week before and after every lesson. I also reviewed my journal every two or three days to make sure missed details were recorded while events were still fresh in my mind, as well as to reflect on these entries. My notes were often refined to include theoretical and methodological considerations, first impressions of meeting my students, and reflections on activities. As the study progressed, the researcher's diary evolved into a record of practical applications of the theory in classroom activities, commentary on participants' reactions with regards components of the design, conclusions drawn from data analysis, as well as reflections on how these conclusions could improve theory and practice. It also served as a tool for reflexivity, providing a site for me to reflect on how my experience might be shaping my findings, conclusions, and interpretations (Creswell, 2012). To capture these developments, I organised my journal (see Appendix D for a sample page) in two sections: a "description"

column, which included an account of anything important that happened and a “reflection” column, where I recorded my thoughts about these events. In completing my journal, I kept in mind Stake’s counsel that “all researchers have great privilege and obligation: the privilege to pay attention and the obligation to make conclusions drawn from those choices meaningful to colleagues and clients” (1995, p. 49).

In the second phase of the study, as I followed DBR requirements for systematic iteration, investigation, and refinement of an intervention, I used the journal as a detailed record of the theoretical and practical considerations guiding the evolution of the research design. The journal also served as a point of reference between cycles to reveal personal and methodological tendencies, concerns, or unwanted biases about ongoing fieldwork (Yin, 2016).

Instructional Logs

To ensure I had an accurate and detailed description of the designed activities, the journal was accompanied by instructional logs where descriptions of the activities, objectives, instructions, resources, students’ reactions, etc. were systematically recorded during and right after each lesson. A sample instructional log can be found in Appendix E.

As researcher and instructor, I found the task of documenting processes particularly challenging given I had decided against audio or video recording classroom activities. The decision had been informed by literature on the requirement for researchers to find “the balance between the complications and the added value” (Yin, 2016, p. 179). At the time, I thought that recording classroom activities would affect students’ attitude towards the research study, their behaviour in activities, and even their decision to participate. On reflection, however, I believe the risk was not as significant as initially thought.

Nonetheless, the instructional logs provided effective documentation of the development of the design. They served as a record of students' behaviour in the classroom, as well as their reactions to activities, materials, tools, etc. Student data and my journal complemented the logs, allowing for reflection on classroom practices and generation of new ideas and/or modifications to elements of the design. Finally, both logs and my journal helped me identify and revise emerging themes and categories in the data and connect these to the research questions.

Student Reflections

Students periodically wrote reflections that included evaluations of the design i.e., teaching activities, materials, tools and resources. I also encouraged students to comment on whether and how they thought the design of the activities could affect their language development. The exercise made them think critically about how to improve their learning; this served a pedagogical purpose in addition to the primary purpose of data collection. Furthermore, comparing their feedback to my own reflections and observations was very useful in identifying and confirming problematic areas, reviewing practice in relation to theory, and redesigning activities. I encouraged students to write their reflections in Greek to better express themselves and to submit them anonymously by placing them on a tray I kept for this purpose in class. While having to translate student reflections was time-consuming, I was confident that giving them the opportunity to anonymously critique their language learning experience in their mother tongue would allow them to bring to the fore issues that they might have felt intimidated to discuss otherwise.

Student Artefacts

I collected student classwork, homework and longer writing assignments during or after specific designed activities throughout the study. These artefacts were used to assess the

effectiveness of the activities and classroom practices in addressing the objectives set for each cycle. For example, I analysed students' responses to a text to identify and examine their use of targeted forms included in instructional practices. Finally, analysis of artefacts helped me confirm conclusions drawn from other data sources, students' reflections and my own observations on different components of the design i.e., activities, materials, resources, etc.

Data Analysis

I used different analysis methods depending on the type of data collected and its purpose in informing and refining elements of the design. Data analysis was practiced throughout the four stages of the study.

Stages 1 and 2 - Analysis and Development

Questionnaires. In Stage 1, I entered students' answers to the needs analysis questionnaire in Microsoft Excel and calculated the percentages in their responses. For the faculty member questionnaire, SurveyMonkey provided numerical (percentages) and graphical representations of the results. The results related to (a) the importance of learner skills and (b) learner competence in these skills.

Focus Group. The staff focus group was transcribed and summarised and a report was sent to all the participants for feedback. After that, I manually coded the data. The coding process involved identifying an important idea or issue and assigning a code to it, prior to interpretation (Boyatzis, 1998). I analysed using descriptive codes, which produced the data's basic topics and provided an index of the data's contents for further analysis and interpretation (Miles et al., 2014; Saldaña, 2013). This process was completed in the following steps:

1. I studied the data thoroughly to identify parts that related to or addressed my research (research questions, conceptual framework, key concepts, problem areas, and solutions to problems).
2. I categorised or labelled these parts with codes. In this process, consecutive sentences that constructed the same meaning were taken as one text unit and coded into a single code. Simultaneous coding was applied (coding text in more than one code) to capture critical data perspectives (Saldaña, 2013).

I grouped similar codes and discarded redundant ones to narrow down the themes i.e., codes that participants discussed most frequently.

Researcher's Journal. Data was analysed through NVivo qualitative data analysis software throughout the intervention. I decided to use NVivo to code the researcher's journal, because my intention was to qualitatively analyse and synthesise data from multiple sources with regards the implementation and evaluation of the design. This was part of a thematic analysis aimed at (a) examining the perspectives of different research participants on the effectiveness of the design, (b) highlighting unanticipated insights, and (c) generating answers to the research questions (Bryman, 2016; King, 2004). Data was used – as with the focus groups – to identify, analyse, organise, describe, and report recurring themes (Braun & Clarke, 2006). The emerging codes were recorded as new or existing themes (nodes). When NVivo coding was completed, I printed out a list so as to review and collapse all the codes again into themes. I then examined emerging patterns of themes and aligned these with theoretical concepts framing the study to generate principles informing the development of the initial design.

Stage 3 - Implementation and Evaluation

Every cycle in this stage included an enactment phase followed by a research and a refinement phase (see Figure 3.2). During implementation, the focus was on enacting the design and collecting data. Analysis of data formed part of this stage, albeit in a limited capacity. The end of each cycle was a time for reflection and evaluation (McKenney & Reeves, 2013).

Researcher's Journal. I coded the researcher's journal with the use of NVivo (see section on focus group analysis) at the end of each cycle. This process enabled me to review the observations and reflections I made on the different aspects of the intervention in relation to the theory framing the study before and throughout the enactment of the design. It also allowed me to identify strengths and weaknesses of the design that were not possible to anticipate prior to implementation.

Instructional Logs. During implementation, I coded instructional logs when there was time available and especially when I considered that specific components of the design such as activities or material needed immediate review and refinement. At the end of each cycle, I re-read and coded all the entries in NVivo. At this point, I could distance myself from the instructional experience and identify issues or challenges that I had not been in a position to notice during the enactment phase. The instructional logs provided detailed descriptions of activity progress, challenges and student reactions to these.

Student Reflections. Although I could not code reflections during a cycle due to time constraints, I looked at some of these to check students' perspectives on the design, to identify possible challenges or benefits, and to get insight into their perceived development. This information helped me make decisions about the design. In-depth reading and coding of student reflections took place in the evaluation phase of each cycle. This process provided me with an

additional intervention angle, one that facilitated the process of recording and evaluating areas that I needed to revisit and review in light of the theory, and thus be able to refine.

Student Artefacts. In every cycle, I analysed student artefacts (see Table 3.2) to evaluate the effectiveness of the design (teaching practices, activities, materials) towards the cycle's objectives. In the enactment phase of a cycle, even small-scale analysis of students' work helped me maintain a researcher's view and make last-minute adjustments to activities, materials, and tools. For example, new or additional material (such as headlines, news reports, or articles) were incorporated into the design. In this process, I could re-examine my preliminary analysis to make decisions on the refinement of activities, classroom practices, and material to be used within the cycle. In the evaluation phase at the end of each cycle, I analysed resulting student artefacts to explore how students had used and discussed the targeted linguistic resources. The steps taken in the systematic analysis of student artefacts in the three cycles are shown in Table 3.3.

Table 3.3*Steps in the Analysis of Student Artefacts*

Cycle	Student artefacts	Steps in analysis
1/2/3	Sentence level activities	<ol style="list-style-type: none"> 1. Colour-coded all references to TR^a 2. Counted successful/unsuccessful attempts in identifying the TR 3. Examined students' reconstructions to check if they had followed the patterns/resources provided in instruction 4. Identified and classified references to the functions of the TR as discussed in the design 5. Assessed whether the identified function matched the actual function in the sentence
1/2/3	Short answer activities	<ol style="list-style-type: none"> 1. Colour-coded all references to TR 2. Examined students' reconstructions to check if they had followed the patterns/resources provided in instruction 3. Counted successful/unsuccessful attempts in reconstructing with the use of TR 4. Identified and classified students' justifications of the functions of TR as discussed in the design 5. Assessed whether the justification of function matched the actual function in the text
2/3	Student writing activities	<p><i>Transitivity analysis</i></p> <p><i>Phase 1</i></p> <ol style="list-style-type: none"> 1. Marked clause boundaries between clause complexes following SFL conventions 2. Marked the three constituent elements in a transitivity analysis (participant, process, circumstance) 3. Sub-categorized constituent elements into types <p><i>Phase 2</i></p> <ol style="list-style-type: none"> 1. Colour coded instances of TR 2. Examined students' choices in TR to check if they had followed the patterns/resources used in instruction 3. Counted successful/unsuccessful attempts in using TR

Cycle	Student artefacts	Steps in analysis
		4. Assessed students' ability to use TR in their texts as discussed in the design
		<i>Modality analysis</i>
		1. Marked the three constituent elements in modality analysis (Subject, Finite, Residue)
		2. Classified constituents into modal verbs used as finites, mood adjuncts of modality and metaphorical realisations of modality (Halliday, 1994)
		3. Sub-categorised modality types into explicit or implicit, and objective or subjective (Halliday, 1994)
		4. Examined students' choices of modality expressions to check if they had followed the patterns/resources used in instruction
		5. Assessed students' ability to use modality expressions in texts as discussed in the design

^a TR = targeted resources.

Sentence level activities were used in the beginning of all cycles. At this point of the implementation stage, this type of activity was designed to engage students with the practices and resources used in instruction. These included practices for identifying targeted resources (TR) and then reconstructing sentences to discuss their functions. The steps outlined in Table 3.3 provided the levels of analysis required to evaluate the design with regards its effectiveness in developing students' ability to identify TR and justify their functions as discussed in instruction.

In Cycle 1, for example, I looked at students' choice of a new subject in relation to their explanation of why/how the author had used nominalisation or passive voice or the function they thought the linguistic resource was serving in the original headline, as illustrated in Table 3.4.

Table 3.4

Sample Headline Reconstruction and Commenting

Original headline: Same-sex couples should be protected from discrimination.

<p>Student 1 reconstruction: <i>The government <u>should protect</u> same-sex couples from discrimination.</i></p>	<p>Student 2 reconstruction: <i>People <u>should protect</u> same sex couples from discrimination</i></p>
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<p>Choice of function: To avoid expressing judgement.</p>	<p>Choice of function: To avoid giving specific information so as to allow for multiple interpretations of an event.</p>
--	---

I followed similar steps in analysing short answer activities in all cycles as shown in Table 3.3. In this type of activity, which involved students in critical analysis of longer texts, it was important to assess first students' ability to reconstruct text following the patterns used in instruction. The analysis steps I followed allowed me to also evaluate students' ability to reconstruct text using TR and discuss their functions as included in the design.

In the last two cycles, I analysed students' writing, using the transitivity and modality systems in SFL. In this type of activity, it was important to assess students' ability to make the connections between a position communicated and targeted linguistic resources. To explore these connections, the transitivity system allowed me to look at (a) the types of clause constituents (participants, processes, circumstances) students had chosen, and (b) targeted resources within the context of being clause constituents.

According to this system, different types of processes (and associated participants) construe a specific type of experience (Bloor & Bloor, 2013; Halliday, 1985). In the writing

activities, students were required to synthesise information in support of an opinion. I therefore examined students' choices of process and the associated role assigned to participants to identify the position students communicated towards the events or happenings described in their texts. Specifically, the steps I followed in Phase 1 of the transitivity analysis (Table 3.3), allowed me to consider what types of participants were allowed or excluded, and what these participants were represented doing, saying, feeling, and so on about events and happenings under certain circumstances. This was important to identify the position students were communicating in relation to these happenings. Once I confirmed there was a clear position, I went back to the data in Phase 2 of the transitivity analysis and looked at the ways students had used nominalisation, passive voice, and reported speech, based on their functions as discussed in the design, to communicate that position.

Student writing activities were also analysed for modality as this was one of the targeted resources in the last two cycles. I used the interpersonal metafunction and the system of modality, as shown in Table 3.3, firstly to classify modality expressions in terms of the degree of possibility or obligation associated with information synthesised in students' writing. I then used these classifications to make assessments of how students had used modality to strengthen or weaken the position communicated. These steps allowed me to evaluate the designs' effectiveness in developing students' ability to use expressions of modality based on their functions as these were included in instruction.

At the end of each cycle, I did as much analysis as time allowed, because it was important to combine conclusions related to students' performance in designed tasks with data from other sources to make decisions informing the design of the next cycle. Throughout this

process, data analysis highlighted emerging issues which were woven into the new objectives, teaching practices (tasks, materials and tools) as well as data collection and analysis procedures.

Stage 4 - Reflection

While reflection was an important component throughout the intervention, the final stage of the study required reflecting on what came together in both research and development in a more active and holistic way, so as to produce new theoretical understanding (McKenney & Reeves, 2013). This was the stage in which I completed the analysis of data collected after the implementation of the design (student focus groups and questionnaires) and synthesised analysis of all data. Because of my double role as researcher and instructor in this study, this was particularly important as the reflection stage allowed me to step away from personal views and feelings and review my research and design through reasoning. According to Reymen and Hammer (2002), reasoning is as essential for research and design as inspiration and emotion.

Focus Groups. I coded data from the student focus groups and merged the codes in NVivo using the same process as I did with other datasets. When the last round of coding was completed, I read the dataset thoroughly one more time and made refinements to existing codes or created new codes. A coding protocol with themes, subthemes and examples from the data is included in Appendix G.

Throughout this process, new insights and ideas emerging from the data were reported as memos and linked to text from the dataset within NVivo to ensure that the theoretical ideas that had emerged could be systematically evidenced and explained by the data (Hutchison et al., 2010). The writing and linking of text with codes and memos identified the parameters of each group of data through which relationships were explored and hypotheses were generated (Bazeley & Richards, 2000; Birks et al., 2008). I reviewed and reconsidered text linked with

codes/memos in relation to the themes as a way to achieve more integration among the data (Miles et al., 2014). I printed out the list of all themes and codes, and attached texts so as to review and collapse all the codes one last time and generate the final list of themes. In this way, a dynamic audit trail was created through NVivo's built-in tools for recording and connecting data from various sources so as to meet the criterion of transparency and enhance confidence in the findings (Bringer et al., 2004). For example, I used the queries function in NVivo to question specific parts of the data. Simultaneous coding (text coded to more than one theme) allowed me to identify concepts and relationships between the categories (Corbin & Strauss, 2008).

Questionnaires. In this stage, I used the same steps as in the needs analysis stage to analyse students' answers in the questionnaire I administered before and after implementation of the design. To do this, I entered the data in Microsoft Excel and calculated the percentages in students' responses. I then used the function provided in Excel to create tables and figures representing the results. The system provided me with (a) bar charts relating to demographic data and (b) tables representing data from students' evaluation of targeted skills before and after the intervention. Finally, I studied the figures to identify differences between the pre- and post-test results. I used the results from the analysis of the questionnaires to triangulate findings from other data sources with regards student's perceptions on the effectiveness of the design.

In this final stage of the study, reflections on findings from the analysis of data sources as a whole allowed me to revisit the theoretical framework of the study. In light of the findings, I went back to critical thinking theories and considered how the designed intervention, framed by the concept of myside bias and supported by SFL and critical pedagogy, developed both students' thinking and their language through an understanding of the connections between biased thinking and the resources targeted by the design. The overall objective of analysis in the

reflection stage was to summarise and interpret findings from all data sources to ensure that the study's research questions are answered. Using the findings to revisit the research questions in the last stage enabled me to reflect on how the design – through critical thinking practices of identifying, reconstructing, and critically discussing targeted resources for their relation to expressing opinion – targeted language growth and promoted critical thinking at the same time. In this process, I was also able to construct the arguments and to generate conclusions in the form of design principles as advocated by DBR, so as to answer the research questions investigated (Anderson & Shattuck, 2012; Barab & Squire, 2004).

Chapter 4: Needs Analysis and Intervention Design

Initial Thoughts

When I started teaching at a university, I realised that learners who had spent a considerable number of years studying English were unhappy with the university requirement that they attend specialised English language courses for at least one year. It was even more surprising to me that this negative attitude appeared to be strongly related to feelings of inadequacy rooted mainly in learners' previous language learning experiences. They had been passive receivers of knowledge, schooled through repetition and drill, and as a result often shied away from actual language use. I observed that, despite their good level of knowledge in English grammar and vocabulary, when asked to use language for meaningful communication, learners performed at an unexpectedly low level.

Although I initially felt that my use of communicative methods and the application of constructivist – rather than behaviourist – perspectives in teaching would alter learners' negative attitude, as the years went by, and as I taught in different departments, I continued to encounter the same attitude towards English language learning. My observations were confirmed by colleagues with the same or similar experiences. At the same time, I observed that while the ESP context increased learners' acknowledgement of the importance of the English language in their academic and professional development, it also contributed to their feelings of inadequacy and insecurity, as the ESP context gave them a clearer indication of the language demands set by their discipline.

When I started this study, my intentions were to activate students' existing knowledge as well as to engage them, through their ESP courses, in the development of new and more significant knowledge and skills. Taking advantage of the university's digital environment, I

decided to explore digital technologies in my teaching practices. I read literature on the role that digital could play in creating a favourable attitude towards language learning and thought about transforming activities to simulate real-life tasks. This was when I started exploring the term *digital literacy*, especially within the context of the English for the Media course I was teaching at the time.

Examining the skills learners would need to develop, I came to realise that perhaps technology was not where I needed to focus. It was rather the term *literacy* that seemed to encompass the essence of what was required in enabling learner development. Exploring literacy as defined by Luke (2012), I concluded that, for media learners, the challenge was to develop their understanding of cultural practices, social institutions and power relations portrayed through texts and discourses. I also realised that technology would merely be a tool in the hands of learners, and part of their development would require guiding them to use technology in the construction and presentation of information. A renewed vision of literacies shaped the focus of my research and guided me towards the concept of *critical literacy* (CL) and more specifically, *critical media literacy* (CML).

It soon became evident that developing CML involved raising learner awareness of the different messages transmitted through the media in various forms of representation and interaction (Kellner & Share, 2007). Moreover, I saw the need to enhance media learners' ability to elaborate on their own textual interpretations, while critically engaging with each other's perspectives.

The English for the Media course provided an ideal context to nurture this development through critical engagement with media texts. Technology and its affordances could support learners in critically engaging with content, particularly to draw learners' attention to texts'

multimodality and the ways information is presented to communicate meaning. I concluded that critical engagement with multimodal texts related to learners' interests could be the way to develop their language. To this end, I started to consider the tools, resources, and opportunities necessary for activating and displaying such a critical stance in the language classroom. This is when critical thinking (CT) became the focus of my research.

Through a review of the literature (see Chapter 2), I concluded that challenges faced by language educators with regards to CT were part of a bigger issue relating to an individual's disposition to think critically. Unlike other skills, CT cannot be directly taught (Facione, 1990), but it can be cultivated through practices of thinking scaffolded by educators through an appropriation of teaching practices in specific domains. These realisations reinforced my initial assumption that identifying and enabling learners' specific needs in CT and CML would help me develop a more accurate view of their language needs.

I continued to read on CT, which brought me to the concept of *myside bias*. Myside bias, as already discussed in the literature review, is the tendency to evaluate, generate evidence, and test hypotheses in a manner biased towards one's own opinions (Macpherson & Stanovich, 2007; Toplak & Stanovich, 2003). While the role such a concept could play in exploring CT as a linguistic practice was not immediately evident, I knew that the dispositions that were described as the very essence of avoiding myside bias were very similar to the propensities considered essential for media students. Furthermore, I was already familiar with stereotyping, or the expression of unjustified views and invalid information, as a common phenomenon in the media. I was confident learners would be able to recognise and analyse expressions of bias, especially if I used topics that genuinely interested them. Prior research (see Chapter 2) has indicated that the avoidance of myside bias is a result of practice (Stanovich, 2011) and also positively correlated

to a facilitating environment (Stanovich & West, 2007), which further highlighted the potential contribution of myside bias in developing CT in the language classroom. If avoidance of myside bias is a result of practice, then learning the language required to avoid myside bias should develop from practice as well. On a theoretical level, this important consideration allowed me to reflect on the ways in which using myside bias to frame the design of activities could benefit language instruction and language learners in general. It became clear to me that if I taught language to develop CT, including the avoidance of myside bias, in a meaningful and facilitating environment, I would be supporting language development as well.

Thus, by apprenticing my students to use language as a tool for identifying and avoiding myside bias, I might make a difference in the way they perceive language learning. This was when theories of language as a social-semiotic became relevant, as I started to see the potential of such specialised practices of critical engagement in developing learners' understanding of the potential of language. Such an engagement could transform the language learning experience by shifting learners' attention from practices of language as the purpose, to practices of language as the way. I realised that engaging learners through activities foregrounding communication and negotiation of personal opinion as the objective, while highlighting language as an essential resource in achieving this objective, could make an impact on how learners perceived language.

To design these activities, I still needed to be clear about the thinking dispositions I wanted my students to develop, as well as the language that would support them in cultivating these. I considered different media sources and reflected on the practices of individuals in the media and then I considered these practices in relation to the language required for performing them. This enabled me to visualise how understanding the concept of myside bias would help learners identify and discuss their own opinions. I anticipated that learners would also realise the

value of such practices, especially if they became aware, as I did, of the existence of myside bias and its manifestations as an integral part of the culture sustained by the media. In raising such awareness, I would be guiding learners to reflect on the reasons for the expression of bias, such as the influence of hidden agendas or propaganda facilitated by the presentation of misleading information, or even through the manipulation of people's words to serve specific purposes. This is how I was able to visualise the potential of CT and specifically practices of bias avoidance in creating opportunities for meaningful engagement with language. Re-introducing language as a tool in this critical engagement would not only help create a sense of achievement for the learners, but also enhance the development of language.

Why Conduct a Needs Analysis?

To create a design that would target the development of language through practices of CT, I had to acquire a better understanding of the critical thinking and language needs of my media students. Conducting a needs analysis (NA), otherwise known as “the systematic collection and analysis of information necessary for defining and validating a defensible curriculum” (Brown, 2016, p. 4), has long been a mainstay in curriculum development. NA has primarily been used to evaluate programmes in relation to learners' critical thinking and linguistic needs. Identifying these needs, as well as possible challenges in addressing them, thus provides important insights for the design. As discussed in Chapter 3, the NA used in this research involved learners and faculty members from the media department of my university. Learners were asked how often they were required to engage in specific activities in four skills (target situation needs), as well as an evaluation of their performance in these activities (present situation needs); in parallel, faculty members were queried on the importance of the same critical

thinking and language skills, as well as their suggestions on how the new course could develop these, were also targeted by NA.

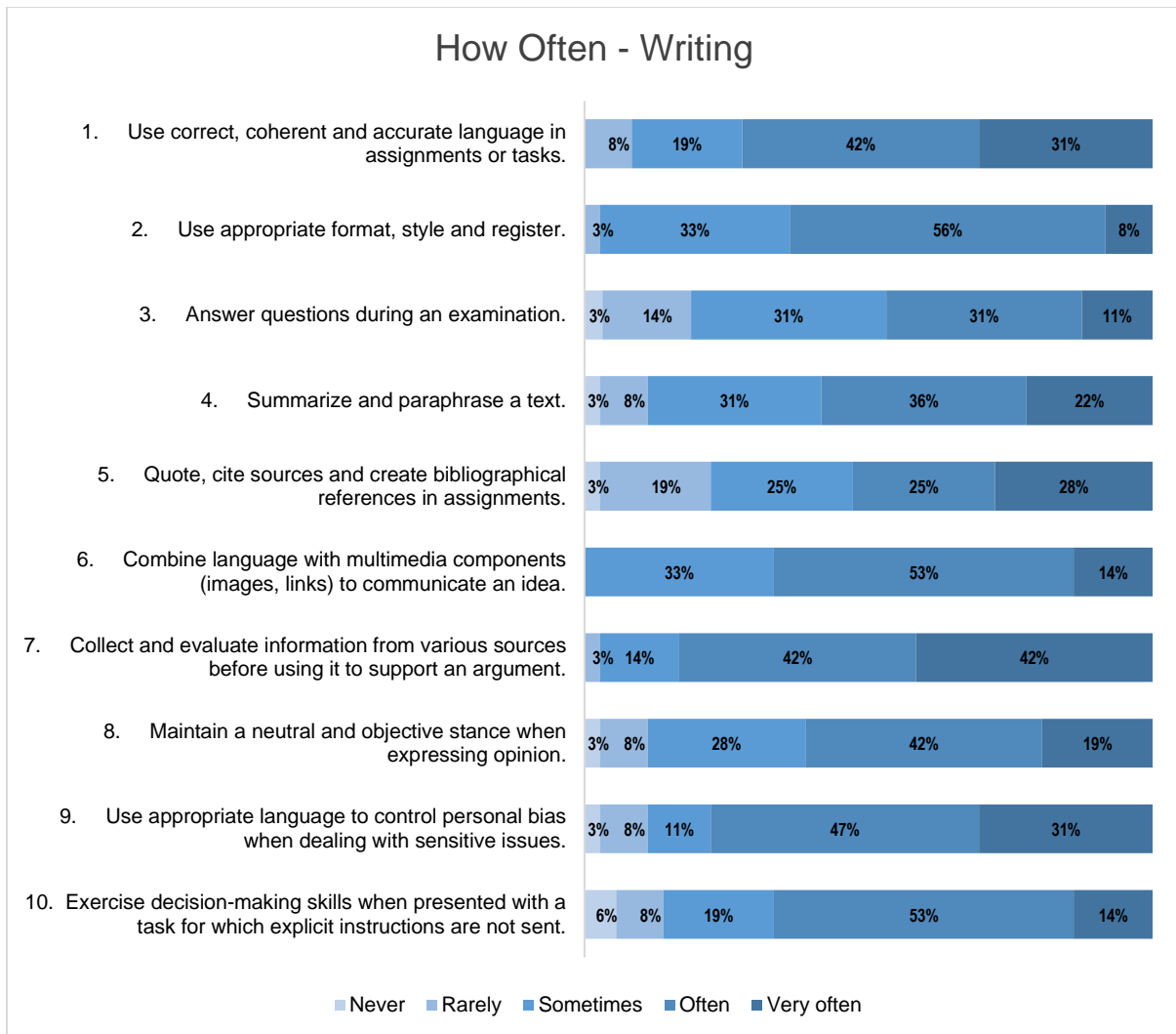
Findings from the Needs Analysis

Student Questionnaire

The student questionnaire was administered to a class of 36 second-year students. Their responses indicated (a) how often they felt they were required to engage in linguistic and critical thinking activities in reading, writing, listening, and speaking (frequency) and (b) how competent they considered themselves in these activities (effectiveness). The results are shown and discussed separately for each skill in Figures 4.1 to 4.8 presented in this section.

Figure 4.1

Student Responses for Frequency in Writing



What stands out in Figure 4.1 is that students consider they are ‘often’ or ‘very often’ expected to collect and evaluate information from various sources (84%). At the same time, they think they are only ‘sometimes’ required to quote or cite the sources they use. Even though collecting and evaluating information from various sources to support an argument does not always mean that the sources are quoted, quoting a source typically requires critical analysis and evaluation of the information quoted. Yet students don’t seem to think they are often expected to do that in quoting a source. In fact, it seems that quoting, citing sources and creating

bibliographies are the activities students feel they are least often required to carry out (21%). This may indicate that students are not aware of the critical requirements of quoting or citing a source. So, in terms of CT development, students do not always seem to be aware that there are areas for which one is expected to carry out CT. On the other hand, students say they are 'often' or 'very often' asked to combine language with multimedia components (67%) and to use appropriate format, style and register (64%). Instead, what they seem to consider themselves doing 'often' or 'very often' in English is using appropriate format, style, register (73%) and correct, coherent and accurate language in assignments (64%).

Figure 4.2

Student Responses for Effectiveness in Writing

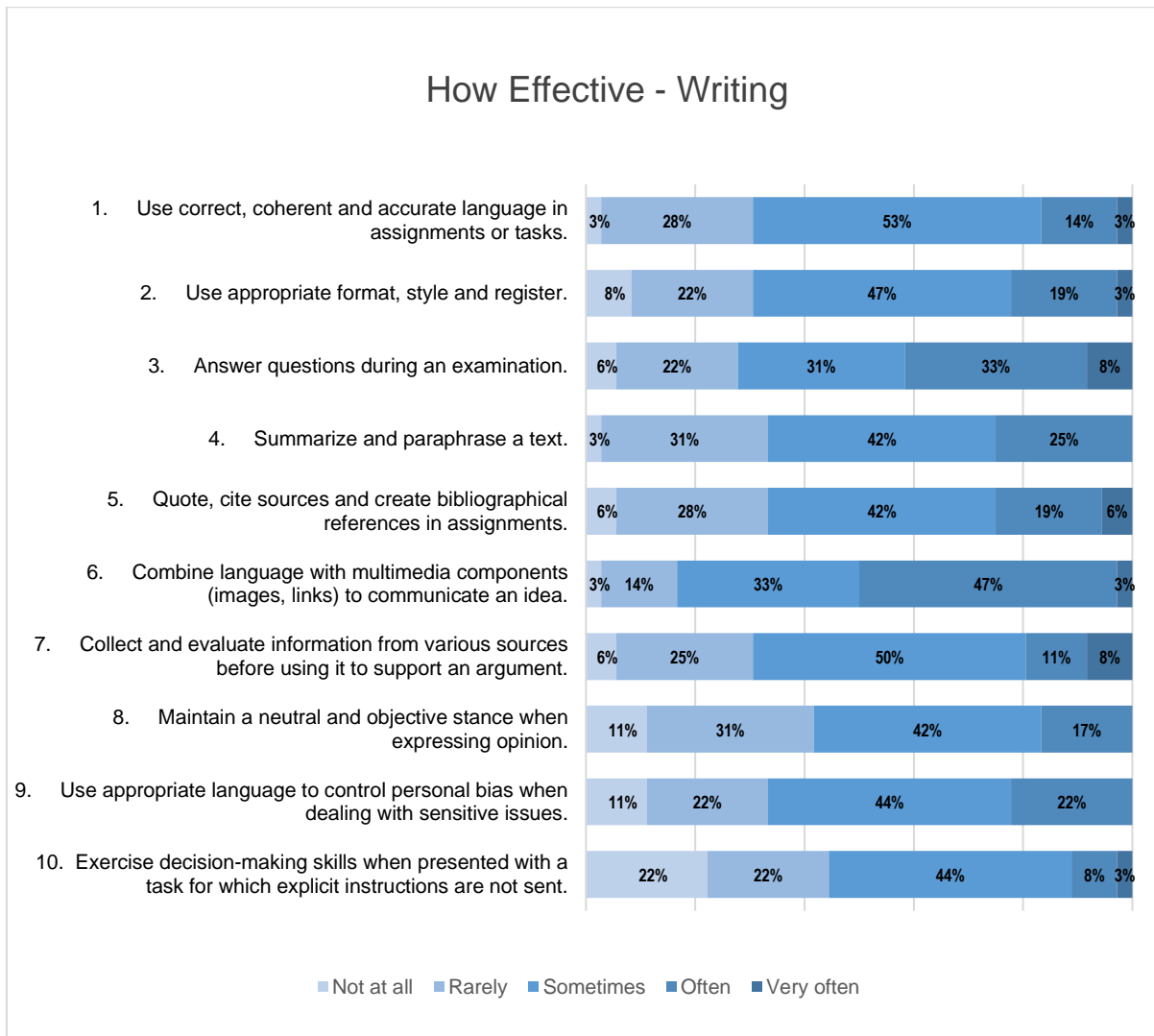
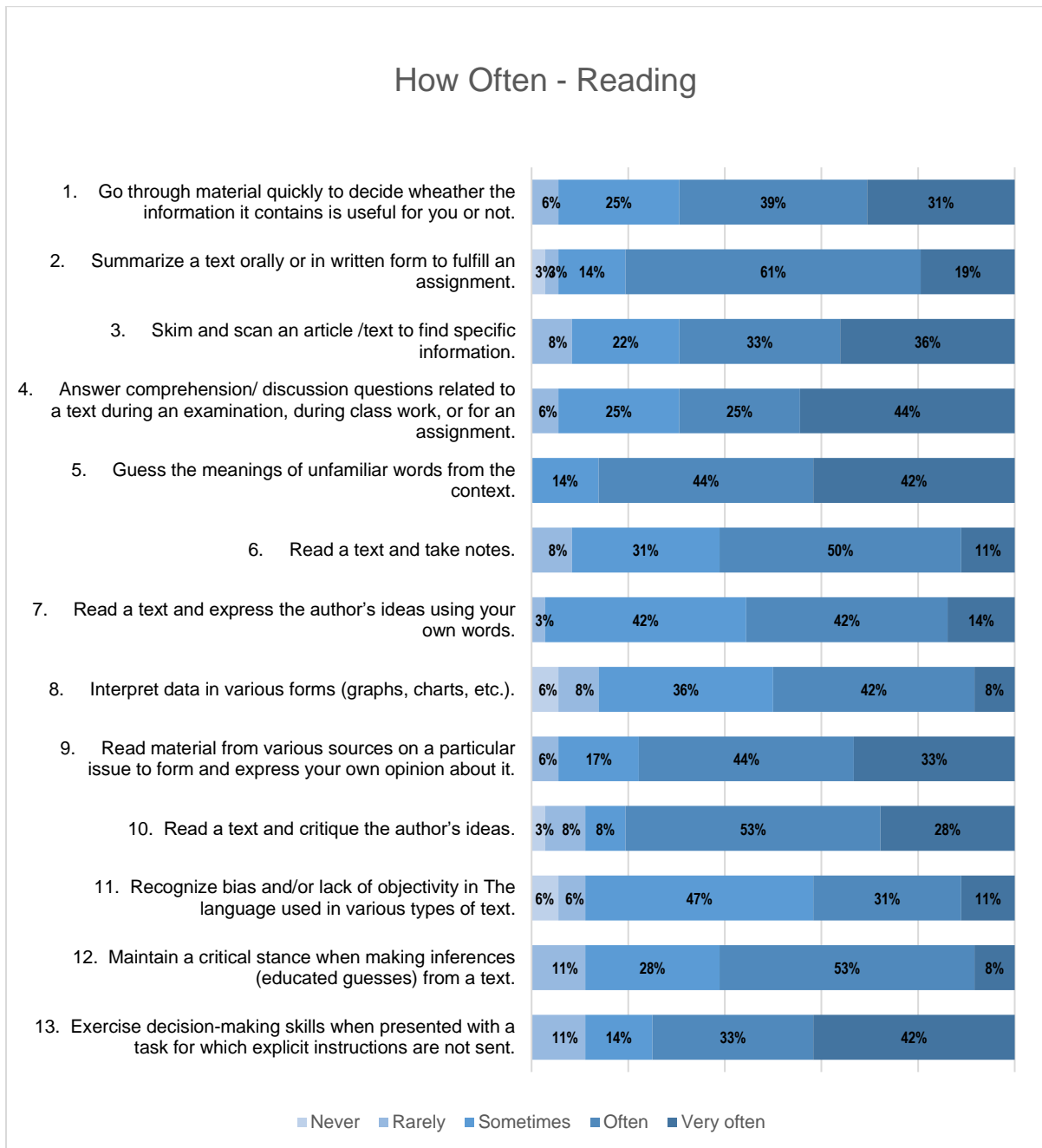


Figure 4.2 shows students’ evaluation of their competence in the same skills. Students evaluate themselves as ‘often’ or ‘very often’ effective in combining language with multimedia components (50%) and this is consistent with their views on the frequency of being required to engage with the activity (67%, as indicated in Figure 4.1). They also consider themselves as quite effective in answering exam questions (41%), although this is something they state they are

not often expected to do (17% state 'rarely' or 'never' in Figure 4.1). Considering that students are required to answer exam questions in English only in their English language courses, this may indicate that students consider themselves effective in answering exam questions without really knowing what is involved in being effective in this activity. This conclusion may be further supported by the fact that students consider they are mostly ineffective in exercising decision-making skills when presented with a task with no explicit instructions (22%), as may often be the case in exams. Finally, it is interesting to note that, with the exception of combining language with multimedia, students identified themselves as mostly ineffective in activities they think they frequently need to do, for example maintaining an objective stance when expressing opinion (42%), and quoting and citing sources (34%).

Figure 4.3

Student Responses for Frequency in Reading

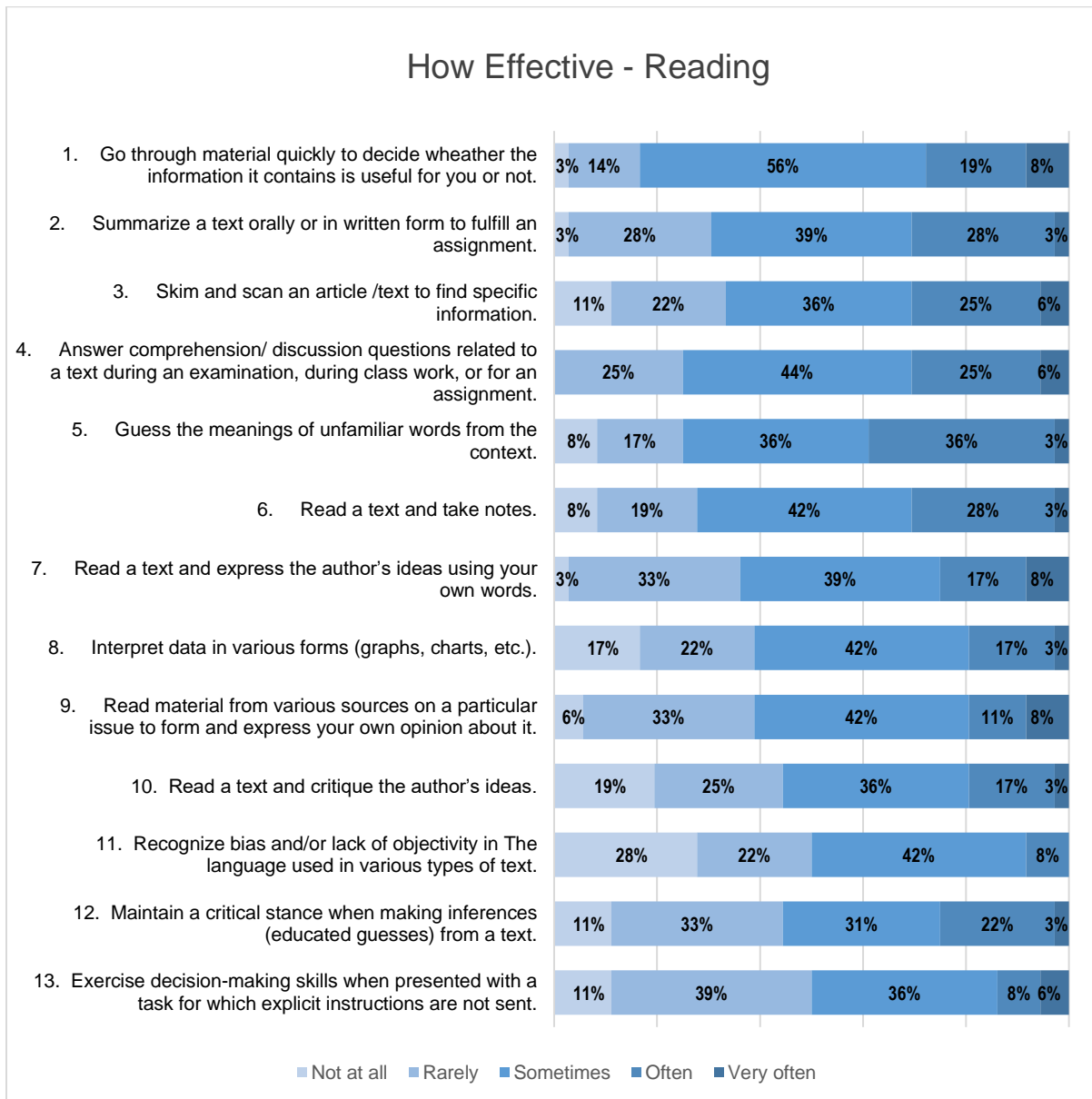


For reading, Figure 4.3 indicates that students ‘often’ or ‘very often’ read material from various sources to form and express an opinion about it (77%). What is interesting is that they also believe they are not often expected to recognise bias in a text (12% state ‘never’ or ‘rarely’)

or critique an author's ideas (11% said 'never' or 'rarely'). This suggests that activities that cultivate criticality (e.g., identifying opinion or bias) and are related to forming and expressing an opinion may either be insufficiently supported by the syllabus or not recognised by students, as they think they are not often engaged in them. Furthermore, even though students are frequently expected to read material and express an opinion on an issue, as already mentioned, they don't think they are often engaged in interpreting information in forms other than text (14% say they 'never' or 'rarely' do this). As data presented through visual representations (e.g., in graphs and tables) is often part of interpreting information to form an opinion, it may be assumed here that students are not very clear about what is involved in this activity or they may not be aware of the critical processes involved in interpreting information in non-textual forms. In general, it seems that the activity students see themselves as 'often' or 'very often' asked to do is guess the meaning of unfamiliar words from context (86%). It is not clear however whether any critical thinking requirements for this activity are explained or understood by students. They may not realise for example, that this activity requires them to understand language in relation to context and not merely use context to practice and remember vocabulary.

Figure 4.4

Student Responses for Effectiveness in Reading

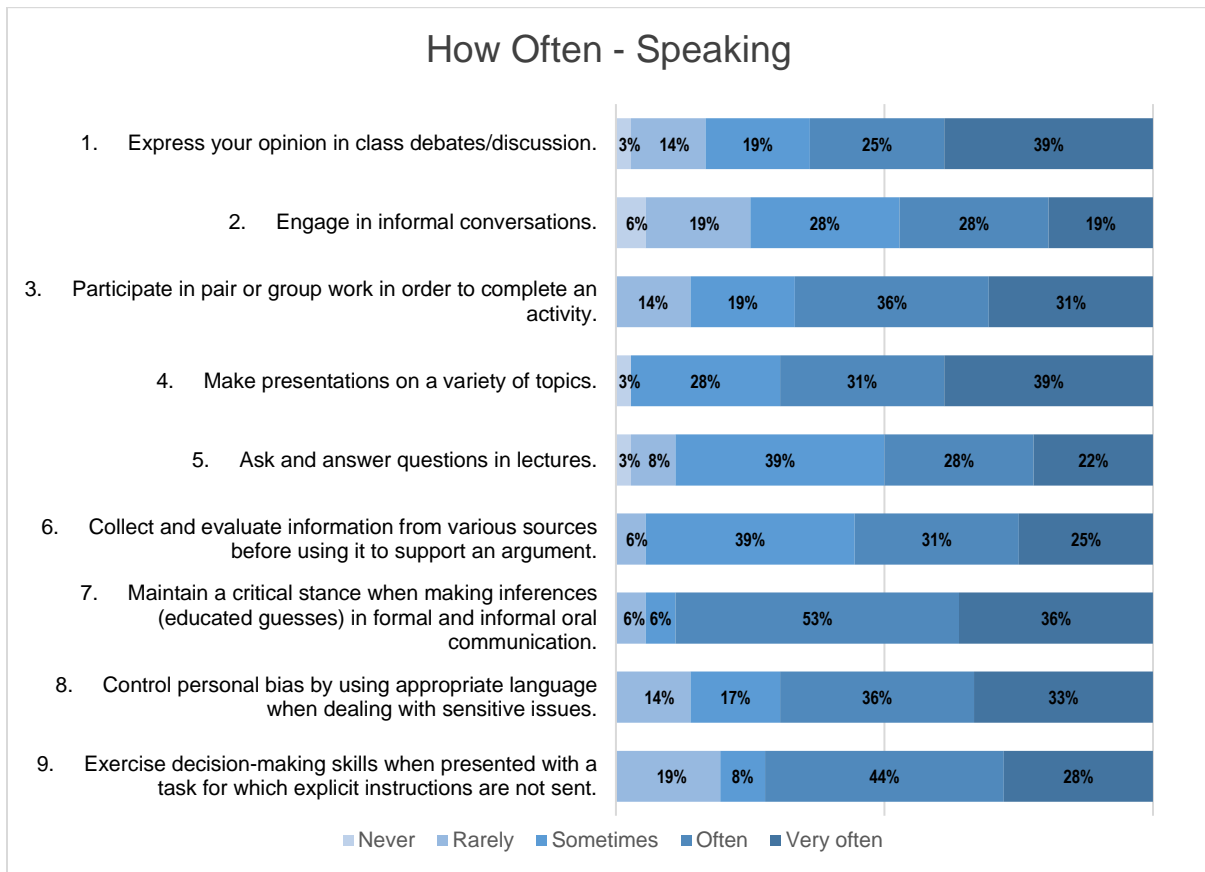


For reading, students evaluated themselves as often effective in only some of the activities they consider themselves frequently doing. For example, 39% said they were often or very often effective in guessing the meaning of unknown words from the context (86% in Figure 4.3) and 31% stated they were often or very often effective in answering comprehension

questions related to a text during an exam or for classwork and assignments (69% in Figure 4.3). 27% also evaluated themselves as often or very often effective in going through material quickly to decide whether the information is useful (70% in Figure 4.3) and 31% in taking notes even though not often required to do these activities (see Figure 4.3). This may indicate that students are not always aware of what is expected of them in performing these activities. What is interesting in terms of reading is that students consider themselves as not effective in recognising bias or lack of objectivity (50% answered with 'never' or 'rarely') and in critiquing an author's ideas (44% answered with 'never' or 'rarely'). This may be related to the fact that they think they are not expected to engage in these activities very often (as shown in Figure 4.3). In terms of CT development these are areas in which one must exercise criticality and the students are indicating they are not asked to do that.

Figure 4.5

Student Responses for Frequency in Speaking

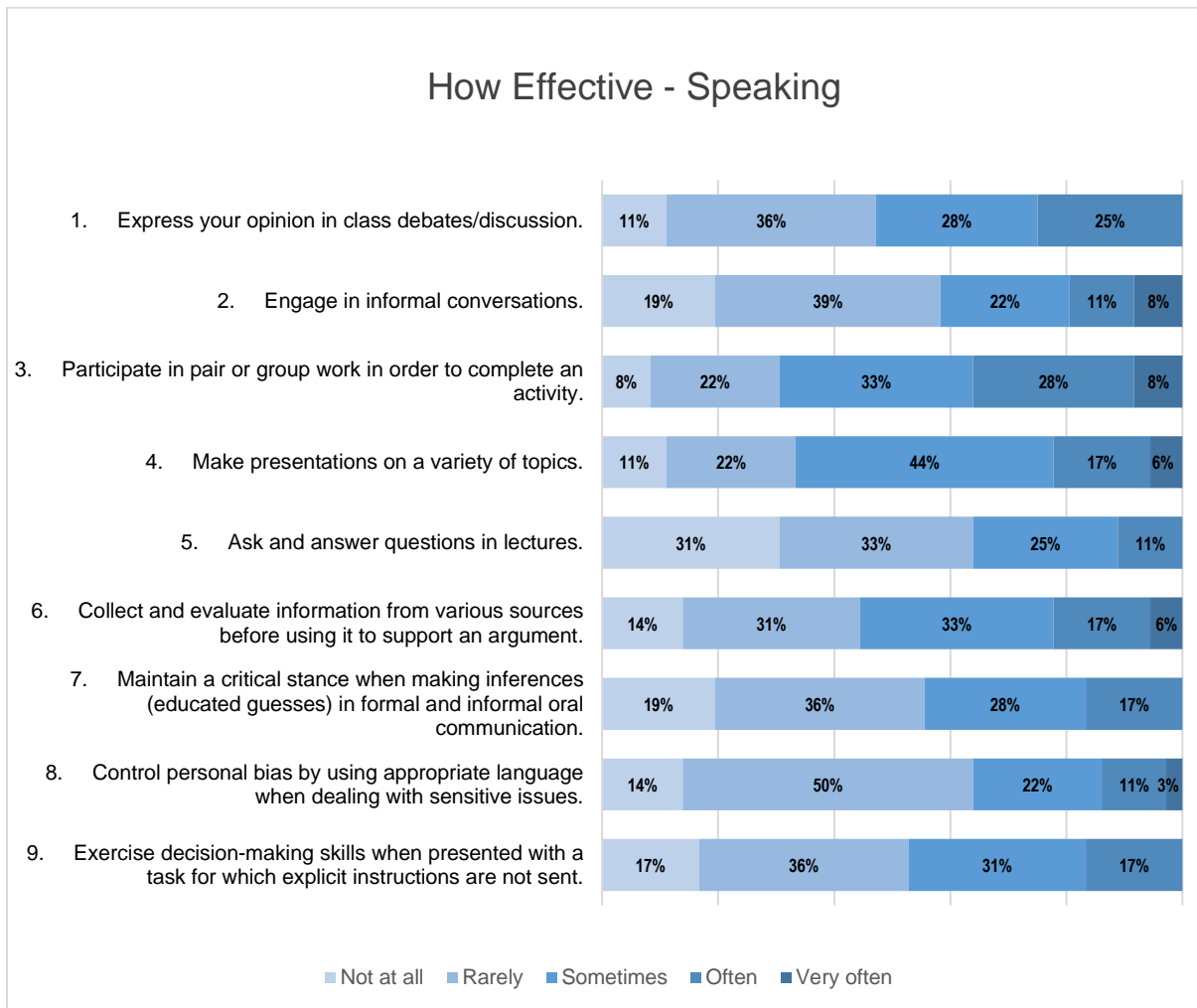


What stands out in Figure 4.5 is that students think they are infrequently required to engage in informal conversations (25% indicate they ‘never’ or ‘rarely’ do it), although they seem to believe they are ‘often’ or ‘very often’ expected to participate in pair or group work (67%). This may indicate that students are not aware of what is expected of them in pair/group work in terms of using English (e.g., that they are expected to communicate in English at all times). It is also interesting to note that, even though students think they are ‘often’ or ‘very often’ asked to maintain a critical stance when making inferences in oral communication (89%), they don’t see themselves as often engaged in other related CT activities such as controlling personal bias when dealing with sensitive issues (31% said ‘never’ or ‘rarely’). In general,

speaking in English for them mostly means making presentations on different topics. The fact that they don't consider themselves engaging in CT (e.g., to control personal bias by using appropriate language) when making presentations may suggest that they don't understand or are not expected to consider the CT requirements of preparing a presentation.

Figure 4.6

Student Responses for Effectiveness in Speaking



As Figure 4.6 indicates, students do not generally consider themselves effective in speaking. Activities in which students see themselves as ‘often’ or ‘very often’ effective include participating in pair or group work (36%) and making presentations (23%). This is consistent with the fact that these are activities, according to Figure 4.5, which students consider they are often expected to do. They are also consistent in their evaluation of themselves as ‘never’ or ‘rarely’ effective in activities they don’t think they are frequently asked to do i.e., asking and answering questions in lectures (64%), engaging in informal conversations (58%), and controlling bias when dealing with sensitive issues (64%). Overall, students don’t see themselves as very effective in activities that require them to think critically, for example in controlling bias or maintaining a critical stance when making inferences in oral communication, and this may relate to the fact that students do not expect to engage in these activities often. They also evaluate themselves as ‘never’ or ‘rarely’ effective in activities that require more spontaneous communication, like asking questions in lectures (64%), taking part in informal conversations (58%), and expressing their opinion in class discussions/debates (47%). These are also activities students consider they don’t do frequently (Figure 4.5) and for which one is required to critically think, for example by evaluating information, deciding on how to present an argument, or selecting appropriate language.

Figure 4.7

Student Responses for Frequency in Listening

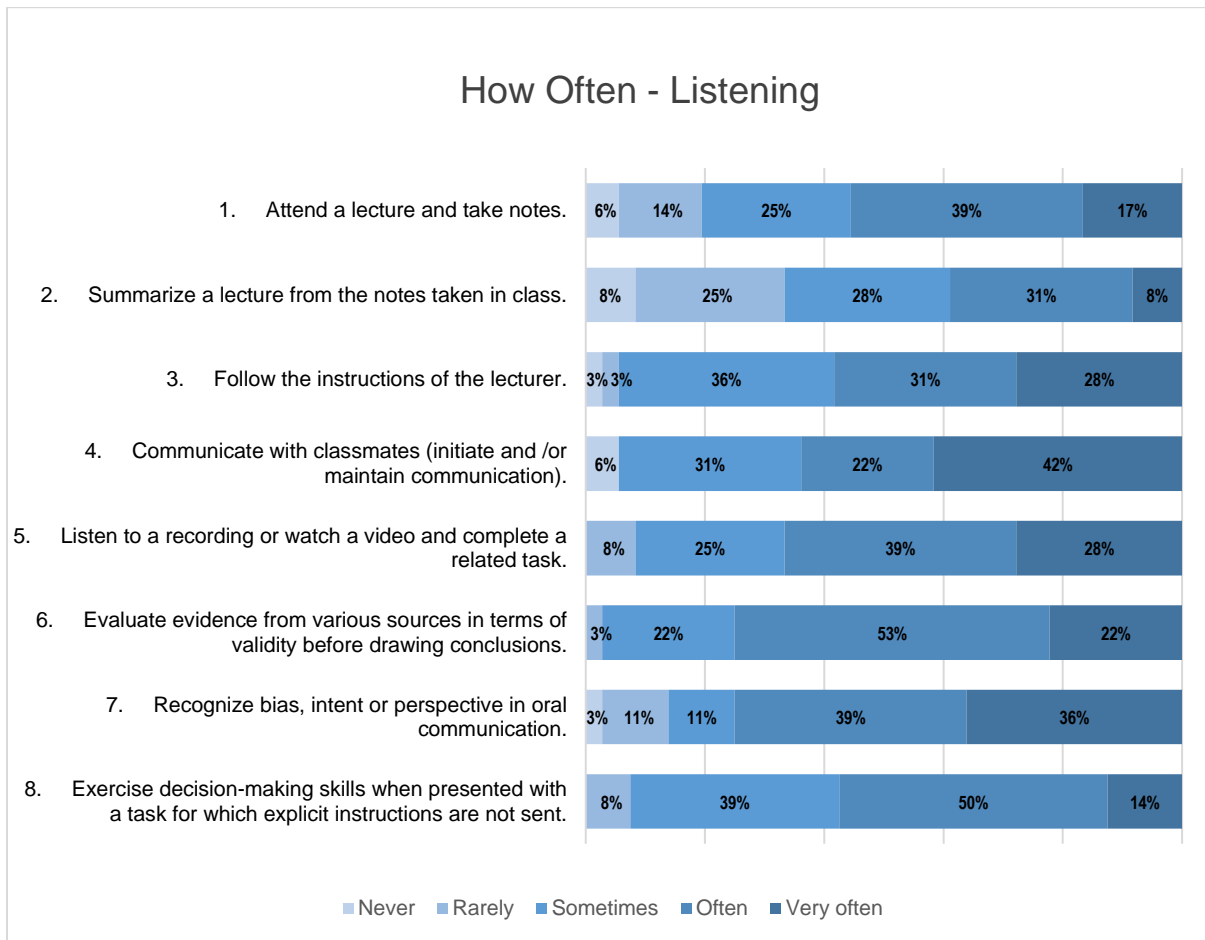
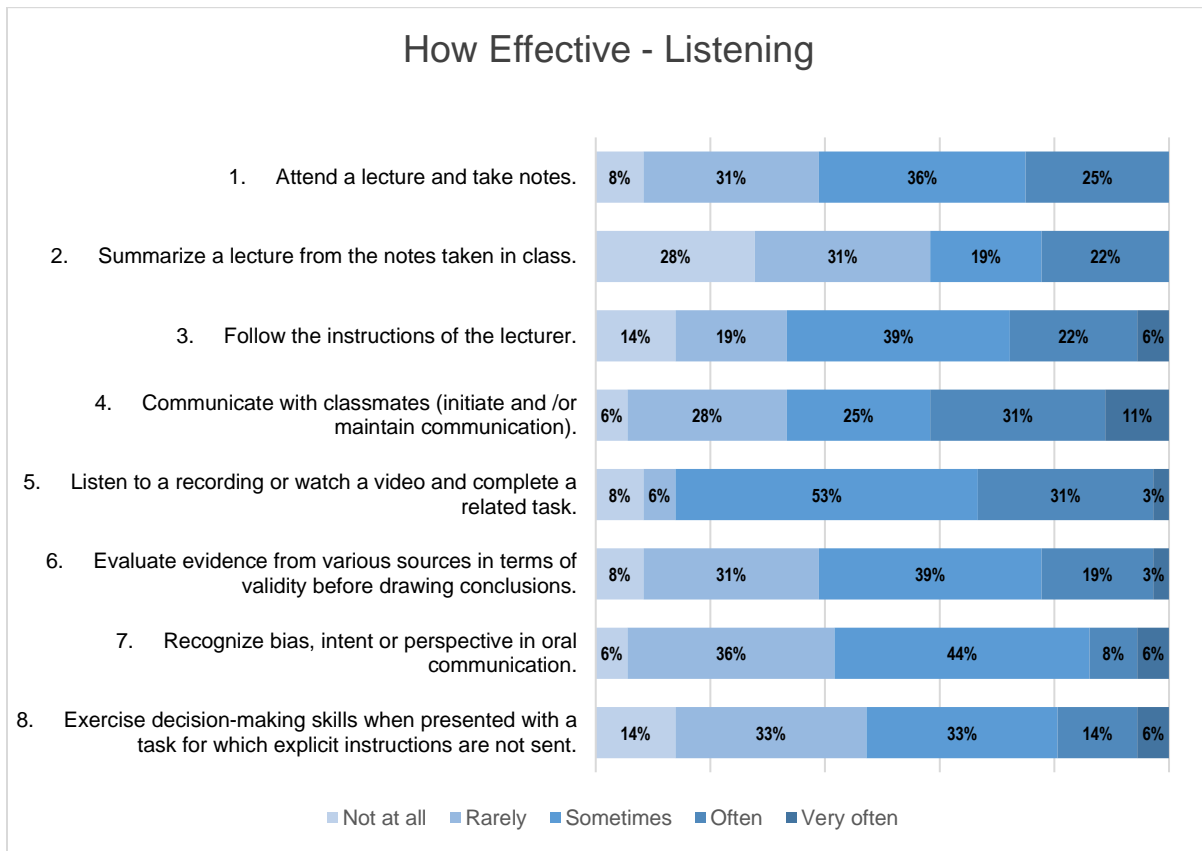


Figure 4.7 shows that students are ‘often’ or ‘very often’ asked to evaluate evidence before drawing conclusions (75%) and to recognise bias, intent or perspective in oral communication (75%). On the other hand, they state they are ‘never’ or ‘rarely’ expected to takes notes in a lecture (20%) or summarise them (33%). So even though students believe they are quite often engaged in CT through listening, they don’t seem to believe that CT is cultivated through note-taking and summarising lectures, despite these activities generally requiring them to evaluate the importance of information and draw conclusions.

Figure 4.8

Student Responses for Effectiveness in Listening



Students evaluate themselves as ‘often’ or ‘very often’ effective in communicating with classmates (42%) and in using audio-visual material (34%), which are both activities they consider they do frequently (see Figure 4.7). They don’t see themselves as effective in summarising a lecture (59% indicate ‘never’ or ‘rarely’) and this relates to the fact that they are not required to do this often. What is interesting is that, although they state they are often asked to engage in CT activities, such as recognising bias (75% in Figure 4.7) and considering evidence before drawing conclusions (75% in Figure 4.7), they evaluate themselves as not very effective in engaging in these activities. Specifically, 42% say they are ‘not at all’ or ‘rarely’ effective in recognising bias and 39% state they ‘never’ or ‘rarely’ consider evidence before

drawing a conclusion. This shows that students don't think they are effective in most activities that require CT, even though they are often engaged in them.

Overall English language courses are not viewed as engaging students in activities that require CT. Even when they believe they are engaging in CT activities, students often don't seem to understand the requirements of the activities or they evaluate themselves as less effective.

In the last section of the questionnaire, students were asked where they would use English in the future generally and/or as part of their professional engagement. More than 60% answered that they expected to use the language for different oral and written communication purposes. Around 15% of these answers referred to general uses for example, "social communication with people from other countries" and "reading information in English in the media". The remaining answers (45%) related to using English for professional purposes such as "writing emails", and "collecting, evaluating and exchanging information from various sources such as websites and broadcasting stations". With regards to English's use as a professional qualification, not all students seem to be aware of the language's importance. Furthermore, only a very small percentage (15%) consider English as important for everyday communication. This is surprising because the country hosts a large number of foreigners, so communication and information published online is often in English. Yet nearly 85% of the students seem to consider English is not needed for their everyday communication, perhaps because they believe their information and communication needs can be covered by their dominant language. Finally, although around 45% of students say English will be used in their professional lives, they seem to be referring to these skills as useful in a general way (e.g., writing emails, evaluating information from websites) and not for activities specific to the media profession. Only three students seemed aware of how English is used by media professionals for activities such as

“writing articles”, “broadcasting news” and “processing information from foreign broadcasting stations and media agencies”. These results indicate that despite the academic and professional requirements of the local context, most media students are not fully aware of the significance of the English language for their future.

Faculty Survey

Seven of the ten staff members answered an online questionnaire used to inform the focus group which followed. I used the answers to gauge faculty’s opinions of learners’ needs. The results were useful in confirming the importance of some skills and in identifying the staff members’ views on how effectively students are challenged in performing activities that lead to the development of these skills.

Faculty Focus Group

The themes emerging from the focus group related to (a) the ways in which students and professionals in the media department are required to use English, as well as students’ competence in relation to these requirements, (b) the reasons students’ English language performance remained average to low despite years of instruction, and (c) how English language courses can enhance the development of language and other skills. A coding protocol with themes, subthemes and examples from the data is included in Appendix H.

Use of English by Faculty. English is primarily used for reading discipline-related material in the Media department, with faculty highlighting that reading for assignments is the only activity they require students to undertake in English. They may also, on rare occasion, ask students to attend a presentation in English, but never expect them to discuss, present, or write in the language.

In contrast, faculty members themselves use English far more frequently: they read and write academic papers, as well as participate in and present research at conferences. They also use English with colleagues and students from other countries, but this is not expected of students, even though a very good command of English is a standard job requirement for positions in media.

Student Proficiency in English. Faculty members all agreed that Greek-Cypriot students' proficiency in English is average to low, which seems unusual considering that most start studying the language at an early age (around 5 or 6 years old). For example, one faculty member stated:

Συνειδητοποίησα ότι παρόλο που τα Αγγλικά είναι ένα σημαντικό μάθημα και διδάσκεται για τόσα πολλά χρόνια στην Κύπρο, όταν χρειάζεται να επικοινωνήσουν η να κάνουν κάτι ποιο συγκεκριμένο ή απαιτητικό όπως να παρακολουθήσουν μια παρουσίαση, η απόδοση τους είναι αδικαιολόγητα χαμηλή.

I realised that although English is an important subject taught for so many years in education in Cyprus, when it comes to communicating or performing specific and more demanding tasks like for example attending a presentation, competence is inexcusably low. (Focus group, April 2014)

In other words, faculty asserted that students' lengthy learning experience is nevertheless failing to develop their ability to use English in more advanced academic settings. The suggestion here is that perhaps the objectives of English language curricula should be reconsidered, as it seems that proficiency relates less to years of study and more to what and how they learn. Four other academics highlighted students' good knowledge of grammar and general vocabulary, but limited ability to apply this knowledge when communicating, especially in academic contexts.

A number of possibilities for learners' proficiency were offered. As mentioned above, these include students' previous English language learning experiences, which according to faculty members emphasised grammar translation methods and neglected communicative approaches to learning and the development of academic skills alike. In commenting on these experiences, almost all staff members highlighted that instruction in Cyprus focuses on achieving high written exam scores that require focusing on sentence translation, memorising vocabulary, and using grammar resources, to the detriment of understanding the functions of the aforementioned in meaningful communication.

Four faculty members mentioned insufficient exposure to well-written texts or more advanced forms of language (literature, poetry) could be another cause for students' limited expressive capabilities: "There isn't... as I have noticed, sufficient training in reading literature in Greek or in English... students do not read literature... nobody can write correctly and confidently if they aren't well-read" (Focus group, April 2014). The connection between reading and writing and the need to expose students to good writing in the target language literature, was seen to help students see how language works and increase confidence.

More than half the participants also commented on students' lack of interest in learning English. As already mentioned, because the medium of instruction at the university where this study is taking place is Greek, it is perhaps difficult for learners to understand the importance of fluency in English, especially as low competence does not necessarily influence their academic achievement.

Another reason for students' lack of interest in developing their English language competence was their need to maintain their Greek-Cypriot identity:

Οι νεότερες γενιές στην Κύπρο, θέλουν να δημιουργούν και να διατηρούν μία αγνή κυπριακή ταυτότητα και αρνούνται οτιδήποτε νιώθουν ότι παρεμβαίνει σε αυτή (την ταυτότητα) ή τους συνδέει με άλλες κουλτούρες... σε αυτή την περίπτωση την βρετανική.

Younger generations in Cyprus want to create and maintain a purely Cypriot identity for themselves and reject anything that they feel would interfere with this identity or associate them with other cultures... in this case the British. (Focus group, April 2014)

The perceived conflict between asserting a Greek Cypriot identity and engaging with British culture, is one possible consequence of learning and using English.¹ That said, this assertion is linked to the island's history and may reflect the faculty member's own views. However, two other participants also stated that students perceive the importance given to learning English for social, educational and professional purposes as a way of adopting British culture and in conflict with students' identity as Greek-Cypriots.

Language Development and Critical Thinking. Limited opportunities in early education language curricular for development of critical thinking was another point raised by faculty:

Η ανάπτυξη της κριτικής σκέψης που είναι τόσο σημαντική ειδικά για τους φοιτητές μας πρέπει να αρχίζει από τα πρώτα χρόνια εκπαίδευσης... και δεν ξεκινά! Όλοι μας γνωρίζουμε ότι αυτή η δεξιότητα έχει μόλις πρόσφατα συμπεριληφθεί στα αναλυτικά προγράμματα κάποιων γλωσσικών μαθημάτων στην δευτεροβάθμια εκπαίδευση.

The development of critical thinking, which is so important especially for our students needs to start from the early years in education... and it doesn't! We all know that this skill has only recently been included in syllabi of some language lessons in secondary education. (Focus group, April 2014)

¹ Cyprus was under British rule from 1878 to 1960.

Additionally, the ineffectiveness of the secondary education curriculum in addressing the development of CT was linked by four faculty members to communication skills in general.

It is not a matter of language in my opinion... learning how to criticise and express an opinion is not just about language. These are skills that should be developed regardless of language. I mean we all have been witnesses of our students' poor critical and communication skills in Greek as well. (Focus group, April 2014)

The common point is that being critical goes beyond language and is a reasoning rather than language issue. An individual's ability to exercise CT in any language requires demonstration of specific capabilities, such as evaluating information and expressing opinions. The same faculty member further suggests that developing an individual's criticality and the language required to be critical should happen simultaneously.

Broad use of the local dialect was seen as further complicating these issues.

Το γεγονός ότι υπάρχει μια ιδιαιτερότητα στην Κύπρο με τη διάκριση μεταξύ της γλώσσας που διδάσκεται και της διαλέκτου που χρησιμοποιείται...δημιουργεί ένα πρόβλημα γιατί αυτό λειτουργεί σαν εμπόδιο όταν ένα άτομο προσπαθεί να εκφράσει πιο αφηρημένους τρόπους σκέψης.

The fact that there is a particularity in Cyprus with the distinction between the language that is learnt and the dialect that is spoken poses a problem because this acts as a barrier when a person tries to express themselves in more abstract forms of thinking. (Focus group, April 2014)

The local dialect is perceived as creating problems in distinguishing between different uses of language, thus impacting abstract reasoning. Abstract reasoning, a higher level of thinking is thus a challenge these academics linked specifically to dialect. Most participants agreed that using

variations of the same language may create challenges in selecting and appropriating language in different situations and in more advanced uses of language including academic language (both in Greek and English).

Participants also agreed that university students are almost never asked to communicate in English, except in their English language courses.

There is a difference between a first and a second language... and a significant difference I think... In your first language, you are not forced to confront the social aspects of the language; you take it for granted when you operate on a daily basis in your everyday life... you socialise aloof without having to think about it... whereas in the linguistic and communication context of a second language, you are directly forced to confront the social consequences of your interaction. (Focus group, April 2014)

This participant, who taught a module in English,² is identifying that unlike working in a dominant language, working in a second language allows an individual to become aware of what language is doing to express meaning, e.g. the social conventions that exist in that language. So opportunities are provided in a second language classroom not just for thinking about how language is used but also for thinking about how to deal with or “confront the... consequences” of language use. This relates to the development in thinking, not just language, and shows that for at least some of the faculty, it is possible to see English classes for their potential as a site for engaging students in CT development.

Improving English Language Proficiency. Faculty members offered different suggestions for engaging students, especially weaker ones, in language learning. One suggestion was to ask students to read authentic, discipline-related material, another, to engage them in

² This module is offered to Erasmus students and is an elective for the rest of the students.

activities simulating real-life academic and professional situations, like writing a news story. Based on their own learning and teaching experience, three faculty members suggested assigning students with readings of high linguistic value would enhance language development and especially writing skills. Three of seven participants stated that exposing students to “good samples of writing” through relevant, discipline-related material could provide opportunities for developing writing and other skills.

Three faculty members suggested including activities that would promote collaboration between learners of mixed ability:

Βρίσκω πως όποτε τους ζητήσω να δουλεύουν μαζί, όλοι κερδίζουν με τον ένα ή με τον άλλο τρόπο. Οι πιο αδύνατοι μαθαίνουν ρωτώντας και οι πιο δυνατοί απαντώντας.

I find that whenever I ask them to work together, everyone gains one way or another.

Weak students learn more by asking and strong students learn more by answering. (Focus group, April 2014)

Collaboration is thus identified as an opportunity for developing language because it capitalizes on individuals’ strengths and weaknesses. Most participants supported this argument stressing the positive impact of teamwork in their own courses, and added that learning as a shared experience at this level in education could empower weaker students through feelings of responsibility for their own and their peers’ achievement. Two faculty members further highlighted that collaborating towards a common goal could also promote meaningful negotiation and interaction, which would help overcome the limitations of the learning environment by providing opportunities for authentic communication.

Language Development and Critical Thinking. Faculty members also discussed the connection between the development of critical thinking skills and language proficiency:

I might be for example wrong in judging them (students) now... however I can't help but noticing that they are quite passive and do not have the drive to learn by themselves... I for one, have to convince them to put their mind in action and think most of the times... so the reason I am saying this is that I think we need to look at their problems with language, English and Greek, and find ways to raise their motivation levels... by showing them how to think. (Focus group, April 2014)

All seven participants agreed that finding ways to motivate and engage students in learning through an activation of thinking skills could be beneficial for the development of both language and literacy with some also highlighting the importance of teaching students how to be critical through language:

Εννοώ, δεν είναι απλά θέμα να γνωρίζει κάποιος τη γραμματική, για τις δραστηριότητες που τους ζητούμε να κάνουν σε αυτό το επίπεδο... πρέπει να διδάσκονται πως να σκέφτονται κριτικά... να αξιολογούν πληροφορίες... να εκφέρουν άποψη μέσω της γλώσσας (Αγγλικών).

I mean, it's not just a matter of knowing grammar, the kinds of tasks we require them to be able to do at this level... they should be taught to think critically... evaluate evidence, to express opinion through the (English) language. (Focus group, April 2014)

Thus for this faculty member learning to engage in critical thinking requires English lessons that target language development that would allow students to evaluate information and express opinion, skills directly related to critical thinking.

Finally, two faculty members commented on how foregrounding critical thinking in the English language curriculum through activities relevant in the media context could help identify and develop the language necessary for this kind of thinking.

Δεν αξιολογούμε τις ικανότητες τους στην γραμματική, αξιολογούμε την ικανότητα τους να εξηγούν η/και να εκφράζουν ένα περίπλοκο επιχείρημα... Πρέπει να μπορούν να χρησιμοποιούν την γλώσσα με συγκεκριμένους τρόπους... ίσως αυτή είναι η γλώσσα που πρέπει να στοχεύουμε... και το μάθημα των Αγγλικών... που είναι τόσο συγκεκριμένο και σχεδιασμένο ανάλογα με τις ανάγκες των φοιτητών, είναι ιδανικό για αυτό.

We are not evaluating grammatical ability; we are evaluating the ability to explain and/or express a complex argument... We need students to be able to use the language in specific ways... to express themselves in particular ways... perhaps this is the language we should be targeting... and the English language course... being specific and tailored to students' needs is ideal for this. (Focus group, April 2014)

The English language course is again identified as an appropriate context in which students may think and use language critically (e.g., to express a complex argument). What is highlighted here is that learning English in higher education could and should go beyond learning grammar rules and encompass thinking about and understanding situated use of language. Participants supported English language courses that provide specific, tailored instruction that develops both critical thinking and the language such thinking would entail.

Overall, faculty members identified a number of challenges with students' proficiency in language and critical thinking skills that they attributed to factors such as inadequacies in prior language instruction and limited opportunities for developing these required skills in their current educational context. Their suggestions for addressing these challenges through the English course, were based on an agreed need to develop students' ability to be critical through language. The English language course was seen as a potential site for raising students' awareness of how language works in supporting the development of both thinking and language skills.

Designing the Intervention

The needs analysis (NA) was useful in identifying the thinking and linguistic challenges faced by media students at university level. It was also useful in allowing me to consider these challenges in relation to students' prior experiences with language learning, highlighting the need to view language and thinking as two sides of the same coin. Analysis of participants' perceptions of media learners' language and critical thinking needs confirmed a number of my initial concerns; among these, the potential to reverse negative feelings about language learning by teaching them how to think through language. This would help me to support students in drawing upon their existing knowledge of English and to engage them in the development of new significant knowledge and skills.

Drawing Together Key Findings from the Needs Analysis and Initial Thoughts

Initial thoughts on the design of the intervention, as already discussed in the beginning of this chapter, included considerations on activating and cultivating a critical stance in the language classroom and, more specifically, developing students' understanding of how language works to express opinion through engagement with media texts. To achieve this, I considered focusing on critical thinking (CT) while engaging students in negotiating personal opinion. Throughout this negotiation, language would be foregrounded and learners would be re-introduced to it as a tool in developing necessary skills, thus making an impact on how they perceive language learning.

I used findings from the needs analysis to evaluate my initial thoughts on the intervention. Analysis of the student questionnaire indicated that students believed their engagement with the English language is mostly focused on using the language correctly and accurately in their course. They didn't often feel expected to engage in activities that require

using the language critically. Furthermore, even when required to exercise CT, for example, in collecting and evaluating evidence or using language to control bias, they often felt not effective. They may also not be aware of the CT requirements of such activities. This indicates that the English language syllabus should include activities which foreground the development of the language one needs to think critically. The syllabus needs to be reviewed to meet these requirements and it may be useful to provide students with explicit instructions on how to engage in CT processes.

Faculty members in the focus group overwhelmingly supported cultivating students' CT capabilities and discussed how language learning and specifically the English for the media course could contribute to the goal. The discussion covered ways in which specialised content and activities in the English course could be reviewed to provide students with practice in using language to think critically. This faculty views reinforced my initial thoughts on teaching learners to think through language. One suggestion brought forward was to target through the course syllabus the language students would need to engage in this type of thinking.

Lastly, faculty members highlighted the potential of collaboration to support students' ability to negotiate and interact. Although questionnaire results suggest students think themselves as effective in pair or group work, analysis also shows they may not understand the requirements of such activities. Greater emphasis on collaborative activities would thus be useful in developing (a) their understanding of the requirements of collaborative work and (b) their ability to engage in CT through discussions of language, which was one of my initial considerations.

Setting the Intervention Priorities

I used findings from the needs analysis to revisit the research's theoretical framework, more specifically the possible use of the concept of myside bias in creating a design that targeted

co- development of students' language and thinking. The aim was to integrate research on myside bias into the design of practices that could lead to the development of language- through- thinking, and thinking- through- language. Understanding the thinking dispositions that are central to avoiding myside bias, such as controlling personal opinion or bias when considering evidence was very helpful in developing the means for targeting thinking and language development in the revised syllabus.

To control myside bias, learners must first develop the ability to identify personal opinion by critically examining and evaluating the evidence offered in support of an argument. This requires putting aside personal views or biases (cognitive decoupling), as well as seeking and examining multiple sides of an argument before positioning oneself towards that information. These thinking processes implicate how language is used. By critically examining, the ways in which myside bias is realised in language use and discussing how to control or avoid it, I could focus on the type of thinking required to limit bias. This was useful in addressing an important need that had emerged from the NA: teaching students how to think through language.

Identifying how language is implicated in the control of myside bias was important for developing students' thinking through language. It highlighted how I could make the connections between language and critical thought, and pointed to the ways in which language development could enhance a critical disposition. Essentially, by using myside bias to design activities and material, I could develop a curriculum that targeted students' understanding of the choices language provides for expressing personal opinion. As highlighted by the NA, media students are expected to be able to identify an argument, examine its different sides, and/or critically evaluate and comment on opinions. Patterns of language used to express opinion had not typically been a focus in language instruction in our institution; decisions tended to be based on the content of

texts, and rarely on the ways language communicates opinion. Foregrounding linguistic patterns used to express opinion was not only a way to facilitate students' understanding of discipline-related language, but also a way of dealing with the 'thinking' challenges identified by the NA. By developing a syllabus that targeted how different linguistic choices function to express opinion, I could therefore target both their knowledge of language and their ability to think through language.

Finally, to address the collaboration/negotiation requirement, I revisited literature on critical pedagogy to consider how activities in the revised syllabus could engage students in structured dialogue or group discussions of language in relation to expressing opinion. The emphasis in these activities would be to develop and scaffold processes of critical questioning and analysis, where learners would gradually become more independent in their use.

Drawing together my initial thoughts with the NA findings, and relevant research, I designed an intervention that prioritised the following:

1. Introduce critical thinking practices that engage students in thinking through language.
2. Develop students' understanding of how language relates to ways of thinking, specifically in expressing opinion.
3. Develop students' ability to critically approach media texts through linguistic practices of identification and analysis related to the expression of opinion and/or bias.

Priority 1 – Developing Critical Thinking Practices in Support of Thinking Through Language. In the original syllabus, students engaged in activities requiring them to exercise CT, such as collecting, evaluating, and editing information to form an opinion or present an argument. However, students were not explicitly instructed to critically engage in these activities and were in some ways expected to go through CT steps, such as deconstructing an argument

and evaluating evidence, without being explicitly taught how to do this. In short, while certain activities in the original curriculum required CT, criticality was not supported; the activities' main objective was to engage students in the correct, accurate and appropriate format and style of language. Quite reasonably, students may not have been aware of what they were expected to do.

For the new syllabus, I designed activities in which critical thinking requirements were made explicit. I created steps to provide students with instructions on how to critically engage with information and scaffold their critical thinking. Myside bias provided the framework for these steps. Drawing on CT processes taken to avoid the expression of myside bias (see Chapter 2, section on myside bias), I designed activities that supported students in identifying, critically discussing, and controlling the expression of opinion. Literature on critical media literacy was also useful, as it provided ways of analysing and identifying literacy requirements important for the design of these activities, including discussions of their own and others' interpretations of texts (Kellner & Share, 2007).

Priority 2 – Understanding the Functions of Language in Expressing Opinion. This priority derived from the need to teach students to think through language, which led me to the conclusion that students needed to develop a different understanding of language. An understanding of how language functions to communicate opinion was thus the second priority in the design of the new syllabus. As already mentioned, students are expected to enter their English language courses with a good level of knowledge in grammar and vocabulary and so the original curriculum did not provide opportunities for grammar instruction. Individualised instruction or other opportunities to practice grammar were only provided in cases where the instructor felt it was necessary, for example when a student's proficiency level impacted their

performance in assignments. Even when this was the case, language was discussed in terms of grammatical form and use, and not in terms of function.

“Learning language” and “learning through language” happen simultaneously, according to Halliday (1993b), and so I am using SFL (see Chapter 2) to identify and explore the ways specific resources could be used to realise opinion (through analysed instructional material). I looked at how specific linguistic resources (discussed later in this section), connect to research on myside bias, and considered different ways SFL could support my teaching in foregrounding the links between form and meaning. This helped me identify language patterns associated to the expression of opinion/bias and provided ways of discussing the connections of targeted resources as part of these patterns to myside bias. I targeted nominalisation, the passive voice, reported speech, and modality in the re-design of the new syllabus based on their functional possibilities in expressing personal opinion and bias. In selecting these, I considered language use in such texts as newspaper articles, news reports and readings from ELT textbooks for media studies. I did this first to improve my own knowledge of how myside bias is evidenced in media-related discourses, and second, to explore ways of helping students understand the connections between linguistic patterns and the expression of opinion and/or bias. Below is an example of my thinking as I made these design choices:

Looking at how personal opinion is expressed in discipline-related material helps me make the connections between myside bias and language stronger in my mind.

Discussing bias with students will also help them become aware of the relationships that exist between forms and meaning, something that I am positive they haven't been instructed to notice before. (Researcher's journal, July 2015)

As shown in the extract above, my initial readings of the material mentioned before, together with what I had learned about the concept of myside bias, allowed me to evaluate language use and raised my awareness of the power of different linguistic choices in construing meaning. It also foregrounded that, despite the importance of understanding the connections between linguistic choices and the context in which they are made to developing language, students are never explicitly taught about them.

My readings of media textbooks and other literature relating to language use in the media for specific purposes (Catenaccio et al., 2011; Cramer & Eisenhart, 2014) highlighted the potential for targeting specific linguistic resources in supporting students to make connections between the concept of myside bias and the possibilities the targeted language offered for expressing opinion.

Nominalisation and passivisation ³were the ones I found most commonly discussed in the literature for their possibilities in conveying opinion. Specifically, choices between noun phrases and verbs, or the passive voice over the active were characterised as ideologically charged as they can provide writers with different possibilities in realising meaning (Fowler et al., 1979; Halliday, 1993b; Halliday & Matthiessen, 1999; Van Dijk, 2008).

Nominalisation, according to Halliday, offers different possibilities in metaphorical or congruent uses of language by deleting the agency of processes and creating new entities. In this sense, nominalisations can be used to turn verbs into abstract or general concepts or entities to be used as subjects in a sentence allowing a speaker or writer to transform the description of an agent performing an action into a general or abstract statement about the action. This allows a

³ I use grammatical and technical terms for targeted resources because this is how they were referred to in textbooks. I also chose to refer to them in this way in the syllabus and instructional practices.

speaker to talk about someone or something without directly positioning themselves towards that information (Bloor & Bloor, 2013; Eggins, 2004). For the purposes of this study, I found nominalisation useful in exploring different ways of presenting information in a sentence, while allowing an individual to minimise the expression of bias or judgement.

In the same way, using the passive to invert the order of constituents in a sentence changes the focus of a text and offers different ways of representing an action or agent; while in active voice the subject and agent coincide, making it very clear who performs an action and what is being talked about, in the passive, the subject and agent are not the same. In terms of expressing opinion, this may serve to purposefully de-emphasise or completely eliminate the agent, resulting in a less defined representation of an event. Such a choice allows the speaker or writer to de-personalise or shift the responsibility for an action and so make an abstract or impartial reference to an event (Bloor & Bloor, 2013; Halliday, 1994; Halliday & Martin, 1993; Martínez, 2001). The choice between passive and active voice may therefore indicate a person's intention to present information towards their own opinion.

Reported speech was another resource that emerged from my research into media language studies (relevant to developing ways of thinking), specifically in relation to the different ways information is reported in support of an opinion. In creating and/or reproducing stories and events, as well as in writing articles, those in the media need to select and embed material from various sources. A review of literature on the functions of reported speech highlighted how choices in the type of reporting (direct vs. indirect quotes) and in reporting expressions allow individuals to encode their evaluations of the material (Bloor & Bloor, 2013; Halliday & Matthiessen, 2004; Martin & White, 2005). I also found references to the different uses of direct and indirect quotes in media studies books discussing how choices are based on an

author's attitude towards the information or the source represented. While direct speech functions to report speech in a manner true to its original wording, indirect speech does not adhere to the exact words of the source (Coulmas, 2011; Holt, 1996). Reported speech may thus be interpreted to indicate a journalist's or author's intention to emphasise, support, or criticise information by endorsing – or conversely, questioning – the evidence provided or the source itself. These examples gave me ideas on how to connect reported speech to ways of thinking and expressing opinion in instructional practices.

Modality was the last of the four resources highlighted in my research for its relevance to myside bias and its potential in developing students' ability to think through language. Modal expressions can be used to identify or introduce a personal or subjective view of an event based on how possible, necessary or desirable it is (Eggins, 2004; Halliday, 1994). Looking at examples of how modality functions in these ways I was able to understand how modality choices are often made by authors to encode attitude by expressing affiliation or distancing from an idea or event. Modality could thus be a very useful resource in identifying and discussing the expression of opinion.

Based on the requirements of the methodology I was using, I knew that the intervention should be conducted in at least three cycles. My research design, as explained in Chapter 3, required the intervention to be carried out with the same students in one semester. Three cycles were sufficient; more than that would be difficult to manage in under 13 weeks (one semester) and three cycles were sufficient to evaluate the design. I decided to use two of the linguistic resources in the first cycle, two in the second and then repeat all the resources in the third cycle. My aim was to introduce and scaffold CT practices in the first two cycles and use the third cycle to assess students' ability to more independently engage in these practices.

I considered the resources' functions in expressing opinion and decided to pair nominalisation with the passive voice in the first cycle, and reported speech with modality in the second. The first pair of functions were similar in that they change emphasis or perspective on information by moving constituents in a sentence; the second pair also showed commonality in that they encode a personal evaluation of information.

While media textbooks were quite useful in identifying and designing instructional material and practices, I found SFL literature to be very important in developing ways of thinking through language and about language in relation to myside bias. The need to develop my own knowledge of SFL so as to achieve these goals was immediately apparent. Developing students' knowledge of SFL, or at least their ability to talk about language using SFL terminology, however, was not as important at the time. I considered that introducing SFL terminology in my teaching would be very demanding for students and that the challenges of such a venture would outweigh the benefits. This led me to continue using the language in student textbooks to discuss the targeted linguistic resources in relation to expressing opinion. My decision was evaluated and modified in later stages of the design, at which point I began to slowly introduce SFL concepts in my teaching. Considerations from the integration of SFL in teaching practices throughout the design will be discussed in later chapters.

Priority 3 – Developing Critical Analysis Skills Through Discussions on Media Texts. The need to cultivate students' understanding of how the targeted linguistic resources function to express opinion led to the consideration of new ways I could engage students with media texts. Influenced by SFL theories on how context can be used to develop the connections between language and meaning and having worked with media texts such as headlines, news

reports and articles for some years, I knew that media texts could provide a vehicle for the type of development I was targeting through the design.

Media texts were included in the original curriculum; however, these were used for reading comprehension activities which engaged students in using language to make inferences and answer questions about the content. Although it was important for students to understand and reproduce meaning in a text, understanding of the connections between specific grammatical forms and the meaning expressed was never developed or assessed. Students were expected to use correct grammar in re-constructing a text (by answering questions, paraphrasing, or summarising), but were not expected to understand or justify their grammatical choices. In the new syllabus, I had already decided to provide explicit instructions engaging students in identifying specific linguistic resources, reconstructing the sentences to re-examine their knowledge of targeted resources and then critically considering the reasoning behind their use (Storch, 1998; 2008; Thornbury, 1997). As the context of their use is informed by the concept of myside bias in this study, critical analysis would involve making the connections between targeted resources and expressing opinion (Principles 1 and 2). To achieve this and in light of the need to create opportunities for interaction, I realised that students would benefit from joint consideration of these connections through interactive or dialogic practices in the activities.

My decision was informed by literature on critical pedagogy (see Chapter 2) and specifically the idea of “dialogic engagement” (Benesch, 1999; Luke, 2004), which I used to consider ways of engaging students in critical discussions of media texts. Using discussions to have learners jointly question and analyse information in texts and then position themselves while critically engaging with each other’s perspectives would potentially present a more interesting form of engaging with language and a meaningful way of situating the expression of

opinion and bias. My initial considerations on the concepts of critical dialogic engagement and literacy in general were recorded in the researcher's journal:

Critical literacy, a concept used to guide the design of the activities, aims at empowering learners to discuss issues and the ways these are portrayed in texts to serve particular purposes and promote specific interests. Dialogic engagement requires learners to elaborate on their own textual representations through consideration and analysis of multiple perspectives. (Researcher's journal, November 2015)

I used critical discussions on content and language to engage learners in identifying and negotiating the expression of opinion. The focus of the discussions was to model and develop ways of systematically foregrounding and sharing understanding of the connections between opinion expressed in texts and the targeted resources. Taking NA findings into account, this could also address faculty members' concerns regarding authentic or meaningful communication and interaction between learners.

To ensure that students with lower levels of language achievement would be able to participate in the discussions, I started the cycles with activities at sentence level, gradually moving to short texts and finally to longer pieces. Particularly in the first two cycles, where students were introduced to the functional perspective on new resources, the use of headlines allowed me to more explicitly and systematically model language practices such as identification, reconstruction, and critical discussion. As students became more confident in engaging in these practices, I found that their ability to discuss language was also facilitated by longer texts. I had to find new material or adapt existing material from the original curriculum to support engagement in critical analysis practices to address the newly identified needs.

In this chapter, I discussed my personal experiences as a language instructor at the university, as well as my initial thoughts on how the local context could create both possibilities and challenges for the proposed intervention. I then analysed data from the needs analysis and drew together the main findings with my initial thoughts to form a clearer view of how the intervention could address learners' needs and challenges. I used the conclusions to revisit the study's theory and research questions. Based on this review, I decided on the priorities for the design of the new syllabus and considered ways of addressing these through an evaluation of the original syllabus. This process helped me identify areas for intervention through the design of the new syllabus. The new syllabus would target the development of students' thinking and language through activities in which critical thinking and language practices, informed by the concept of myside bias, would be explicit and guided. In these practices, SFL understandings of the relation of language to meaning would be used to develop students' understanding of the relationship between specific linguistic resources and the expression of opinion. Finally, the practices used in the new syllabus and repeated throughout the intervention would aim to develop students' ability to critically question and analyse media texts. These priorities or principles formed the foundation on which the design of Cycle 1 was created.

Chapter 5: Analysis of the Design Across Three Cycles

In this chapter, I present analysis of data relating to the implementation and evaluation of the design across the three cycles. Each cycle targets the development of specific linguistic resources and is guided by different but related objectives which inform the activities and material. At the end of the implementation, I present data analysed in the reflection stage of the intervention (see Figure 3.2 in Chapter 3).

In Cycle 1, instruction focused first on having students identify nominalisation and the passive in media texts, and then on developing their understanding of how these resources function to express opinion/bias by emphasising or avoiding specific information. To address these objectives, I used material from student textbooks, as well as headlines, short extracts, and sentences from news reports and articles. Activities began with whole class discussions and pair or group activities, and then shifted to independent work.

Cycle 2 focused on reported speech and modality. The material included textbooks, as well as news broadcasts and articles to involve students in class discussions, collaborative activities, and independent work. While I had introduced students to the SFL concepts of *participant* and *process* in Cycle 1, I focused further on these two concepts (especially *process*) in this cycle. I nevertheless continued to use the language from their textbooks i.e., reported speech and modality expressions, and to refer to the grammatical resources therein.

In Cycle 3, instruction focused on repeating practices of identification, reconstruction, and critical discussion of all the targeted resources from Cycles 1 and 2 in relation to myside bias. Although some of the material was again adapted from student textbooks, opinion articles and news broadcasts, in most activities, students engaged in individual or collaborative analysis of material they selected themselves. In this cycle, my role as instructor involved less scaffolding

and more monitoring of the activities to facilitate students in employing the critical analysis practiced in previous cycles. Although we continued to refer to nominalisation, passive voice, reported speech, and modality using the language from textbooks, the SFL concepts of *participant* and *process* were used more extensively to foreground the connections between targeted resources and myside bias. For the purposes of this thesis and to illustrate the iterative design process, I chose to present the analysis of the most relevant activities.

Table 5.1 presents an overview of the objectives, teaching practices, materials, tools, and data that facilitated the analysis of the activities across the three cycles. Each cycle's analysis will be discussed in its own section in this chapter.

Table 5.1*Overview of the three cycles of analysis*

Objectives	Teaching practices	Material/texts	Tools	Data
Cycle 1				
<p>1) To identify nominalisation and passive voice and explore their contribution in emphasising or avoiding specific information.</p> <p>2) To demonstrate an understanding of the ways nominalisation and passive voice function to promote personal opinion through critical questioning and analysis.</p>	<p>-Whole class discussions</p> <p>- Collaborative activities in small groups or pairs</p> <p>-Independent work</p>	<p>- Headlines from media sources & online opinion articles</p> <p>- PowerPoint presentations</p> <p>- Guidelines on the functions of nominalisation and passive voice</p> <p>- Videos</p>	<p>- Moodle eLearning system for accessing/archiving course material</p> <p>- Google mind-mapping software for organising and sharing ideas</p> <p>- Google Drive for sharing and co-creating documents</p> <p>- Facebook for sharing and commenting on articles</p>	<p>- Individual worksheets & texts:</p> <p>*Identification of nominalisation and passive voice in sentences</p> <p>*Identification of participants/processes</p> <p>*Text reconstruction (nominalisation and passive voice structures)</p> <p>*Comments on the use of nominalisation and passive voice in relation to personal opinion</p> <p>- Students' written reflections</p> <p>- Researcher's journal</p> <p>- Instructional logs</p>

Objectives	Teaching practices	Material/texts	Tools	Data
Cycle 2				
1) To critically identify and explore the functions of reported speech and modality in presenting information.	- Whole class discussions - Collaborative activities in small groups or pairs	- Headlines from media sources & online opinion articles - Archived broadcasts with transcripts - PowerPoint presentations - Handouts on the functions of reported speech and modality	- Moodle eLearning system for accessing/archiving course material - Google Drive for sharing and co-creating documents - Facebook for sharing and commenting on articles	- Individual worksheets: *Reproduction of a broadcast using reported speech and modality *Identification of reported speech and modality in sentences *Conversion of sentences using different types of reported speech and modality *Comments on the functions of reported speech and modality
2) To demonstrate an understanding of the contribution of reported speech and modality in promoting personal opinion.	- Independent work			- Individual texts: *Reproduction of a broadcast using reported speech and modality *Critical evaluation of the combined use of headlines and images - Students' written reflections - Researcher's journal - Instructional logs

Objectives	Teaching practices	Material/texts	Tools	Data
Cycle 3				
1) To critically analyse and discuss the contribution of text in the expression of opinion	-Whole class discussions -Collaborative activities in small groups or pairs	- Headlines/short texts/images from media sources & online opinion articles	- Moodle eLearning system for accessing/archiving course material	- Group and individual worksheets: *Identification and classification of nominalisation, passive voice, reported speech, and modality in texts *Comments on the functions of nominalisation, passive voice, reported speech, and modality
2) To critically synthesise and collaboratively present information from the text to express attitude	-Independent work	- PowerPoint presentations - Videos - Critical analysis guidelines - Guidelines on the functions of nominalisation, passive voice, reported speech and modality	- Google mind-mapping software for organising and sharing ideas - Google Drive for sharing and co-creating documents - Facebook for sharing and commenting on articles	- Students' written reflections - Researcher's journal - Instructional logs - Opinion articles in groups - Focus groups

Cycle 1 Analysis

Cycle 1 consisted of six lessons and 38 activities in total. Six activities were analysed to assess the effectiveness of the design towards the two objectives of Cycle 1. However, for the purposes of the thesis and because of word limitations, I present the analysis of four of these activities. I selected these activities as the most salient and relevant for illustrating the design process. The design's effectiveness in addressing the first objective on nominalisation and passive voice in media texts was evaluated using two activities 9 (A9) and 12 (A12).⁴ A9 involved students in collaborative discussion of headlines in which they explored foregrounding or de-emphasising of information to communicate a specific view. To analyse this activity, I used data from the researcher's journal and instructional logs. Towards the same objective, I also analysed A12, an activity that required students to work individually and identify nominalisation and the use of passive, to unpack these and to comment on the functions of targeted linguistic resources in relation to positioning information. The students' responses were analysed to assess the design's effectiveness in developing their ability to independently identify these functions.

The second objective for Cycle 1 was to develop students' understanding of how nominalisation and the passive function to promote personal opinion. To assess the design against this objective, I analysed A26 from the implementation stage and A37 from the evaluation stage. In A26, learners answered critical analysis questions on part of an article (Appendix I, Critical Analysis of Article 1, part 2) and shared their responses in a whole class discussion. Students' reflections, entries in instructional logs, and my researcher's journal were used to assess the effectiveness of the design in developing students' ability to discuss how

⁴ A complete list of activities can be provided upon request.

nominalisation and passive voice function to communicate opinion. A37 involved learners in independent critical analysis and questioning of sentences from different media sources. The analysis targeted students' ability to distinguish between specific and abstract participants, and to comment on the functional possibilities offered by nominalisation and passive voice to express opinion.

Objective 1

Implementation. This section discusses how the design was assessed towards its effectiveness in developing students' ability to identify nominalisation and passive voice and to explore their contribution in emphasising or avoiding specific information. Students were relatively similar in their ability to identify the targeted resources; however, they were more challenged in discussing the functions of the resources in presenting information in specific ways.

A9 involved pairs of students in reviewing the forms and functions of nominalisation and the passive. This was a step in developing students' ability to identify how nominalisation and the passive function in a text to express opinion. Activities preceding A9 involved students in discussing examples, first in a whole class, teacher-fronted discussion (A7) and second, in joint presentation of examples (A8) of their functional possibilities involving all students and me.

First, students in pairs read selected headlines and sentences about the Palestinian–Israeli conflict, and then searched the internet for related news stories and editorials. The sentences presented a specific same angle of the story, and I encouraged students to explore and discuss different perspectives to the story. In the discussion, I used the sentences to highlight how media supports one side of a story and explained that this could be the result of myside bias. Students could search for Greek-language sources. For the next step, students identified instances of

nominalisation and/or the passive in the headlines and sentences and discussed their use in promoting a specific view. To facilitate the discussion, I provided students with a handout on the functions of targeted resources in expressing opinion, as set out in media textbooks (Appendix F). I designed the handout to be used as a guide providing students with easy access to the formation of targeted resources and their functions in expression opinion. I also included example sentences of the functions to help students in identifying and commenting on the resources.

As recorded in the instructional log, students who were more familiar with the issue were encouraged to share information with their partners to expand perspectives on the Palestinian–Israeli conflict. I monitored student discussions and provided feedback when necessary.

The instructional log states that most students were able to identify instances of nominalisation and the passive. In many responses, as indicated in the table below, agency was foregrounded. Table 5.2 includes some of the headlines discussed and students’ comments.

Table 5.2

Student Comments on Headlines Discussed in A9

Headlines provided to students	Student comments on use of targeted resources
Headline 1: Israeli Troops Shoot Dead Palestinian in W. Bank	Israeli troops highlighted as the subject and Palestinian indicated as victim; described in active voice.
Headline 2: New West Bank Shooting Marks Truce	Palestinian not named as subject/actor, the shooting is described in a nominalised form to avoid mention of who was behind the shooting. Also, Israelis not mentioned at all here.
Headline 3: Israel Kills Three Militants; Gaza Deal Seen Close	Israel named as the actor; Palestinians (“Militants”) are the object the victims; use of active voice
Headline 4: Bus Blown Up in Central Jerusalem	Palestinian is the subject/actor but there is no mention and also no mention of the victims (Israelis). Use of passive voice to avoid referring to the party responsible for this act (Palestinian).

Note. Headlines were adapted from HonestReporting.com.

The activity was effective in generating discussion about the targeted resources and analysis of students' comments shows an understanding of how nominalisation and the passive functioned. Students identified the use of the active voice in Headlines 1 and 3, which named Israeli troops as the subject in violent acts against Palestinians and use of the passive when violent acts were committed by Palestinians in Headline 4. In Headline 2, a student identifies "the shooting" as a nominalisation functioning to avoid mention of the actor or to delete agency for the act of shooting. These comments demonstrate students' ability to identify targeted resources and their function in foregrounding or downplaying information to communicate a position; in this case, in support of Palestinians.

The different ways students referred to participants highlighted challenges in their understanding of the ways nominalisation and the passive/active functioned to present information. As recorded in the log, students sometimes referred to the entity committing the action as the *subject* and sometimes as the *actor*. They also referred to the entity experiencing the action as the *object* or *victim*. Even though students were using grammatical terms used in their textbooks, I realised this language was potentially obscuring how the targeted linguistic resources functioned in expressing opinion. In turn this was potentially making it more difficult for learners to understand the ways language can function to present participants as *impacting* or *being impacted by* an action. Reflecting on the data, I concluded that replacing terms such as *actor*, *subject*, *object* and *agent* from traditional grammar in instruction with the term *participant* from SFL, could develop students' understanding of how targeted resources could function to express opinion through different choices in participants.

Records in the instructional log show how students are beginning to acknowledge how a position is communicated through the ways information is presented:

Έχω ακούσει για αυτό το θέμα τόσες πολλές φορές στις ειδήσεις και αυτή είναι η πρώτη φορά που συνειδητοποιώ ότι οι πληροφορίες μπορεί να παρουσιάζονται μονομερώς ή υπέρ της μιας πλευράς.

I have heard about this issue so many times in the news and this is the first time I realise that information may be one-sided or presented in favour of one side. (Instructional log, 22 February 2016)

Though the student was quite familiar with the Palestinian–Israeli conflict, they reported it was the first time they could actually see how information can be presented to promote a specific perspective. It seems, therefore, that drawing attention to language in this activity was already allowing students to discover new ways of evaluating information. Acknowledgement of the connections between language and meaning was recurrent in student reflections on A9:

Είναι πολύ σημαντικό να μπορεί κάποιος να δει πως η γραμματική μπορεί να διαμορφώσει το νόημα γιατί με αυτό τον τρόπο μπορεί να συνειδητοποιήσει πως η γλώσσα μπορεί να επηρεάσει τις απόψεις μας...τον τρόπο σκέψης μας.

It's very important to be able to see how grammar can change meaning, because you realise how language can really affect our views and opinions... our way of thinking.

Here, another student emphasises the importance of grammar in shaping the ways we make meaning. This is an important consideration, as it indicates the effectiveness of the design, even at this early stage, in enabling an understanding of how language relates to the ways we make meaning.

The emerging awareness of the contribution of grammar in expressing opinion was followed by students paying close attention to functions of nominalisation and the passive voice. I hadn't expected this degree of progress so early in the cycle, nor had I prioritised familiarity with the topic. Yet, two students' reflections discussed the difficulty of analysing the contribution of the targeted resources when they were unfamiliar with the topic:

Ίσως να μπορούσα να καταλάβω την χρήση συγκεκριμένων λέξεων σε συγκεκριμένα σημεία αν γνώριζα καλύτερα τα γεγονότα πίσω από τους τίτλους.

Perhaps I would be able to understand the reasons behind the use of specific words in specific positions if I knew more about the events behind the headlines.

However, the phrase “the use of specific words in specific positions” is another clear indication of the design's impact in developing students' understanding of the connection between language and meaning and more specifically the contribution of language in shaping meaning. Going back to these reflections and the instructional log, I realised that, while I had noticed students at lower proficiency levels asking for clarifications, I had assumed (and noted in my log) that it was their level of linguistic proficiency that had perhaps been the barrier to participation:

The activity seems to be more challenging for weaker students. As it is important to get everyone involved, so I allowed students to clarify the different views on the issue behind the headlines in Greek, if they felt it was necessary. (Instructional log, 22 February 2016)

As indicated in the extract from the log, I had attributed the reluctance to participate to the student's low linguistic competence and not to the fact that they were unfamiliar with the topic discussed. This gap in understanding contributed to the design in two significant ways. First, as the instructor, I needed to be more careful with my assumptions about how factors other than language might compromise students' capacity to participate. Lack of familiarity with the topic

seems to have been one such factor. Students who knew or were interested about the topic participated more, while those who were not familiar with the topic were limited. Reflecting on data from the log and student reflections, I also realised that the Palestinian–Israeli conflict was a topic on which most students concurred, and this may have undermined the effectiveness of the design in foregrounding myside bias. Perhaps topics and material that brought out multiple perspectives would allow me to more effectively frame discussions around the expression of personal opinion so as to make language/meaning connections clearer to the students. A second consideration concerns the effectiveness of the research design in capturing the difference between my log and the students’ reflections for triangulating data. I realize for example that while teaching I underused my log which would serve in going back to activities to understand how things developed. Such gaps were however in many cases, filled by data from students’ reflections. This is important in the design of activities for the following cycles as well.

Another feature of the design commented on in many student reflections was the use of the language function guidelines (Appendix F):

Το βοήθημα με τις γλωσσικές λειτουργίες και παραδείγματα που είχαμε μου έδωσε περισσότερη αυτοπεποίθηση. Συνήθως καταλαβαίνω όταν η καθηγήτρια μας εξηγά τη σχέση γλώσσας και άποψης αλλά δεν είμαι σίγουρος αν θα μπορούσα να τα εξηγήσω εγώ χωρίς το βοήθημα. Ίσως και να μην το δοκίμαζα καθόλου.

Having the function grid as a guideline in this activity made me more confident. I usually understand when the teacher explains the connections between language and attitude, but I am not sure if I could explain them by myself without the grid. I probably would not have attempted it!

In their reflection, the student emphasises the significance of the guidelines not just in facilitating understanding, but also in developing the ability to talk about language, and more specifically to explain connections between language and how opinion is expressed. There is a significant point here in terms of the type of development identified, as the student refers to a development in using the language towards explaining and not just comprehending the use of language, which they attribute to the use of guidelines.

The instructional log also reflects the guidelines' value; "The scaffold facilitated the discussion around language especially for those students who could identify opinion in the text but could not easily talk about it. Many students referred to the scaffold during the discussion" (Instructional log, 22 February 2016). Again, the value of a shared metalanguage in discussing the functions of the targeted resources is highlighted. Such observations confirmed the contribution of these guidelines as a scaffold:

The scaffold will be used as a point of reference; a students' guide to talking about the connections between linguistic resources and how these function to express opinion. It may not be useful for everyone but I am sure it will support some students in different stages of the activity, to identify the resources, to understand their contribution to the opinion expressed and most importantly to have the confidence or competence to express themselves. (Researcher's journal, 24 February 2016)

Thus, evidence suggests the guidelines supported the achievement of the design's objectives in different ways. I had included a list of functions and examples of these, students could use in identifying and discussing similar instances in new material. I had also spent time going over this material and modelling how the guidelines could be used to talk about connections between

targeted resources and expressing opinion in class discussions. They have been used both as a way to structure activities and as a resource for students at different stages of the activities.

Analysis showed that the design of A9 has been effective first in raising students' awareness of how language relates to meaning and then in developing their understanding of how nominalisation and passive voice structures may present information to support an opinion. While some students were challenged because they were not very familiar with the topic, data indicated that on the whole, participation in the activity was facilitated by the class discussion and the guidelines. Both were useful in introducing a shared metalanguage for discussing language, which students found valuable. Reflecting on how the first objective was addressed, I concluded that components of the design, such as class discussions and guidelines should be further explored to support students in identification and discussion practices foregrounding the contribution of grammar in expressing opinion. At this point in the intervention, I started to realise that the language I was borrowing from textbooks to refer to grammatical terms (subject, actor, etc.) was potentially limiting students' understanding of the functions of the resources I was targeting. I also began to identify problems with the use of textbook language on *expressing opinion*, which was not consistent with the theory on myside bias or the ideas I wanted students to engage with. However, I continued to use this expression to discuss opinion and bias as I was not aware yet that this would create more challenges later in the intervention.

Evaluation. To assess students' development towards the first objective at the end of the first cycle, I analysed A12. It involved students in repeating previous collaborative practices and was used to assess the effectiveness of the design in developing students' ability to perform these practices independently. This activity required identifying nominalisation and the passive voice

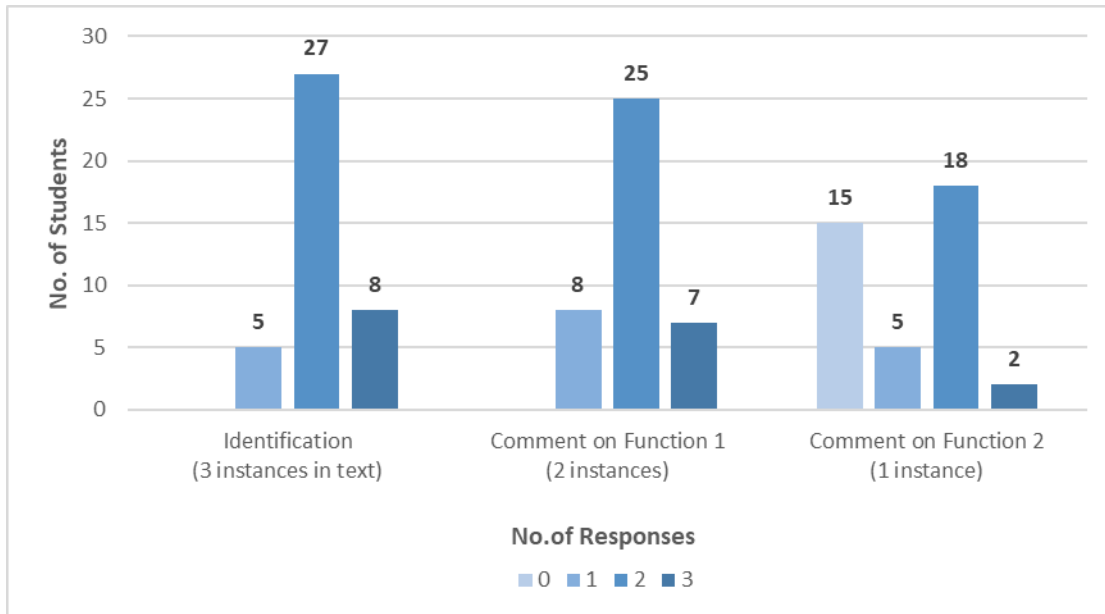
in sentences, unpacking these and commenting on the contribution of targeted resources in emphasising or avoiding specific information.

Identification and Commenting on Function. In A12, students were given four sentences which included three instances of nominalisation and two instances of use of the passive (Appendix I, A12 Handout). Students were instructed to first highlight the targeted forms and then rewrite the sentences to de-nominalise or turn the passive into active voice. The last step of the exercise required students to compare their reconstructions to the original sentences, consider the functions of the grammatical resources and comment on the differences in meaning using the guidelines (Appendix F). I expected students to assign two (out of three) nominalisations and one instance of the passive to avoiding the expression of judgement (Function 1). I also expected them to assign one instance of nominalisation and one instance of the passive to the resources' function in allowing for multiple interpretations of an event (Function 2).

Figures 5.1 and 5.2 show the number of students (40 students) who identified and commented on the functions for each of the targeted resources as coded in the data.

Figure 5.1

Results for Nominalisation in A12



Note: Function 1: to avoid expressing judgement, Function 2: to allow for multiple interpretations.

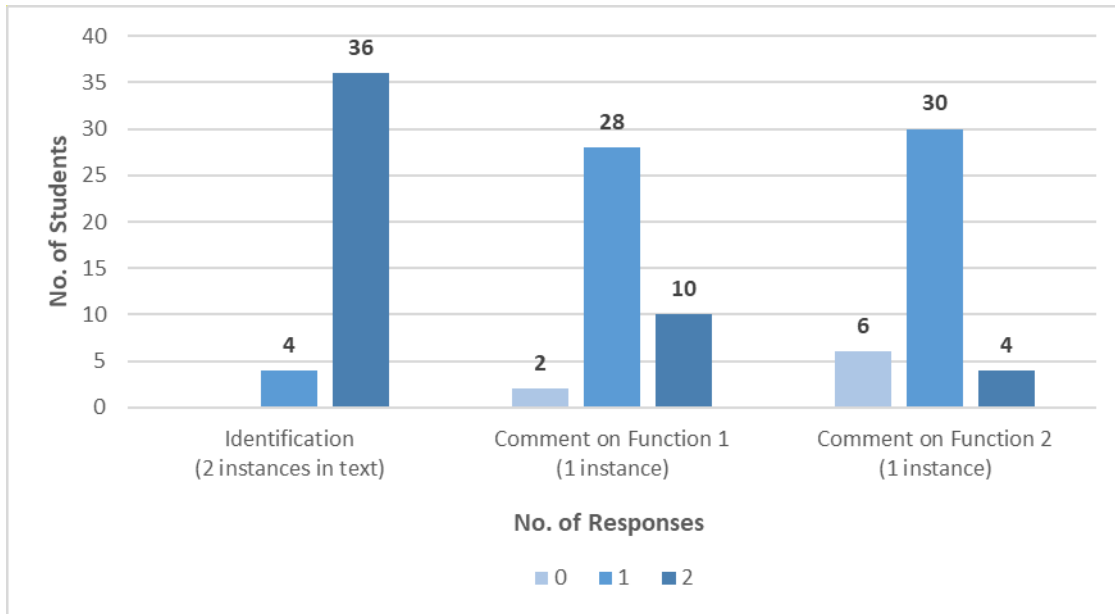
Thirty-five out of 40 students (87.5%) identified at least two of the three instances of nominalisation; eight identified all three. Thirty-two (80%) identified and commented on the two instances functioning to avoid expressing judgement (Function 1). However, only 25 students (62.5%) commented on just the two instances. Seven out of 40 (17.5%) students commented on Function 1 three times, and eight students (20%) commented on only one instance. Students misidentified or inaccurately commented on some instances of use. For example, although there were two instances of Function 1 of nominalisation (to avoid the expression of judgement), two students commented on three and 15 students did not comment on any.

Twenty-five students (62.5%) identified the one instance in which nominalisation allowed for multiple interpretations (Function 2) but only five students (12.5%) commented. Eighteen students (45%) twice inaccurately assigned the use of nominalisation to Function 2 and

two students (5%) did so three times. Finally, as shown in Figure 5.1, 15 out of 40 students (37.5%) failed to recognise any instance related to Function 2. Overall students did quite well in identifying nominalizations however there were quite a few instances of over and under-assigning functions.

Figure 5.2

Results for Passive Voice in A12



Note: Function 1: to avoid expressing judgement, Function 2: to allow for multiple interpretations.

All students identified at least one of the two instances of the passive and 36 out of 40 (90%) identified both. Thirty-eight (95%) commented on the instance functioning to avoid expressing judgement (Function 1). However, only 28 students (70%) commented on just one instance. As with nominalisations, students over-identified and commented on more instances than the one expected. In 10 out of 40 (25%) responses, students commented on Function 1 twice. Also, two (5%) students did not comment on the specific function at all.

Thirty-four students (85%) accurately commented on the one instance of Function 2 of the passive, which was to allow for multiple interpretations of an event. While 30 (75%) responses accurately related to just the one instance, four (10%) assigned the use of passive to Function 2 twice. Finally, 6 out of 40 students (15%) failed to recognise any instance related to Function 2. Students did very well in identifying the passive; while there were a few instances of

mis-assigning functions, students generally performed better in both identifying and commenting on functions for the passive than nominalisation.

Table 5.3 includes samples from students' completed activities that have been selected to represent a range of English competence levels and for their relevance in assessing the design.

The sections involving identification and reconstruction are underlined.

Table 5.3*Reconstruction and Comments on Targeted Resources for A12*

Resource	Original sentence	Reconstruction	Comment on function
Nominalisation	1. <u>Inadequate provision</u> of appropriate shelter to refugees arriving in Italy has put people in danger	S30: <u>The Italian local authorities have insufficiently provided</u> appropriate shelters to the refugees, thus putting people in danger.	“Here the nominalisation helps avoid giving specific information allowing for multiple interpretations of the event. I think original version is safer because of politics”.
		S23: <u>The Italians have not provided</u> appropriate shelters to the refugees, and so they put people in danger.	“The nominalisation is used to de-emphasise the subject. I would first make sure whose fault it is before I assigned the responsibility”.
Passive voice	2. Same-sex couples and their families deserve <u>to be protected</u> just as their heterosexual friends and neighbors.	S15: <u>The government should protect same-sex couples and their families</u> just as their heterosexual friends and neighbors.	“Original sentence avoids assigning responsibility (Function 1 from table). Maybe this newspaper supports current government and they did not want to show their faults”.
		S35: <u>The law should protect</u> same-sex couples and their families just as their heterosexual friends and neighbors.	“The author used passive here because he doesn’t want to say who should protect gay people. So, to allow for multiple interpretations of this. I would say it’s the law that is responsible”.

Note. S = Student

All students demonstrated some understanding of the contribution of the targeted resources in indirectly communicating a point of view, although it varied with the students' proficiency. After analysing all the data, the examples included in Table 5.3 were chosen to represent different levels of understanding. Student 30 one of the most proficient students, successfully identifies and unpacks the nominalisation in the first sentence. In their reconstruction, they use the nominal group "Italian local authorities" as the subject of the new sentence and conclude that the nominalisation in the original sentence served to present information in a more abstract way, so as to allow for multiple interpretations of the event described. The student also attributes this choice to the author's decision to maintain a more neutral or "safer" position with regards politics. For the same sentence Student 23 a least proficient student, uses a more general noun – "Italians" – to unpack the nominalisation and assigns its use to the author's choice to make the subject of the sentence abstract and so avoid assigning responsibility for the situation to someone specific without knowing exactly "whose fault it is". It is interesting to note that through the reconstruction, the student shows awareness of how nominalisation contributes to presenting a more neutral perspective. What is not evident in the student's answer is whether they understood the difference between the functions; however, at this point in the cycle, identifying targeted resources and understanding how they contribute in promoting opinion was the main objective.

In the second sentence, Student 15 uses the noun "government" as the subject of the new sentence in the active voice and concludes that the use of the passive in the original sentence served to avoid blaming the government for not protecting same-sex couples and their families. The student justifies their answer by concluding that this choice may be an indication of the author's support towards the government, which shows an understanding of how the passive

voice functions to promote an opinion. In assessing the design, it is interesting here also to notice how reconstructing the sentence allowed the student to consider the difference in the perspective between the two sentences. This indicates an understanding of the contribution of the passive in de-emphasising information to express opinion. For the same sentence, the comment made by Student 35 a lower achieving student, also indicates an understanding of how the passive voice contributes to de-emphasising information. In reconstructing the sentence, the student uses the abstract noun “law” as the subject of the active verb in the new sentence; they comment on how the passive functions to make information abstract, allowing readers to make their own assumptions of who should protect same-sex couples and their families. While it is not clear why the student chose to assign the use of the passive to the specific function, the justification of their choice indicates the effectiveness of the design in developing their understanding of the connections between the use of the passive and the opinion expressed.

Overall, analysis showed students performed very well in identifying instances of the passive and relatively well in identifying nominalisation. While there were instances of over- and under-assigning functions for both, students performed better with respect to use of the passive than with nominalisation. It is possible that students generally found identifying the functions of passive less challenging than nominalisation. Analysis indicated that challenges in assigning functions for both the resources may have resulted from a poor understanding of the difference between the functions. Performance in commenting could have been impacted if students random selected from the options provided in the handout. Moreover, because the sentences were presented in isolation, lack of familiarity with the sentence topic may have limited students’ understanding of how the resources functioned in expressing opinion.

Fine-grained analysis of students' comments, indicated that the design of A12 has been effective in developing students' understanding of the contribution of the resources in emphasising or avoiding specific information, to a certain degree. At this point in the intervention, there is a distribution of abilities in discussing the resources' functions that appears related to understandings of the differences between functions or/and an over reliance on the guidelines. Specifically, while in many cases students' comments following reconstruction indicated a good level of understanding of the possibilities offered by the resources (as outlined in the handout), for the passive more than for nominalisation, in positioning information to emphasise or de-emphasize it, it was not clear whether students were aware of which function the resources were serving in communicating a specific view.

Implications. The first objective of Cycle 1 was to develop students' ability to identify the targeted resources and explore their contribution in emphasising or avoiding specific information. Analysis indicated that the objective was achieved to a certain extent especially with regards identification. The design was also quite effective in developing students' awareness of the potential of resources in positioning information. What is not evident at this point in the unit is whether students had understood the different possibilities between the resources' functions. Based on this assessment, the following considerations will be used to revise the design so as to address the research questions.

Critical Discussions. To achieve a better understanding of how targeted resources function to convey opinion, the relationship between myside bias and these resources needs to be further explored. One way to facilitate this understanding could be to make the concept of myside bias more central in discussing language. This would mean further developing students' understanding of what is involved in expressing myside bias, the differences between expressing

myside bias and expressing opinion, as well as the ways in which this type of bias is manifested in language. The design should thus be more focused on developing students' understanding of the connections between targeted resources and myside bias so as to achieve a better understanding of the resources' functions. Use of better metalanguage to discuss how targeted resources function to place information in specific positions in a sentence could also support students' understanding of the connections between language and myside bias. As already highlighted in the analysis, using grammatical terms such as *subject* and *object* – borrowed from student textbooks – may limit students' understanding of resources' functional possibilities. The metalanguage to replace these terms should be used by students as part of critical analysis discussions.

Selection of Material. Analysis also showed that the context provided by the sentences used in the activities was not always enough for enabling students' understanding of the resources' functions in expressing opinion. Another possible way therefore, to facilitate students' understanding of these functions is the use of texts such as news reports or articles. Engaging in practices of identification, reconstruction and analysis through longer texts could facilitate students' understanding of the connections between targeted resources and the ways myside bias is expressed. Analysis also showed that students might have been particularly challenged in engaging with sentences including instances of nominalisation rather than the passive. The choice of resources thus could have also impacted the effectiveness of the design in supporting students.

Finally, although using the language function guidelines was valued by students as indicated in their responses (A12) and reflections (A9), it is not certain whether this use was beneficial, as many responses seemed to just replicate the examples or the language in the

guidelines. Considering that this was the first time students were asked to comment on resources' functions independently, an over-reliance on the guidelines was expected. Therefore, while it was useful to include guidelines to support students, it might have been better if the design had provided ways of using them in a less controlled manner.

Objective 2

Implementation. The following section discusses how the design was assessed towards its effectiveness in developing students' ability to critically analyse targeted resources function in communicating opinion. While the design seems to have broadened students' awareness of the linguistic choices available through reconstruction, their comments were largely dependent on the guidelines provided to support critical analysis.

To assess the design against the second objective, I analysed A26, which involved students in critical analysis of an article entitled "When the media misrepresents black men, the effects are felt in the real world" (Appendix I). The article was selected to provide textual context on racism, an already discussed topic. Specifically, the first paragraph of the article had been analysed in a previous class discussion (A25). During A25, I used specific sentences from the paragraph to model identification and reconstruction practices so as to foreground and review the connections between targeted resources and their functions in expressing opinion. To draw students' attention to important entities in the sentences and facilitate their understanding of how these entities were impacted by targeted resources in expressing opinion/bias, I emphasised the use of the term *participant*, which I used to replace the terms *subject* and *actor* from student textbooks. I explained that in discussing language using the more general term *participant*, as one who participates in an action either by acting or being acted upon, would allow us to more effectively refer to any entity affected by a verb or process, regardless of the grammar used.

In A26, groups of students critically analysed two paragraphs of the article that had been used in the previous activity (A25). The activity required identifying and discussing the functions of targeted resources in expressing myside bias. Students were encouraged to refer to their Critical Analysis Handout (CAH1; see Appendix J), as well as the language function guidelines (Appendix F) to justify their answers. Although the activity essentially involved students in answering questions on the text, I used the expression “critical analysis” in the design because I wanted students to feel that they were doing much more than answering questions. The aim was for them to notice how questioning a text gradually developed into a process of critical thinking and of evaluating content in relation to personal opinion. This process included questions guiding students in repeated practices of identification and discussion of the contribution of nominalisation and the passive to express opinion. During the activity, I monitored the group discussions and provided feedback when needed.

Following groupwork, answers to the questions provided on a handout (Appendix I, Critical Analysis of Article 1, questions on paragraphs 2 and 3) were shared in a whole class discussion. Several responses for the same question were read to ensure that students had a chance to review and refine their answers. During this process, some answers were displayed on screen. In many cases, I used strategic questioning which I based on the critical analysis questions students had already answered to guide them in reconsidering their answers. My questions focused more on who the author was and how the language functioned to relate the events described to the opinions expressed. As required by the design and modelled in the previous activity (A25), I encouraged students to use the concept of *participant* to emphasise the way information was presented.

Because I didn't audio record classroom interaction, the data analysed in this section is limited to records in my log (students' responses to questions on paragraphs 2 and 3 of the article), student reflections, and entries in my journal. Records in the instructional log show that I asked questions such as "Who is the participant in this sentence?", "How is the participant referred to and why?", "What are the different perspectives presented?", "What are the reasons for presenting these in this way?", and "How do specific words and the structure contribute to the text in terms of meaning?". The log also indicates that several groups discussed how the choice of linguistic resource enabled the author to refer to subjects in sentences sometimes as concrete entities, and in others, as abstract and general concepts.

As already mentioned, students' responses to the questions were first discussed in their groups and then shared with the rest of the class. One response was displayed on the screen by each group. Analysis of group responses demonstrated a development in students' ability to notice differences in the use of participants, even though the sentences I had used were not appropriate in making targeted forms salient. The following is a response displayed on the screen and recorded in my log:

In the sentence "These portrayals constantly reinforced in the media...." the word portrayal is very general and may refer to anyone having these negative ideas and that is perhaps the reason why the subject of this sentence is de-emphasized with the help of the passive voice. (Group response to Appendix I, Question (a) on paragraph 3, Instructional log, 29 February 2016)

It is interesting to note that, although the sentence did not include a passive, as students commented, but a rank-shifted clause, they managed to identify the noun "portrayals" as the "general" subject of the sentence and acknowledge its use in making the information in the

sentence abstract. Here, the students thus acknowledge the contribution of a general noun in de-emphasising information potentially to avoid attributing responsibility, even though their reference to the subject does not show clear understanding of what exactly is made abstract or avoided in the sentence.

In the answer below, a group identifies and comments on the function of the active voice to present a fact:

In “Officer Darren Wilson, who shot and killed the unarmed black teenager” the author is presenting a fact, something that happened and cannot be denied. We think he is using the active voice here to emphasize a concrete and very specific identifiable subject to highlight the event and to show that he disapproves of this kind of behavior. (Group response to Appendix I, questions on paragraph 2, Instructional log, 29 February 2016)

This answer combines a belief that the active voice presents information as factual, with an unsupported claim that the author disapproves of the officer’s behaviour. It is important that students also notice the subject here, and acknowledge its specificity in emphasising the information in the sentence. While not completely supported, the justification indicates that the design has led students to consider language and the expression of opinion, thus developing students’ ability to think through language.

Overall, students performed quite well in identifying and commenting on how the use of different participants served in emphasising or avoiding information. Analysis of students’ responses however also showed that students were somewhat limited in their explanations of the different functions of the resources. Going back to the design, I realise that these limitations could have resulted from the wrong choice of material. In retrospect, I had asked students to discuss functions in examples in which the targeted forms were not salient and I can see how

this could have compromised students' ability to think about and discuss the targeted resources. Additionally, students may have been challenged by the specificity of the questions and the examples included in the guidelines on resource functions. Finally, although the term *subject* was replaced with *participant* in discussions of the activities designed for Objective 2, students were not explicitly instructed to use the term *participant* in their responses. This may have allowed students to think about and explain how targeted resources were functioning in the sentences.

My researcher's journal and students' reflections suggest the class discussion contributed in foregrounding specific linguistic choices and relating them to the position taken by the author. Collaborative questioning furthered these connections as I observed in my journal:

I think that I have finally managed to get most of the students to talk about the connection between grammar and the meaning expressed. These connections were not as clearly explained in many of their answers before the discussion. Understanding the context in which grammatical phenomena function to present opinions really helps but clearly students need more practice in discussing these. (Researcher's journal, 2 March 2016)

My increasing awareness that it was not just the textual context, but rather explicit attention to language through collaborative questioning that empowered students to critically reflect on the relationship between grammar and meaning, was also highlighted in the analysis of students' reflections on A26:

Ήθελα πραγματικά να πάρω μέρος στη συζήτηση γιατί είχα διαβάσει πολλά για αυτό το θέμα στα Ελληνικά, έχω δει πώς κάποιιοι άνθρωποι το παρουσιάζουν σαν κάτι τελείως διαφορετικό (ο Ρατσισμός να παρουσιάζεται σαν πολιτικό θέμα) και πραγματικά πιστεύω

ότι είναι πολύ ενδιαφέρον. Μέσα από την συζήτηση, ακούμε διάφορες απόψεις και έτσι είναι πιο εύκολο να συνδέσουμε την γλώσσα με την εκφορά άποψης.

I really wanted to take part in the discussion because I have read a lot on this subject in Greek, I have seen how some people present it like a completely different issue (racism presented as a political issue) and I really think it is very interesting. Through the discussion, we listen to different opinions and so it is easier to connect language to the ways personal opinion is expressed.

Here, the student's comments on how personal perspective may serve to portray a topic differently. The student also acknowledges the impact of the class discussion in understanding the connections between personal opinion and the language used. Another three students commented on how the class discussion facilitated their engagement with language in their reflections. The student's reflection above may also suggest that familiarity with the topic allowed for clearer connections between the author's linguistic choices and the position communicated. These are important considerations in assessing both the instructional practices and material used in this activity.

Thus, the analysis points to a growth in students' understanding of the connections between targeted resources and meaning which was developed from explicit attention to the ways language functions to communicate position. This indicates the effectiveness of the critical discussion in foregrounding these connections.

Evaluation. To assess the design's effectiveness in supporting students to achieve Objective 2, I analysed A37 (Appendix I), which engaged students in independently repeating practices of identification, reconstruction, and critical consideration of the functions of targeted resources in expressing opinion/bias. Students were provided with specific instructions to (a)

identify participants in the sentence and categorise them as specific or general, (b) reconstruct selected sentences, and (c) compare reconstructions to the original sentences and comment on the functions of passive voice and nominalisation in presenting information to communicate opinion. The five sentences and instruction for the first step (identification) in A37 are shown in Table 5.4. Students were expected to identify two specific participants (underlined in sentences a. and b.) and three abstract (underlined in sentences c., d., and e.).

Table 5.4

Sentences in A37

Underline the participant⁵ (subject/actor/object that performs or undergoes the action) in the following sentences. Then classify it as specific or general.

- a. Officer Jennifer Wide shot the suspect because he was armed.
 - b. The suspect was shot because he was armed.
 - c. People's attitudes can be manipulated through the use of gender stereotypes in advertisements.
 - d. The hegemony of males is being promoted in many ways nowadays.
 - e. Generalizations or misrepresentations of specific groups create false images of the reality.
-

Identification and Categorisation of Participants. Students' choices in types of participant for A37 are shown in Table 5.5.

Table 5.5

Categorisation of participants in A37

Type of participant (specific vs general)	No. of students (total 40)
Sentence a/Specific	37
Sentence b/ Specific	34
Sentence c /General	27
Sentence d/ General	28
Sentence e/ General	30

⁵ Use of the term participant is not consistent with SFL here.

“Officer Jennifer Wide” was identified as a specific subject in sentence a. by 92.5% of the students, while fewer students (85%) identified “the suspect” as a specific subject in sentence b. The use of the passive in sentence b. may have impacted students’ understanding of the participant as specific. As shown above, students were slightly less effective in identifying general participants in the three last sentences even though the majority answered as expected. Around 70% of students categorised participants as general in sentences c and d, whereas a higher percentage of students (75%) identified the general participant in sentence e. Again, students were more successful in identifying and classifying the participant in a sentence in the active voice. It is not evident in this data however, whether attention to how reconstructions using the active/passive voice change the focus in sentences has influenced students’ thinking on the types of participants used.

Reconstruction and Commenting on Function. As already mentioned, the second step in A37 asked students to add an actor in sentences c, d, and e and then comment on the differences in construed meaning. Nearly 90% of students used specific participants such as the media, education and society to rewrite the sentences. There were no pre-defined answers for this step of the activity. Student comments on how the resources were used were considered accurate if they could be justified by explaining the functional possibilities related to myside bias which had been foregrounded in the design. Table 5.6 shows students’ choices in targeted resources functions in sentences c., d., and e.

Table 5.6*Responses on Functions for Targeted Resources in A37*

Sentence (c)	No. of students (Total 40)
Function 1: To avoid expressing judgement	30
Function 2: To allow for multiple interpretations	10
Sentence (d)	
Function 1: To avoid expressing judgement	12
Function 2: To allow for multiple interpretations	28
Sentence (e)	
Function 1: To avoid expressing judgement	26
Function 2: To allow for multiple interpretations	14

In their comments following reconstruction for sentence (c), 75% of the students attributed use of the passive voice to the author's intention to avoid assigning responsibility to a specific entity. The remaining 25% said the passive was used to allow the readers to make their own interpretations of who manipulates peoples' opinions through advertisements. Most students (88%) selected "the media" as the new participant in their reconstruction of the sentence. The context provided – the use of gender stereotypes in advertisements to manipulate viewpoints – seems to have highlighted the "media" as the entity most likely responsible. Students' choice of function to justify the use of passive in the original sentence was therefore considered accurate.

For sentence (d), 30% of the students said the passive made the participant general so as to avoid directly expressing judgement, while 70% commented on the use of the resource to

allow readers to make their own interpretations of the statement or information provided. In this sentence, students' assumptions of who may be promoting "the hegemony of males" were much more general than in sentence c., as indicated in their reconstructions and their choice of function for the passive voice. Specifically, there were various possibilities provided in students' reconstructions with nouns such as "the media", "education", "the government", "older people" or "society". The different possibilities highlighted by analysis thus justify the decision by most students to comment on how the passive functions in this sentence to allow for multiple interpretations. Analysis here indicates the design's effectiveness in developing students' understanding of the function of the passive to create possibilities in communicating a position.

The nominalisations in sentence (e) were attributed by almost 65% of the students to presenting information in an abstract way to allow for multiple interpretations of the statement. Only around 20% of the students commented on the use of nominalisation in the original sentence to avoid assigning responsibility to someone specific (mostly the media) for misrepresenting specific groups. In most of the rewritten sentences (85%), "the media" was the new participant. Identifying nominalisation as functioning to allow for multiple interpretations of the statement, while at the same time highlighting the media as the entity mostly responsible for this, may result from poor understanding of the function of nominalisation in sentence e., or that some students randomly selected a function from the guidelines. In assessing the design, students should perhaps have been instructed to provide more than one alternative in their reconstructions. This would have further engaged them in thinking about possibilities and would have provided more insights into the development. Fifteen percent of students did not comment on the use of nominalisation in sentence e. at all.

Fine-grained analysis of students' comments provided insights into their understanding of how the passive voice and nominalisation functioned to communicate opinion in the sentences.

Table 5.7 includes original sentences, samples of students' reconstructions and their comments on the resources' functional possibilities as understood after comparing the two. While all student responses were analysed, the specific data was selected based on the comments' relevance in assessing the design to represent students of different achievement levels. Participants added by students in their reconstructions are underlined.

Table 5.7*Reconstructions and Comments in A37*

Resource	Original sentence	Sentence Reconstruction	Comment on function
Passive voice	c. People's attitudes can be manipulated through the use of gender stereotypes in advertisements.	<u>Advertisements</u> use gender stereotypes to manipulate the peoples' attitudes.	S20: To avoid giving specific information allowing for multiple interpretations of an event so as to avoid assigning responsibility and expressing judgment.
	d. The hegemony of males is being promoted in many ways nowadays	<u>The Media</u> promote in many ways the hegemony of males.	
	c. People's attitudes can be manipulated through the use of gender stereotypes in advertisements	<u>Media people</u> use gender stereotypes to manipulate the peoples' attitudes.	S16: This is different because the verbs 'use' and 'promote' need a subject and so the author should give specific information. By using 'Media people' and 'the society' the sentences are not any more general or allow for multiple interpretations.
	d. The hegemony of males is being promoted in many ways nowadays	<u>The society</u> promotes in many ways the hegemony of males.	
Nominalisation	e. Generalizations or misrepresentations of specific groups create false images of the reality	<u>The media</u> misrepresent or generalize specific groups and so create false images of the reality	S36: When we add a subject, we can directly say that misrepresentation is created by the media. The author used nominalisation to allow the reader to decide and cover his own opinion.
	e. Generalizations or misrepresentations of specific groups create false images of the reality	<u>Advertisers</u> misrepresents specific groups create in this way false images of the reality	S18: The author is expressing an opinion and we know it because he uses nominalisations to cover (the subjects) who misrepresents specific groups. He doesn't want to blame someone specific. When he presents facts we see clear subjects.

Note. S = Student

Most students engaged in sentence reconstruction in A37 quite proficiently. Many also demonstrated good understanding of the possibilities offered by targeted resources in communicating a position, although this varied with students' proficiency. S20, a student of average linguistic competence, shows an understanding of participants and processes, as well as a good level of competence in turning the sentence into active voice. Furthermore, the student effectively adds new participants: "Advertisements" in sentence c. and "the Media" in sentence d. The reconstructions allowed them to assume that the active was used to avoid making specific reference to specific entities. S16, a student of high linguistic competence, correctly reconstructs the sentences following the instructions given and demonstrates an understanding of what changes in the sentence in terms of the way information is presented. S36, a student of average to low linguistic level, demonstrates a good level of competence by adding a specific participant in sentence e. and acknowledging the difference in meaning. Their comment on how the nominalisation functions to allow the author to indirectly express an opinion further shows an understanding of how the meaning changes in relation to the functional possibilities foregrounded by the instructional design. However, as mentioned earlier, the student belongs to the 85% who nominated "the media" as the subject in their reconstruction of sentence e., but at the same time commented on the function of nominalisation to allow readers to make multiple interpretations. It is not evident therefore that the student had understood how the nominalisation functions in this sentence which, as already mentioned, may indicate the ineffectiveness of the design to provide opportunities in developing understanding of the distinctions between the ways nominalisation functions to express opinion. S18, a student of low achievement level, identifies opinion through the use of nominalisation in sentence e., which they correctly associate in their comment with the short phrase "who misrepresents specific groups". This association and the

reference to the use of “clear subjects” to present a fact in reconstruction and comment indicate a good level of understanding of how nominalisation functions to present information in more abstract ways. Taking into consideration the student’s language level (inconsistencies in verb–subject agreement) and the fact that this answer was individually completed, we may conclude that the design has been effective in developing their ability to critically question and analyse the way nominalisation functions to express myside bias in sentence e.

Students’ comments on the use of targeted resources after comparison of the original sentences to the reconstructions were generally based on the functions discussed through the design. Although most of the comments made could effectively be justified by the functions in relation to the position communicated, many students over relied on the guidelines on language functions (Appendix F) to write these. For example, although the design seems to have enabled S20 in their critical analysis, it is difficult to know whether they would have been able to comment in the same way if they had not been facilitated by the guidelines. More specifically, the student comments using language from the guidelines, and even though their choice of function can be justified in the context in which it was made, their response seems confined by the options and language provided, making it difficult to know if they really understood the function of the passive voice in the example. S16 makes a correct observation with regards the specificity of the new sentences by highlighting the need to include participants to turn the sentence into active voice. However, they are also relying on the language in the guidelines to justify their answer. It is interesting to note that even students of quite high linguistic competence, like Student 2, commented in a very general way on the functions of targeted resources. Student 2 repeats the language used in the guidelines and class discussions (“shift responsibility”, “opinion-based”) in their comment. Over-reliance on the guidelines to justify the

author's use of the passive in the original sentence makes it difficult to assess their understanding of how it functions to express opinion.

Analysis of A37 indicates that, although students' reconstructions were not always grammatically accurate, there was a development in their understanding of the functional possibilities offered by nominalisation and passive voice. This understanding seems to have been facilitated by learners' involvement in repeated, joint practices of identification, reconstruction, and discussion of targeted resources: "It was very important to work gradually in this activity. Every step was different, I had done this before and every time I managed to complete one I could see how it helped me understand better" (Student reflection on A37, March 2016). The student here comments on how, working gradually through the different steps in the activity, they could recognise a development in their understanding. The student also points to the effectiveness of having gone through the same steps before. This was a point found in almost half of the reflections and an indication that designing steps into activities had been effective in supporting students, especially those of lower linguistic competence. Based on the data analysed, this understanding could also have been enhanced by the emphasis placed on the ways targeted resources connect to meaning in critical discussions supported by SFL in the last two activities. Students' acknowledgement of the benefits of discussing language in these practices was another success of the design indicated by analysis.

Οι συζητήσεις στην τάξη ήταν πιστεύω αυτές που μου επέτρεψαν να καταλάβω πως να κάνω τις αλλαγές και να βλέπω τις διαφορές στο νόημα έτσι ώστε να καταλάβω τις λειτουργίες της γραμματικής. Δεν νομίζω να μπορούσα να το κάνω από μόνος μου αν δεν είχα δει τόσα παραδείγματα στις συζητήσεις στην τάξη.

The discussions we did in class were in my opinion the ones that allowed me to understand how to make changes in language and see the difference in meaning so as understand the functions of grammar. I don't think I could do this by myself if I hadn't seen so many examples in the class discussions. (Student reflection on A37, March 2016)

In the quote above, the student is pointing to the design of activities allowing for explicit discussion of the functions of targeted resources in expressing personal opinion through a range of examples. The student also identifies the importance of participation in multiple discussions modelling and explaining critical analysis practices, which facilitated their understanding of functions and enabled them to perform independently. Analysis of reflections indicates that critical discussions of language created opportunities for negotiation and co-construction of meaning, which appears to have supported students' understanding of how language functions to create choices in expressing opinion. Extracts from the researcher's journal also highlight:

I am targeting participants and processes (the experiential meta function) of how language relates to experience – our involvement with other people. Types of processes might be complicated sometimes but what I am getting students to notice is how the language realized by participants and processes is functioning rather than the grammar categories. (Researcher's journal, 8 March 2016)

Students' performance in reconstructing sentences and providing alternatives for *participant* and *process* highlights the effectiveness of the discussions foregrounding the connections between targeted resources and expressing opinion. Furthermore, having students justify these alternatives as part of the design of activities was useful in focusing on the grammatics of myside bias and seems to have provided more effective ways of thinking and talking about language. Finally, data from students' reflections and my log shows how the use of metalanguage to support the

pedagogical design facilitated both myself and students in understanding and discussing language. Reflecting on the data, I grew aware that SFL could also become a useful analysis tool in the research design. SFL analysis of students' writing would provide insights into their understanding of how targeted resources function to express personal views and their ability to use the resources in this context. Finally, the use of individual sentences, as opposed to a longer text, seems to have facilitated students in reconstruction, even though the lack of textual context may have also limited students' understanding of how resources functioned to express opinion/bias.

The guidelines on resource functions, provided for discussing the contribution of targeted forms in communicating position were also valued by students: "I found it very useful to have the functions listed like this. The examples helped me understand but also explain them in my exercises" (Student reflection on A12, March 2016). Here, the usefulness of having the functions outlined through examples is recognised. It is interesting to note the student's comment on how the guidelines helped them explain the use of language in their responses to the activities. This is a significant achievement of the specific feature at this point in the intervention, as it refers to a development in using, rather than merely comprehending language. It was however difficult in many cases to assess students' performance in commenting on the functions they had selected to justify linguistic choices.

Even though analysis shows that the design was quite effective in supporting students to achieve Objective 2, there were some challenges in assessing its effectiveness. Among these are the use of the guidelines on functions on which students appear to have over-relied for their justifications of the resources' use and which may have limited their comments. Furthermore, as with previous activities, the use of sentences in isolation may have made the context more

difficult to understand. Finally, analysis of A37, as well as previous activities, shows that students were more challenged by nominalisation rather than passive voice in the identification, reconstruction, and discussion practices repeated in the activities.

Implications. The second objective of the cycle was to develop students' ability to critically question and analyse the way nominalisation and passive voice function to express opinion. Analysis showed that the design was effective in developing students' critical questioning ability through repeated engagement in practices of identification, reconstruction, and discussion of language. Through this engagement, students' awareness of the possibilities available through targeted resources was raised. What was not evident at this point in the intervention was whether the design had been effective in developing students' ability to critically discuss these possibilities without relying on the instructions and guidelines provided. Following assessment, the design was revised according to the considerations below.

Critical Practices of Analysis. Practices of identifying, reconstructing, and discussing targeted grammatical forms and functions which appear to have facilitated students' understanding of the ways language contributes to meaning continue to be repeated through the design. In the next cycle, students are engaged in the same critical analysis patterns with different resources. This aims to develop these practices into ways of thinking, specifically ways of critically engaging and reflecting on language through analysis of content in relation to expressing opinion. Using different linguistic resources in the next cycle should allow the assessment of the pedagogic design in developing students' understanding of the connections between language and opinion regardless of the linguistic forms targeted.

Critical Discussions. Making explicit use of the SFL concepts of *participant* and *process* in the activities in Cycle 1 facilitated discussions on the grammatics of myside bias and provided

both the instructor and students with new ways of talking about the connections between language and myside bias. At this point, I became even more aware that – to continue developing students’ ability to think through the targeted language – discussions on how language functions to communicate position need to be more focused on the concept of myside bias. Evaluation of the design in Cycle 1 showed there was at times a shift towards using textbook language in discussions, as opposed to the theory of what is included in myside bias. Although this was done on purpose to facilitate students’ understanding of the concept by relating it to the *expression of opinion*, it seems to have affected students’ understanding of the functions of resources targeted by the design. Metalanguage from SFL will continue to support critical analysis and discussions in the next cycle. Instead of simplifying the concept of myside bias, this will be made more salient in the discussions.

Guidelines for Analysis. The language developed through practice and used to discuss language–opinion connections was included in the guidelines and incorporated in the design as a scaffold supporting students in the activities. Analysis of text data showed that, although effective in supporting students in identifying, reconstructing, and discussing targeted resources in relation to opinion and bias, this type of scaffolding may have limited students’ ability to express themselves freely in their answers and thus may have compromised the quality of the data needed to assess the design. New, more detailed ways of analysing students’ answers may be required, and including SFL-informed analysis in the research design, as already discussed, could provide better insights into students’ development. This is an important finding relating to the research design and how this may have been impacted by decisions in the pedagogic design of activities.

As already mentioned, the appropriateness of DBR methodology in this study is confirmed as I recognise that my double role as instructor and researcher allows me to identify and reconsider such challenges in refining the connections between the two areas. In Cycle 2, guidelines will continue to support students' engagement with language, although in a less controlled manner.

Selection of Topic and Material. Finally, analysis showed that the material and topics selected and adapted to support critical discussions had been quite important in engaging students, as recorded in my journal, instructional logs, and student reflections throughout Cycle 1. Students' engagement in activities was impacted by material relevance and authenticity. A number of reflections reinforce this observation, with more than half the students characterising these activities as "interesting". The rich context provided by such material was also important in supporting students in class discussions and critical analysis practices. This illustrates how crucial it is for the design of the next cycle to include material and activities allowing explicit discussion of context to foreground the connections between language and myside bias.

The design developed in this study targets the development of both language through critical thinking and critical thinking through language. This co-development is achieved through the implementation, evaluation, and refinement of instructional critical thinking and language practices informed by the concept of myside bias. An evaluation of the intervention in Cycle 1, highlighted the need to enhance learners' understanding of the connections between myside bias and language in the pedagogic design by repeating and further developing these practices through authentic material and topics related to students' interests. The use of SFL and the guidelines on resource functions, which had been effective in facilitating students in these

practices by providing new ways of discussing language, were reviewed to support the design in the next cycle targeting new linguistic resources.

Cycle 2 Analysis

Cycle 2 was completed in six lessons and included a total of 40 activities. Thirteen activities were analysed to assess the effectiveness of the design towards the two objectives of Cycle 2. For the purposes of the thesis I present the analysis of six of these activities which I selected as the most important for illustrating the design process. In addressing the objectives, I evaluated students' understanding of the ways reported speech and modality were used in the design informed by the concept of myside bias. As in Cycle 1, the design of activities included critical discussions of media material ranging in length from individual sentences to longer texts.

To evaluate the design against the first objective, I present the analysis of four activities: A4, A10, and A14 during the implementation of the design, and A11 following the cycle's completion. A4 involved students in teacher-fronted collaborative reconstruction of sentences that used reported speech and targeted consolidation of students' understanding of the form and functions of direct and indirect speech in realising myside bias. Data from instructional logs and the researcher's journal were used to evaluate the design, material, tools, and teaching practices. I analysed A10 and A14, which involved students in (a) critical class discussions of two articles and (b) reconstruction of parts of the articles that included targeted resources. Data from my journal and students' reflections were used to evaluate the design's use of joint critical discussions and text reconstruction to foreground the functions of reported speech and modality. Analysis addressed the use of longer texts to provide a richer context for identifying and discussing the functions of targeted resources (reported speech and modality) in relation to myside bias. To assess students' ability to independently manipulate and discuss the targeted linguistic forms for their contribution in expressing myside bias, I analysed A11. Data includes

student exercises that required identifying reported speech and modality, reconstructing the sentences using reporting verbs, and critically questioning the use of the resources.

To assess the design against Cycle 2's second objective, I analysed two activities (A27 and A28). In A27, students discussed a news broadcast of a theft incident from the perspective of the people involved. Data from the journal and instructional log was analysed to assess students' understanding of how an event/story can be presented to communicate the reporter's ideological position through the functions of reported speech and modality used to present information (statements). In A28, students wrote a news report of the same incident based on this understanding. SFL analysis of student reports of the incident served to identify their ideological position on the incident and also showed their understanding of how reported speech and modality can function to express personal opinion.

Objective 1

Implementation. The following section discusses how the design was assessed – in A4, A10, and A11 – towards its effectiveness in developing students' ability to identify and critically explore the functions of reported speech and modality in presenting information to convey a point of view. Even though analysis showed a development in students' understanding of how choices in targeted resources can communicate a position, their ability to relate these choices to specific functions was not always clear.

A4 involved students in group sentence reconstruction with an aim to consolidate their understanding of the functional possibilities of reported speech in promoting opinion. This was followed by a group discussion in which students shared their comments after reconstruction. Grammatical form and functional possibilities of the targeted resources in expressing myside bias had been reviewed in the previous two activities. Classroom data in Cycle 1 showed

sentence reconstruction had posed challenges for several students, so I provided headlines and individual sentences along with the articles/news reports from which they originated. The context of the stories facilitated students in identifying and discussing the functional possibilities of the grammatical structures in expressing personal opinion.

To review the contribution of direct/indirect speech and reporting expressions in promoting a specific point of view, I provided the students with examples adapted from their textbooks. I selected a sentence – “Italian Prime Minister Silvio Berlusconi, on an official visit to Russia, described US President Barack Obama as ‘young, handsome and even suntanned’” to illustrate how reporters distance themselves through the use of direct quotes that represent the opinion of the source and not the journalist. To foreground myside bias using Berlusconi’s description of President Obama, I asked students to consider the adjectives and explain why they thought the reporter had decided to quote them. Even though students’ comments, as recorded in the journal, indicated that they understood the reporter’s decision to directly report Berlusconi’s words as a way of showing they themselves did not endorse the statement, I cannot be sure of the extent to which attention to language was important in facilitating students’ understanding, since my journal does not include details of the discussion.

What the data shows, however, is how the connection between the concept of myside bias and specific functions of reported speech was revisited. Bringing the concept of *participants* into the discussion, I highlighted that a *sayer*’s choice of reporting expression could relate to their evaluation and presentation of evidence in a manner biased towards their own opinions. In my journal, I wrote:

We discussed participants again and how they connect to the information reported.

Language was discussed and foregrounded in search for the relation between the opinion

expressed and the people who had uttered the words. Who these people are and what do they choose to believe. (Researcher's journal, 15 March 2016)

Students were then asked to comment on possibilities for reporting expressions for a sentence from the students' textbook and the differences in meaning (see Table 5.8).

Table 5.8

Sentences with Reporting Expressions Used in A4

The doctors **said** that the disease is highly contagious.

The disease is **allegedly** highly contagious.
The doctors **confirmed** that the disease is highly contagious.

The textbook was a key resource in this activity. It provided examples in which I varied the reporting expression to foreground their contribution to the information presented. Unusually, I asked for the Greek translation of these expressions, expecting that the difference in students' understanding would be similar. The instructional log shows that the Greek translations of reporting expressions led students to agree that the third sentence had a bigger impact on their perceptions of the situation's severity. Even though switching between languages is not a practice I had generally encouraged in class, I realised that, in this case, it would help students (especially weaker ones) make the connections between language and meaning or opinion expressed. Drawing on SFL, I also referred to the use of the noun "doctors" as the subject (participant) of "confirmed" and asked students to consider whether and how this choice of participant further enhanced the opinion expressed. My journal entry shows that students agreed that the choice of the noun "doctors" as the source of the information made the statement more valid and powerful. To further review students' understanding of differences conveyed in what I

called *attitude*, I referred them to examples in a handout and asked them to write pairs of sentences similar to the examples. When all students had written at least one pair, I had them share their sentences with the class and explain differences in meaning. Table 5.9 includes samples of answers made by students of various proficiency levels, as recorded in the researcher’s journal.

Table 5.9

Examples of Student Answers in A4

“He threatened to come back the next week.” (*negative – not good intention*)
“He promised to come back the next week.” (*positive – coming back is something we want*)

“The nurse told us that the medicine was very effective.” (*general – no real implication*)
“The nurse claimed that the medicine was very effective.” (*a false impression*)

“Mrs Jones asked the students to sit down.” (*neutral – no emotion*)
“Mrs Jones screamed at the students to sit down.” (*emotional state – angry*)

Students’ examples and explanations indicate a good understanding of how the choice of reporting verb presents alternatives for expressing meaning. Analysis shows that students identified differences in (a) the negative and positive valence of lexical choices (“threaten” and “promise”) and (b) the more symbolic or neutral exchanges of meaning realised by reporting verbs such as “told” and “asked”, as opposed to reporting verbs like “claimed” and “screamed”, which can indicate the author’s stance.

Data from my journal and instructional log show the effectiveness of the design in cultivating a genuine interest as well as students’ capacity to discuss the use of reporting expressions at a sentence level.

Students were given about 10 minutes to complete this activity and most of them managed to write two or three pairs of sentences without help in time. Only 3 students required clarifications on how to use some reporting verbs and when these were given students wrote at least one pair of sentences just in time to share them with the class.

(Instructional log, 15 March 2016)

Reflecting on the data, the fact that students used the time available to write more than one pair of sentences and that only three students required assistance may indicate a development in students' understanding.

While there is nothing to suggest that students would perform at the same level with longer texts, this activity seems to have been effective as a step towards that direction. Increased participation may mean that students found the design more useful than in their previous learning experiences. This is borne out in some reflections:

Ήταν πιο εύκολο να καταλάβουμε τις διαφορές επιλογές σε νοήματα από τα reporting verbs, επειδή αλλάζαμε τις προτάσεις στην τάξη και μάθαμε πώς να συζητάμε τις διαφορές.

It helped that we focused on the intended meaning of the speaker to understand how reported speech functions to shape the message... it made grammar more meaningful and easier to understand.

What is important in the quote above is the student's acknowledgement of the focus on intended meaning in the activity, which facilitated their understanding of how reported speech functions to shape a message.

While analysis of reflections also shows that students perceived the activity as useful for developing their understanding of the connections between the functional possibilities of reporting expressions and the expression of opinion, it is not evident whether more emphasis on

the concept of myside bias helped to achieve the first objective. More specifically, students' responses to A4 indicated that while most could identify how choices in reporting expression influenced meaning, it is unclear whether they understood these differences in relation to the ways myside bias is expressed and particularly how linguistic choices reflect our personal views. This is an important consideration in assessing the design since discussion of sentences was framed around the ways in which myside bias is manifested in language.

Reflecting on my teaching, I realised that, in an effort to simplify the concept of myside bias and make it accessible, I may have overused *opinion* and this may have undermined students' ability to distinguish opinion and/or bias. Furthermore, although my design is informed by SFL and I had already introduced students to the concepts of *process* and *participant*, I chose to use language from their textbook – *reported speech* and *reporting expressions* – in instructional talk in this cycle as well. In reviewing the implementation of the design, I can see that this caused confusion and that using concepts from SFL in discussions and more generally in my instruction could have better facilitated students' understanding of how and why language use relates to myside bias. This will be further discussed in the intervention's conclusions and implications in Chapter 7.

Another possible challenge in relating language to myside bias could have been my presentation of sentences in isolation of their textual context. Presenting students with the situations or the context for the sentences may have assisted them in making the connections between language choices and myside bias. As indicated by the findings from Cycle 1, longer texts providing richer context were likely necessary for learners to understand the connections between targeted resources and the opinions expressed. Difficulties in understanding the functions of reported speech in expressing myside bias may also relate to the ways textbooks

present and refer to fact and opinion. Students' comments on reporting expressions in textbook sentences suggested that the difference between fact and opinion was not always evident to them. Reflecting on findings from Cycle 1, I connected difficulties in making this distinction to the way I chose to discuss the expression of opinion in the design. At this point in the intervention, it became clear that my choice to oversimplify the connections between the concepts of opinion and bias by using textbook language in the discussions was problematic. I was not however comfortable with replacing textbook language yet.

Finally, as discussions around language gradually became a feature of the methodological design, it became clear that recordings would have been a rich source of data. However, I did not include them in the research design as I had not secured ethical approval to record classroom interactions.

A10 and A14 involved students working together on reconstruction and critical discussion of the targeted resources in two articles (Appendix K, A10, A11, A14 Handout). The discussion in both activities centred on the ways reported speech and modality are used in different media to express myside bias, as well as a review of the critical thinking practices used in Cycle 1. The aim was to foreground and discuss the functional possibilities of reported speech and modality in expressing opinion in longer texts. The articles were selected based on their topics, which were of potential interest to the students, and because they included examples of reported speech and modality that could be discussed for their contribution in conveying myside bias. Based on Cycle 1 findings indicating the benefits of analysing use within a text, articles were a key resource in the design.

The pedagogic design for this activity included two steps. The first was to model critical analysis of content by directing students' attention to manifestations of myside bias or the ways

authors express specific views without considering or giving equal attention to evidence against these views. The second step involved students working together to reconstruct main arguments, ideas, and conclusions, in order to discuss the functional possibilities of targeted resources in presenting information to promote opinion/bias. Students read the extracts for homework, so that they were familiar with the article's content before class, which meant critical questioning could focus on making explicit connections between personal opinion and the people or sources behind the opinions. Notes from my journal show how the questioning process targeted this objective:

The questions I used to discuss content allowed me to direct students' thinking to the connections between the arguments provided and their sources. Students' responses indicate an understanding of how some of the arguments raised may reflect personal opinions. (Researcher's journal, 17 March 2016)

The questions required students to identify instances of reported speech in the arguments and comment on the type of reported speech used to support them. They were also encouraged to consider the source in relation to what was said and to discuss how they thought the specific type of reported speech was functioning to express opinion. To facilitate students in making the connections between meaning and language, I reviewed the concept of *participant* as the main subject doing or undergoing an action. My notes in the instructional log show that it was more challenging for some students than for others:

I used simple sentences to review and consolidate the concept of *participant*. Once most of the students were clear on this, I asked them to identify participants in other parts of the text and to consider their connection to the context in relation to the type of reported speech used in expressing opinion. (Instructional log, 17 March 2016)

The guidelines on language form and function (Appendix F) were used to provide students with examples and ways of discussing the connections between reported speech/modality and the concept of myside bias. Data from the instructional log shows that questioning these connections gave students good control over the main arguments and opinions expressed in the articles. Examples from the same material were used to foreground and discuss the functions of modality as the second linguistic resource targeted by the design in Cycle 2 (A14). The aim was to demonstrate how modality, like reported speech, functions to present information depending on the intention of the author/source to promote, endorse, or contradict evidence in support of their personal beliefs.

Analysis of data, mainly from the researcher's journal and instructional logs, indicated good performance in identifying and discussing both targeted resources for their contribution to expressing personal opinion at sentence level, especially when the stories behind the sentences were provided. Again, participation was high and students performed very well in identifying and discussing modality: "Modality seems to be much easier for students both in terms of formation and functionality. Students also seem much more confident when talking about language. They may find the resource easier to understand than reported speech" (Researcher's journal, 17 March 2016).

Despite the above observation, there is nothing inherently easy about understanding or using modality. What is indicated in the data may be something beyond grammatical development. It may relate to a development in students' ability to understand an author's position and discuss the grammatical resources used to realise that position. Students' confidence in talking about language, as indicated above, could be a result of how thinking about language had started to develop.

Moreover, increased levels of participation may have resulted from scaffolding. Student reflections provide evidence of the effectiveness of the guidelines:

Το ότι είχαμε κάτι να μας βοηθά να συνδέουμε τα παραδείγματα με τον τρόπο σκέψης του συγγραφέα, έκανε την γραμματική πολύ πιο ενδιαφέρουσα, με πιο πολύ νόημα και πιο εύκολη. Δυσκολεύομαι να πιστέψω ότι μαθαίναμε την γραμματική αλλά όχι τις λειτουργίες της τόσα χρόνια.

Having something to help us connect the examples to the thinking that probably took place in the mind of the author has made working with grammar far more interesting and consequently meaningful and easier to understand. I find it difficult to believe that we have been learning the grammar but not its functions for so many years.

Reflecting on the quote above, what is highlighted is the effectiveness of guidelines in targeting the connections between language and meaning, as opposed to a mere identification of rules. Secondly, there is an acknowledgement of how understanding the functional possibilities provided by grammar could improve the language learning experience, which is an issue with implications on language education in general.

In assessing the implementation of the design against the first objective, it is important to note that foregrounding the connections between targeted resources and expressing opinion developed students' understanding of how choices in language can support an author's position. The use of extracts from an article in A10 and A14 (as opposed to the headlines used in A4) to provide students with more context, as well as the use of concepts from SFL in discussions, appears to have assisted students in making the connections between language and how this is used in expressing myside bias. Yet students' ability to discuss language choices in relation to specific functions was not always indicative of their understanding. Finally, the guidelines used

in discussions of language seem to have supported a development in students' understanding of the meaning potential of targeted resources. This development was often dependent on how the language included in the guidelines was used by the students. As I continued to use the language from the textbooks to refer to reported speech and modality, I recognised that confusion may have limited students' understanding. This will also be discussed in Chapter 6 as an implication from the intervention.

Evaluation. To assess the effectiveness of the design towards the first objective, I analysed student texts from A11, which aimed at involving students in repeating the practices they collaboratively engaged in – in A4, A10, A14 – so as to assess the design's effectiveness in enabling students to perform the same practices independently. The activity was completed in two steps: students (a) identified and commented on the use of targeted linguistic resources and (b) reconstructed sentences and commented on the use of different reporting expressions in relation to myside bias in the two texts discussed in A10 and A14.

Identification and Commenting on Function. As a first step in A11 (Appendix K, A10, A11, A14 Handout, Exercise 1), students independently identified instances of direct/indirect speech, reported expressions, and modality, and then commented on how these functioned in promoting opinion. Measuring students' performance allowed for the evaluation of the design, which targeted practices of identification and commenting on the functional possibilities of the specific resources in expressing myside bias. Students were required to complete the same steps for two texts.

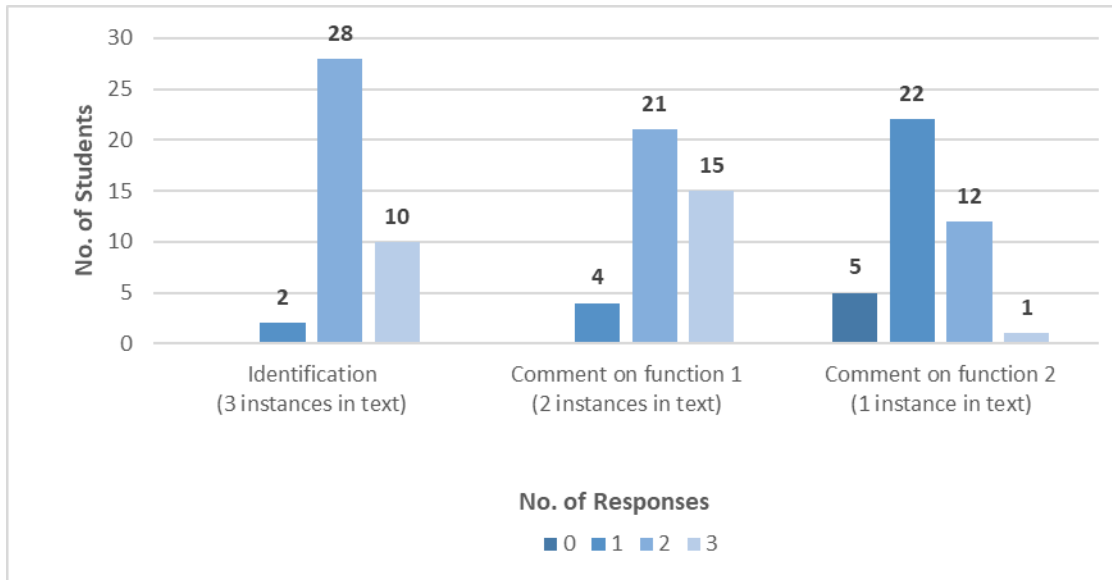
Text 1 and Text 2 were presented separately, as only the first was scaffolded by the instructor. Scaffolding for Text 1 included a teacher-fronted class discussion of the content to ensure the context or main ideas and opinions expressed were clear. The discussion was designed

to review instructional practices and scaffolding used in previous analysis exercises to make the connections between opinion/bias expressed and targeted resources. To review these practices, students were asked to identify at least one instance of direct or indirect speech in Text 1 and then prepare to orally discuss its function in expressing myside bias based on the guidelines provided. All indirect speech instances were identified and one was discussed as an example before students proceeded to complete the activity individually in writing. For Text 2, there was no discussion of the content or language in the extract. Students were expected to use instructional practices and scaffolds autonomously. Below, I present the analysis for indirect speech.

In Text 1, students were expected to identify and comment on three instances of indirect speech, four instances of direct speech, three reporting expressions (reporting verbs and prepositional phrases such as “according to”) and two modal verbs. In Text 2, students were expected to identify and comment on five instances of indirect speech, three instances of direct speech, three reporting expressions and four modal expressions. Figures 5.3 and 5.4 show how students performed in identifying and commenting on the functions of indirect speech in Texts 1 and 2.

Figure 5.3

Results for Indirect Speech in A11, Text 1



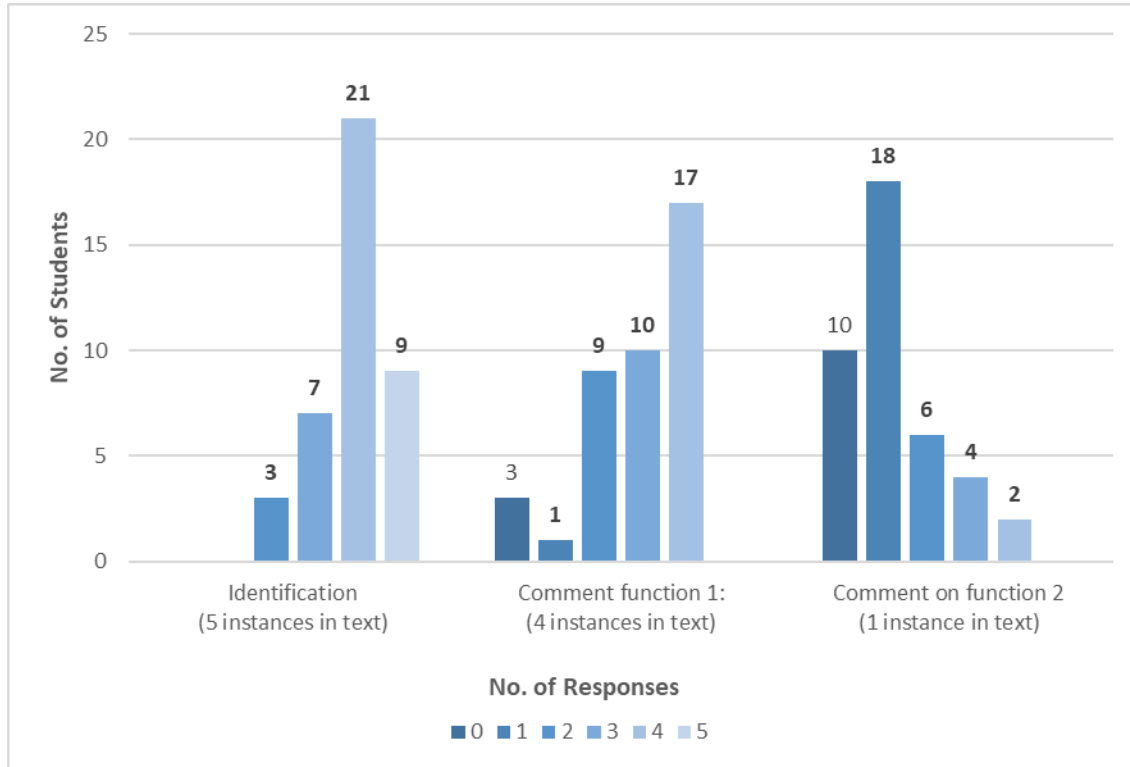
Note. Function 1: to give authority to a statement, Function 2: to distance the author from a statement.

Thirty-eight out of 40 students (95%) identified at least two of the three instances of indirect speech in Text 1. Only 10 (25%) identified all three, despite the scaffolding provided. Students misidentified or commented inaccurately on some instances of use. For example, although there was one instance of the author distancing themselves from a statement (Function 2) in Text 1, one student commented on this function three times. The two instances of indirect speech that functioned to give authority to a statement were commented on by 36 students (90%). However, only 21 (52.5%) commented on the two instances they were expected to comment on. Fifteen students (37.5%) commented on Function 1 of indirect speech, more than twice, and four students (10%) commented on only one instance. For Function 2 of indirect speech, 35 students (87.5%) commented accurately on the one instance. Only 22 (55%) responses related to the one instance though. Twelve (30%) inaccurately assigned the use of

indirect speech to Function 2 twice, and one student (2.5%) did so three times. Furthermore, five students (12.5%) failed to recognise any instance of Function 2.

Figure 5.4

Results for Indirect Speech in A11, Text 2



Note. Function 1: to give authority to a statement, Function 2: to distance the author from a statement.

In Text 2, there were overall five instances of indirect speech and while all students identified at least two, 21 out of 40 (52.5%) identified four, and only nine (22.5%) identified all five instances. Four of the instances of indirect speech functioned to give authority to a statement (Function 1); only 17 students (42.5%) commented on all four. Ten (25%) commented on Function 1 in three instances, and another 10 students (25%) commented on only one or two instances of this function. There was one instance in Text 2 of Function 2 of indirect speech, to

distance the author from a statement. There was one instance of indirect speech in Text 2 and 18 students (70%) accurately commented on it. Ten students (25%) did not comment on Function 2 at all, whereas 12 (30%) commented on it between two and four times.

Students performed better in Text 1, both in identifying the number of instances they were expected to identify (25% in Text 1 and 22.5% in Text 2) and in identifying one instance less (95% in Text 1 and 52.5% in Text 2). Comments on how the resource functioned to give authority to a statement (Function 1) were also more accurate for Text 1 than for Text 2. In Text 1, 90% of students correctly assigned this function to two instances, while all students assigned the correct function to at least one of the two instances. In Text 2, only 37.5% of the students assigned Function 1 to the four instances they were expected to comment on and 47.5% used this function to comment on at least three. Finally, 87.5% of students used Function 2 to comment on the one instance in Text 1, while in Text 2, the percentage of students who managed to comment on the one instance was much lower (45%).

Overall, students performed better in Text 1 than in Text 2 (See Appendix L for results on all targeted resources in A11), both in identifying the actual number of instances and in assigning the correct function to the instances in the text for all the linguistic resources. Specifically, analysis showed that students performed very well in identifying targeted resources, which was part of the objective. Commenting on the resources' functions in expressing opinion was less effective, as students both over- and under-commented on them. However, considering that this was the first time students were asked to do this independently, their performance was relatively good. Data indicates that, although students could identify and discuss the use of resources in support of an opinion, it was not always clear if they understood which functions the resources were serving. Inaccurate selection of functions in commenting may have resulted from

challenges in understanding the context in which each resource was used, especially in Text 2, and in making choices between the functions provided. Because of these challenges, students' performance may also have been impacted by random choices guided by the examples of functions in the scaffolding that took place in class. Reflecting on how the guidelines (Appendix F) used in the first step of A11 may have limited students' ability to choose between functions indicates a need to review the choices and examples included in this.

On the other hand, completing the requirements of the activity was clearly better performed in Text 1 than in Text 2. Keeping in mind that different texts may present students with different challenges relating to the content discussed or language used, better performance in completing the steps for Text 1 may also have resulted from the scaffolding provided by the design for the analysis of Text 1 as described earlier. Specifically, collaborative critical questioning of the content to uncover the connections between targeted resources and the concept of myside bias, which was supported by the class discussion, may have enhanced students' performance, indicating a strength of the design. These considerations in assessing the design indicate a need to review the ways material and guidelines are used to support learners.

Table 5.10 includes examples of students' comments on the functions of targeted resources. Following analysis of all data, these examples were chosen first due to the frequency with which they appeared in students' responses and second, because they represent students across levels of achievement.

Table 5.10*Student Comments on Reported Speech & Modality for A11*

Resource commented on	Sentence in text	Student comments on functions	Analysis of comments
Indirect speech combined with direct quote	Persistent negative stereotypes in the media about teenagers may be harming their prospects of getting a job... Jonathan Birdwell, head of the citizenship programme at Demos and author of the report said “People think of teenagers as apathetic, lazy and self-centred”.	S26: “To make the argument stronger”.	S26 comments on how the “actual words” can be used to support the opinion expressed by adding validity to a statement.
Direct speech	“At a time when Europe is enduring a deep crisis, primarily linked to the tragic events unfolding in Cyprus... myself and Mustafa are working tirelessly to reunify our country” Anastasiades said.	S18: “To make more impact since the statement belongs to the president and so it is too powerful to be changed”.	S18 comments on the function of direct speech in validating a powerful statement made by the president.
Modal verb “would”	Anastasiades said a settlement would require billions of euros in international aid to help resolve poverty issues.	S38: “To present something as more possible than it really is”.	S38 includes the use of modality to support or endorse a statement by presenting it as a generally accepted possibility rather than just a point of view.

Resource commented on	Sentence in text	Student comments on functions	Analysis of comments
Modal verb “should”	...newly found hydrocarbon resources...should act as a source of peace and cooperation rather than conflict and tension.	S20: “‘Should’ is used here to present the action as an obligation rather than a possibility”.	S20 was among the few students who commented on the use of “should” to present a statement as an obligation rather than just an assumption.

Note. S = Student.

Through their comments on how different types of reported speech function, most students demonstrated a good understanding of the importance of the source in conveying different types of information. For example, students emphasised the contribution of direct quotes by important sources to the validity of statements or the affordances of indirect speech in controlling information. Similarly, students seemed to understand how modality can function to encode possibility or obligation in presenting information to support or refute an opinion. Student performance in commenting was quite significant if we consider that the first objective required learners to identify and critically explore the use of these resources in presenting information to promote opinion. Whether these comments indicate students’ understanding or merely replicate examples discussed in class cannot be certain. Moreover, it is not always evident from the data whether the students were commenting on the functions of targeted resources based on the authors’ opinions/biases or their own.

Reflecting on the analysis and pedagogic design, I realised that even though the first objective was achieved to a certain extent, the design, at this point in the intervention, should have further facilitated students’ understanding of the connections between targeted resources and myside bias by creating clearer distinctions between the functional possibilities offered by the resources. Because these distinctions are intrinsically difficult to make and sometimes very

subjective, more time should have been devoted to having students share, discuss, and critically think about their answers before they proceeded to individual work. This would have allowed for extended analysis of the material in class, which may have helped in furthering students' understanding of the range in functions offered by targeted resources.

Reconstruction and Commenting on Function. For the second step in A11 (Appendix K, Exercise 2), students were required to convert two quotes from direct to indirect speech and substitute the verb “said” with another reporting verb (“claimed”, “worried”, “accused”, or “affirmed”) to communicate the attitude supported by the author. More than one reporting verb from the options was possible as a substitute, even though there were two expected answers for each quote. Students were instructed to make choices based on how the quotes were used in the context of the article, the people quoted, and their own interpretation of the opinions expressed. They were also instructed to use the functions for reported speech discussed in class to comment on their choices. Both quotes from the article supported the author’s opinion that teenagers’ prospects of getting a good job are impacted by negative portrayals of young people in the media.

Table 5.11 shows how often students used each reporting verb based on their functional possibilities to express opinion for Quote 1, which portrayed an expert’s view on how media representations of young people can be influencing their image:

Jonathan Birdwell, head of the citizenship programme at Demos and author of the report, said: “People think of teenagers as apathetic, lazy and self-centred, with a sense of entitlement; that’s the dominant negative stereotype. But our research shows the reality is that more young people are volunteering in the community, and the most common words

used by teachers to describe them in our survey were ‘caring’, ‘hard-working’ and ‘enthusiastic’”.

Table 5.11

Responses for Quote 1 in A11, Exercise 2

Functions in expressing opinion	Number of students who used each reporting verb			
	“claimed”	“worried”	“accused”	“affirmed”
To give authority to a statement	3	13	16	-
To question a statement	2	-	1	-
To support a statement	3	-	-	-
To distance the author from a statement	4	-	-	-

A contrast was highlighted between the public’s impression of youth, and the latter’s actual characteristics as recorded by research. Students were expected to use reporting verbs “accused”, and “worried” as substitutes for the verb “said” in the original quote to convey the author’s opinion. As expected, “accused” (40%) and “worried” (32.5%) were the most widely used verbs. Moreover, the majority of students justified their choice based on the functions of the two verbs in giving authority to a statement. Table 5.12 shows samples of students’ substitutions and comments on “worried” and “accused” for Quote 1. The samples represent students of various achievement levels.

Table 5.12*Reconstruction and Comments for Quote 1*

	S12	S22	S18
Reconstruction	Jonathan Birdwell, accused people for thinking that teenagers are lazy and self-centred ... even though research shows that ...	Jonathan Birdwell worried that people have the wrong idea about young people, despite what the research says.	Jonathan Birdwell claimed that people have a wrong idea about young people that they are lazy and apathetic.
Comment on function	“Jonathan Birdwell is the head of the citizenship programme and someone who knows about research on this topic. I think that having such a person’s view in the article with a strong verb like ‘accuse’ would make the opinion expressed more strong.”	“This person is an expert and the ‘worry’ makes his statement a lot more important. People should notice it.”	“I used ‘claim’ because what Jonathan Birdwell is saying is not what the research shows”.

Note. S = Student.

Reflecting on the comments, most students were not only accurate in their selection of verbs to portray the attitude expressed, but also indicated a good understanding of how the specific verbs, in combination with the sources, function to add authority and importance to the statement.

Student 12 uses “accused” to convey the expert’s disapproval of peoples’ impression of teenagers that is negative and runs contrary to research findings. The student shows an understanding of how a “stronger verb” can intensify the statement. In their comment, Student 22 acknowledges the importance of an expert’s concern in portraying the author’s opinion. The verb “claim” was used by 12 out of 40 students and it related to different functions, as indicated in

Table 5.11. The specific verb seems to have confused some of the students who indicated that they had used “claimed” to question the statement or distance the author from the statement because of the contradiction between the expert’s words and research. Student 18, a student of average proficiency chose the verb “claim” in reporting the statement. Although the student’s understanding of that verb to question a statement is not inaccurate, it seems that the challenge in assigning the function as expected was in understanding the context in which “claim” was chosen.

Analysis showed that students were overall able to identify and comment on the use of targeted resources in relation to expressing opinion in the activities designed to assess the first objective. There were instances of inaccurate or random selection of functions in students’ comments and these were related to challenges in understanding the context in which choices in targeted resources were made, or the fact that students were over-relying on the guidelines provided. Additionally, even though this was not targeted by the first objective, students’ comments on the use of reporting expressions – except in some cases (e.g., the verb “claim”) – indicated a good understanding of how these expressions may function to convey opinion (A11). Finally, analysis of activities designed to involve students in practices of identification, reconstruction, and critical discussion of language with and without scaffolding demonstrated that joint and explicit discussions and guidelines foregrounding the connections between myside bias and targeted resources were important in developing students’ understanding.

Implications. The first objective of this second cycle was to develop students’ ability to identify reported speech and modality and explore their functions in presenting information. Analysis indicated that the design was effective towards this objective, particularly with regards identification. The design was also quite effective in developing students’ awareness of how

targeted resources may function to present information in support of a point of view. It is not evident however, whether the design – which included discussions, material, and guidelines – supported students in making the distinctions between resources' functions. The following considerations were used to revise the design so as to address the research questions.

Critical discussions. While I intended to emphasise the concept of myside bias in the activities, I continued to use textbook language on the distinctions between fact and opinion/bias. I realised again how this may have created challenges in developing students' understanding of myside bias as the expression of unsupported opinion, as well as in clarifying the connections between the concept and targeted resources. I recognised how developing students' understanding of the possibilities offered by the resources through metalanguage, replacing grammatical terms such as *verb* with *process* provided me with better, more informed ways of talking about the functions of the resources. On reflection, if I had used SFL to further explain the differences in meaning provided by different types of processes used as reporting expressions (for example a verbal as opposed to a relational process), I could perhaps have made the distinctions between linguistic choices clearer. On the other hand, going deeper into SFL theory with my students at this point could have presented major challenges for me and them. The concepts of *participant* and *process* therefore continued to be used in the discussions.

Selection of Material. I also realised that my own bias may have influenced choices about the material and types of engagement with the material. I may have directed students to notice and discuss only what I thought was there, by giving them specific and/or limited options in reporting verbs which could have directed them to make certain choices over others. Although analysis shows that students' choices and comments on the functions of the reporting verbs provided were accurate overall, it is not certain that students would have been as effective if the

options had been more general or open to wider interpretation. As an implication for the design of both Cycles 1 and 2, this indicates a need to find ways of exposing students to a wider range of targeted resource examples functioning to express opinion. This could be achieved through a wider selection of material and more explicit attention to the connections between language and myside bias. I also recognised the need to make these connections as well as the functions of targeted resources clearer in the guidelines (Appendix F). Both of these considerations were brought forward in the previous cycle as well.

Objective 2

Implementation. In the following section, I discuss how the design was assessed towards its effectiveness in developing students' understanding of the contribution of reported speech and modality in promoting personal opinion. Analysis demonstrated a development in students' ability to connect a point of view to the language used in expressing it. Critical discussions and guidelines foregrounding the connections between targeted resources and opinion appear to have facilitated this development. The topic and multimodal material selected for this activity were also effective in engaging students.

To assess the design against the second objective of the cycle, I used activity A27, which involved students in watching and then discussing a broadcast of a shoplifting incident. The aim of the activity was to engage learners in a class discussion of the incident from the perspectives of the different people involved. The activity was designed to foreground the functions of modality and reported speech in expressing opinion and bias through discussion of the statements made and their sources. It was also designed to prepare students for A28, in which students had to use the material to reproduce the story and employ the targeted resources to communicate their position on the issue.

I used an archived video broadcast, along with transcripts, about an incident involving a teenage immigrant stealing a sandwich from a supermarket (Appendix K, A27, A28 Handout). The video shows the teenager biting an in-store security guard in an attempt to escape and being wrestled to the ground by the team of security guards. The video includes footage of the teenager talking about what made him steal and how he was treated. It also shows a spokesperson for the supermarket explaining why the security guards reacted in this way, as well as a representative of an organisation supporting vulnerable migrants commenting on the incident.

After watching the video, students recounted the incident by referring to statements made by the people involved. In the discussion, students were asked to consider the people communicating these perspectives and how what they said shaped the viewer's opinion about the incident. Students were encouraged to refer to the people in the story as participants as a way of foregrounding the connections between the quotes and the quoted and reminding students of how participants' views could be reflected in the information reported. They were also encouraged to consider the direct quotes in the transcripts (Appendix K, A27, A28 Handout), and discuss how they would use these to indirectly communicate a position if they were reporters covering the incident. To scaffold their thinking in the use of targeted resources, I asked students to consider in groups which quotes they would use and share ideas on how the functions of reported speech and modality could help them present the story through these quotes. According to the instructional log and journal, students highlighted the use of direct quotes from the teenager as a way of bringing the story to life. A number of students also used reporting verbs to present information they wanted to emphasise or de-emphasise. Finally, students commented on the use of modal verbs to present scenarios that could have led the boy to this offense. During the discussions, students were directed to the guidelines outlining the functions of resources targeted

in Cycle 2 (Appendix F) and were encouraged to use them in explaining how they would target resources. My instructional log shows students' comments on the use of statements to promote perspective: "The statements of the young boy and the representative of the organization supporting immigrants were clearly used to support the boy's side of the story. The statement of the supermarket spokesperson presents the opposite side of the story" (24 March 2016).

It was interesting that, although most students seemed to consider the act of stealing to be unethical, they empathised with the shoplifter possibly because of his young age and financial situation. Only two students mentioned that despite their personal feelings of sympathy towards the teenager, they couldn't blame the supermarket personnel for "doing their job". As recorded in the log, one student even remarked that statements should have been taken from the security guards: "We didn't have any statements from the security guards who actually immobilized the boy. Perhaps our view of the situation would be different if we knew their version of what happened" (24 March 2016).

What the student is highlighting here is the importance of a statement from the security guards in creating a balanced view of the incident. This is consistent with a development in their understanding of how reported speech or someone's view of what happened may contribute to how a situation is perceived. Another interesting comment related to how language may function, is a student's reference to how introducing an event as a possibility through a modal verb could change the perspective on an issue:

As a reporter I wouldn't leave out important information like the fact that Armine bit one of the guards. However, I would present this as something that could be avoided, or a possibility that forced the boy to behave like this for example the boy's bad situation. (Instructional log, 24 March 2016)

In their comment, the student points to the use of language to present an event as a possibility or a result of something else, rather than a fact. This comment is related to the use of modality and further points to an understanding of how a person's perceptions, opinions, or biases may be manifested in their language, which was an objective of the design. In my journal I wrote:

Our discussions on myside bias seem to be effective in developing students' critical awareness of how personal opinion is expressed. In their comments on the importance of the statements used in this activity, most of them emphasized the importance of considering and evaluating evidence both towards and against an opinion. (Researcher's journal, 28 March 2016)

This journal entry also highlights the contribution of critical discussions in analysing evidence, in this case, in the form of statements from those involved, to develop students' thinking on the connections between language and myside bias.

Reflecting on records in my journal and instructional log, I see both a genuine interest and an increased level of participation in the discussion for A27. Students' reflections show that they appreciated critical discussion of the incident to foreground the contribution of targeted resources in expressing opinion through authentic, multimodal material. While there is nothing to indicate that students would be able to use modality and reported speech to communicate a position in their own writing, A27 seems to have been an effective step towards that direction by developing students' ability to discuss the contribution of language in expressing myside bias.

Analysis of reflections also showed that the material and instructions given were considered useful in understanding the use of language:

Πιστεύω ότι το υλικό που χρησιμοποιήθηκε σε συνδυασμό με τις οδηγίες που μας δόθηκαν για τη χρήση της γλώσσας ήταν πολύ βοηθητικά στο να καταλάβουμε την χρήση της

γραμματικής. Είναι τόσο ενδιαφέρον να βλέπεις πως μπορούν οι λέξεις που χρησιμοποιεί να δείξουν πως σκέφτεται κάποιος.

I think the material used in combination with the language instructions provided around the use of language were very good in helping me understand the use of grammar. It is so interesting to see how words can show the ways someone thinks.

It is interesting to note in this quote that the student is evaluating the combination of material and language instructions positively in terms of its effectiveness in developing their understanding of grammar. This is important in assessing the design, as the aim of A27 addressing the second objective, was to engage learners in discussing the opinions expressed in the context of the incident and to foreground the connections between these opinions and targeted resources. It is not clear however what the student means by “instructions provided around the use of language”. They may be referring to the guidelines provided on language forms and functions (Appendix F) or the verbal and written instructions to use the material and targeted resources to communicate their own opinion on the incident. The latter involved asking students to become *participants* in the story. As recorded in the journal, engaging students in discussions of participants in this activity through the material and scaffolds provided was useful in explaining the connection between language and personal opinion:

Using the term *participant* to refer to the person/entity offering the quote rather than to the subject of the sentence, helped me emphasize once again the importance of considering language choices in relation to who and why they were made. I think making these connections helps both myself in explaining and the students in understanding the language work completed through the material and tasks. (Researcher’s journal, 28 March 2016)

As the design develops, and in connection to earlier analysis (A10 and A14), I continued to realise that bringing SFL theories into teaching by discussing the concept of *participant* and how this influences linguistic choices, developed my own and my students' thinking with respect to the functional possibilities of the targeted resources in conveying opinion. This development, recorded in the journal entry above, pointed to the effectiveness of the design in supporting teaching and learning by including SFL in critical discussions to exemplify the functions of language in expressing myside bias.

Another point on the last activity relates to the topic selected:

Το υλικό ήταν πολύ ενδιαφέρον... Μου άρεσε το γεγονός ότι συζητήσαμε ένα θέμα που είναι τόσο επίκαιρο στις μέρες μας με τόσους ανθρώπους να μεταναστεύουν στην χώρα μας για ένα καλύτερο μέλλον.

The material was really interesting... I liked the fact that we discussed an issue that is so relevant to us in the current climate, especially as so many people are immigrating to our country in search of a better life.

Here, the student is highlighting the importance of engaging with interesting and/or relevant material. The comment reflects the student's awareness of and possible experience with immigration issues. A number of students commented on how the choice of topic and material made the activity meaningful and engaging because it portrayed real, everyday problems they could easily understand or relate to.

Overall, data analysis indicated that A27 was quite effective in developing student's ability to understand how the expression of opinion/bias relates to a person's choices in reported speech and modality. Analysis of student reflections indicated that the design of the activity, including the material, critical discussion, and guidelines, had been well received by the students;

they particularly valued the portrayal of a real-life incident, which allowed them to better understand the context, the opinions expressed, and the linguistic choices made to support these opinions. Data from the journal and instructional log confirmed the effectiveness of the material and critical discussions with the use of SFL that foregrounded the connections between targeted resources and myside bias. Furthermore, the same data pointed to a development in the instructor's ability to explain these connections with the use of concepts from SFL. Authentic material which has limited the use of textbook language (as opposed to previous activities) to some extent, could have contributed to a better understanding of the connections between myside bias and the targeted resources. At this point, it had become clear once again that my decision to use material and language from students' textbooks in previous activities was possibly affecting both the students' and my own ability to create these connections.

Evaluation. To assess students' development towards the second objective at the end of Cycle 2, I analysed A28 which was designed to involve students in using targeted resources to individually reconstruct the story in the video and communicate their own position on the incident discussed in A27). Students were instructed to use the transcripts of the statements made by the people involved in the incident in their reports of the event. They were also instructed to use reported speech and modality based on their functions in expressing opinion. A28 aimed at assessing the design's effectiveness in developing students' ability to reconstruct the quotes they had already analysed and discussed in A27 in support of an opinion, using reported speech and modality. Transitivity analysis of the 40 student texts collected as data in A28 was conducted first to identify and connect students' linguistic choices to the opinion promoted, and second to explore students' ability to use the targeted resources based on their functions in promoting these opinions.

Transitivity analysis. Students’ choices of processes, participants, and circumstances (Martin et al., 2010), revealed that the majority of students (35 out of 40) used language to position themselves in support of the young immigrant. Material processes were more frequently used to describe the actions of the security guards, rather than those of the young immigrant. Table 5.13 shows the choices for material processes made for the two participants in student texts.

Table 5.13

Material Processes in Student Texts for A28

Participants	Process	Number of times used
Security guards	Hit	35
	Beat	34
	Push	30
	Hold/put down	28
	Grab	27
	Slap	24
Young immigrant	Take/steal	40
	Bit	27

As indicated in Table 5.13, material processes were more consistently used by students (85%) to portray the brutality and violence of the security guards (actors) towards the young boy (goal). On the other hand, to describe the young immigrant’s actions, the most commonly used material processes are shown to be the ones describing the boy’s offense (taking/stealing a sandwich) and his reaction to the violence he received (biting a guard).

Most students (70%) used relational processes such as “was portrayed”, “is so desperate and hungry”, “had no other option”, and “received” (see Appendix M, sentences 1, 5, 7, and 9) to refer to the young immigrant, which allowed them to describe or express an evaluation of the situation of the young boy in relation to other beings, things or events. Relational processes

allowed students to encode their personal assessment of the boy's situation by assigning him with attributes like "portrayed as dangerous", "desperate", "hungry", etc. Finally, students used circumstances of manner such as "by the neck", "like an animal", "so tight", "violently", and "endlessly" (Appendix M, sentences 2, 4, 6, 8 and 11) to draw the reader's attention to the violent treatment of the boy. They also used circumstances of cause (Appendix M, examples 3 and 9) to emphasise the reasons that led the boy to steal ("for a sandwich", "due to hunger") and so to foreground the fact that his violent treatment was unnecessary and unfair.

The analysis indicated the ways in which students developed and communicated position in their texts. The purpose of doing a transitivity analysis was to assess students' ability to foreground linguistic choices in expressing personal opinion and bias. The next section discusses findings from the transitivity analysis of students' choices in reported speech and modality with regards the second objective.

Reported Speech. There were 38 projections of a direct quotation of the young boy's words in students' writing. Direct quotes of the statements made by the CEO of the organisation in support of vulnerable migrants (see Appendix K, A27, A28 Handout) also appeared in the majority of student texts (73%). Following instruction, the students used direct quotes possibly to appeal to the reader's emotions by giving the young boy a voice. The verbal processes "said" and "mentioned" were most frequently used in the projecting clauses. Perhaps considering the quotes themselves as powerful enough to create an impact, the students thus disregarded the potential use of stronger reporting verbs. There were only a few instances of other verbal processes in projecting direct quotes by the young boy:

1. III As he described the fact later II "He held his hands around my neck and I couldn't breathe" III (S1)

2. III He explained that II “If I didn’t bite him, I think I would be in a cemetery somewhere” III (S23)

The verbal processes “describe” and “explain” are here used instead of “said” to foreground and strengthen the impact of the statements and so highlight the gravity of the boy’s situation. Stronger verbal processes could also have been chosen as a way to communicate the student’s stance by portraying the boy’s desperation and emphasising the circumstances that led to his offence. In two other indirect speech instances, verbal processes were used to project the young boy’s words:

3. III Armine begged them II to take him in a private room or II if they don’t want to keep him to let go III (S35)
4. III He cried II and asked them II let him free III (S20)

Despite the grammatical inaccuracies, students’ process choices indicate their intention to highlight the young boy’s mistreatment, as well as an understanding of how these processes can be used to portray the desperation of the boy and appeal to the reader’s emotions. It is important to note that, even in sentences written by students of lower linguistic ability (like 3 and 4), the reporting verbs were semantically accurate. This indicates that the activity was effective in developing students’ understanding and ability to use indirect speech together with processes that allow them to communicate perspective.

Direct quotes from the supermarket spokesperson explaining the use of force were only used by two students who included quotes from all the sources. This was done either to give equal value to all the evidence or because the students had not comprehended how direct speech functioned to enhance an argument as instructed.

Most instances of indirect speech (26) reported the words of the supermarket source. The two most commonly used verbal processes were “maintained” and “claimed”:

5. III The Sainsbury’s spokesperson maintained II that the security of the store have right to use force when it is necessary III (S4)

6. III Spokesperson for Sainsbury claims II that all security officers have the right stop a person II committing theft II and handing him/her to the authorities III (S25)

Based on the functions of the resources foregrounded by the design and instructions given for the activity requiring the use of targeted resources in communicating personal opinion, the students above were possibly reporting these statements through indirect speech to question them. The use of the specific processes indicates the students’ intention to question the security guards’ right to treat the young immigrant like a criminal. In the examples, students of quite low linguistic competence used verbal processes to position the Sainsbury’s spokesperson as the *sayer*, possibly to distance themselves from the opinion expressed. Although the sentences above are not grammatically accurate, by choosing to use “maintained” and “claimed” (instead of “told”), the students were hedging; they were introducing a degree of uncertainty around whether security guards had the right to use force.

Reporting verbs such as “claim” and “maintain” were employed in 19 texts to report the Sainsbury’s spokesperson’s words. Considering how the functional possibilities offered by these reporting verbs were foregrounded by the design, it is important to note that almost half of the students seem to have understood how to use these in their writing to express opinion.

Students also employed a number of verbal processes in paraphrasing the statements made by the supermarket spokesperson:

7. III The spokesperson of the Sainsbury's condemned [verbal] the immigrant II while she turned [behavioural] in favor of the violent response of the security forces. III (S16)

Verbal and a behavioural process were used in sentence 7 to encode the student's view of an unfair and biased treatment on behalf of the spokesperson. The behavioural process "turned" serves as a metaphor to indicate the shift in the spokesperson's position. These processes suggest a possible criticism of the spokesperson's choice to support the violent response of the security guards towards the young boy. Students' choice to foreground this "turn" in position is probably made to imply their own negative opinion towards the event.

8. III The spokesperson appears to take [relational] the part of the securities II when she says [verbal] that II they have the right to stop a person stealing from the supermarket III (S7)

Similarly, student 7 uses a relational process also functioning as a metaphor ("appears to take") to express uncertainty or disbelief towards the spokesperson's decision to support the security guards. Metaphors were used to refer to the spokesperson's position in this way possibly to criticise or question it by implying that there was an effort by the spokesperson, as the representative of the supermarket, to justify the actions of the security guards. It is interesting to note in these examples the students' use of language, beyond the resources targeted by the design, to communicate stance. This indicates a development in students' awareness of how language functions to create a position that could potentially lead to a better understanding of language in general and was something not initially anticipated in developing the design.

Modality. The mood element of clauses was analysed to assess and classify instances of modality realised either as a feature of the finite (F) or as a separate mood adjunct (A^{mod}) in

clauses. Analysis was based on Halliday's categorisation of modality types into modal verbs as finites, mood adjuncts, and metaphorical realisations of modality (Halliday & Matthiessen, 2014, p. 69). Modality instances were then analysed with respect to their functional possibilities in expressing opinion through possibility or obligation.

More than half the students (62%) used modal verbs in the 40 texts analysed, to express opinion as targeted by the design. The following are examples of modal verbs used in the finite:

1. This accident (S) **could (F)** have been prevented (P) if the government (S) **would (F)** give (P) the permission for work to immigrants (R). (S5)

In their paraphrase of the statement by the Praxis CEO, the student uses modal verbs "could" and "would" in the finite to implicitly disclose a personal evaluation or judgement of how the government would have been able to prevent this incident by allowing immigrants to work.

Although the sentence is not completely accurate in terms of grammar (precision is lost after the second modal), the student indicates a good understanding of how modality functions to suggest a possibility without directly imposing an opinion.

In five texts, students used modal verbs as finites in their concluding sentences as shown in examples 2 and 3 below:

2. As human beings we (S) **should (F)** show (P) mercy and not discriminate against people without knowing the whole story (R). (S18)
3. People (S) **should (F)** be reminded (P) that cases like that are presented negatively (R). (S3)

These were used by students to express a subjective judgement on our obligation as human beings to be more sensitive towards other people, especially those in need. The fact that students chose to foreground this obligation in their concluding sentences could also indicate an

understanding of how modality can function to appeal to the readers' emotions by leaving them with a strong message in support of the opinion promoted.

There were also three instances of modal verbs in the finite within the headlines of texts:

4. A man (S) **would (F)** lose (P) his life just for a sandwich (R). (S39)
5. Stealing a sandwich (S) **could (F)** cause (P) a man his freedom (R). (S10)

It may be that students 39 and 10 used modal verbs here to introduce a more dramatic angle to the story by suggesting that desperation could lead people like the young immigrant to risk their life or freedom for something as easily accessible to others as a sandwich.

In the following headline, the student uses "should" to express a personal judgement:

6. To be human (S) **should (F)** be (P) above to your job (R). (S22)

Although grammatically incorrect, the headline encodes a subjective evaluation of how humans should behave by indirectly criticising the security guards' treatment of the young immigrant.

Taking into consideration how the functional possibilities offered by modality were foregrounded by the design, it is important to note here that most students seem to have understood how to use these in their writing to express opinion.

Most of the modalisations found in student texts (22 in total) were implicitly subjective realisations through modal verbs as finites. Most indicated obligation ("should", "may") while the rest were used to express possibility ("could", "would"). Students used the majority of these forms to indirectly express their opposition to the treatment of the young immigrant in the specific incident, as well as their disapproval of the way people, the state, or society in general may address similar issues.

Analysis indicates a good understanding of the use of modality in conveying attitude, even though the number of modality expressions used was considerably lower in comparison to

reported speech. This could be partly attributed to the fact that students were provided with transcripts of the statements made by the people involved in the incident and were instructed to use these in their reconstructions of the event. The written instructions did not explicitly ask for the use of modal expressions, although both the activity preceding the production of student texts (A27) and the scaffolding involved students in discussing how they would use modality and reported speech to communicate their position in reporting the incident.

Students' reconstructions of the incident demonstrated an overall good understanding of how reported speech and modality function to express opinion. Specifically, projections of direct quotations of the young boy's words and the statements made by the migrant organisation CEO were included in the majority of student texts to portray support for the young boy and appeal to the readers' emotions by giving him a voice. Moreover, students used reporting verbs other than "said" and "told" in projecting the quotes of people representing the opposite side, so as to control information and encode their disapproval of how the young immigrant was treated. Finally, in their reports of the incident, students frequently used modality to suggest how the boy could have been treated differently. Considering how the functional possibilities offered by targeted resources were foregrounded by the design, it is important to note that the majority of the students were able to use these resources to communicate their position, at least to some extent.

Overall, the analysis indicated a good level of understanding of the contribution of targeted resources, especially reported speech, in communicating a point of view. Reflecting on the design, I became aware that choices in the design may have led to the small number of modality instances in student texts. While the use of reported speech in the material and instructions provided for the activities were explicit, there were no clear indications for the use of

modality. Nevertheless, analysis of data indicates a development in students' ability to use the resources based on their functions in expressing opinion. Critical discussion of the context (incident) in relation to the language (quotes) used to report the incident in A27 seems to have been useful in this development. Finally, based on student reflections and data from the instructional log, the material and guidelines (Appendix J) were effective in engaging students with the topic and in facilitating discussions of the contribution of language in conveying personal opinion.

Implications. The second objective of the cycle was to develop students' understanding of the contribution of reported speech and modality in expressing opinion. Although analysis indicated that students generally performed well in using both targeted resources to communicate a position, reported speech was more widely used by students. In retrospect, this seems to have been a flaw in the design and specifically the instructions and material provided. Other components of the design however, such as critical discussions and guidelines seem to have been effective in supporting the development targeted at this point in the intervention. The following considerations emerged as a result of design assessment towards the second objective.

Critical Discussions: The Contribution of SFL. Triangulation of students' texts with data from reflections and the instructional log continue to highlight the importance of critical discussions in developing learners' understanding of how language functions to express opinion and bias. In the discussions, it was important to provide students with opportunities to interact with each other and the instructor, share views, and reflect on the different possibilities offered by reported speech and modality in communicating position. Analysis further showed that the inclusion of the SFL concepts of *participant* and *process* in critical analysis discussions facilitated the connections between meaning and targeted resources and was quite effective in

developing learner understanding of language through its connection to content. Although I realised at this point that deeper and more explicit use of SFL may have further enhanced this understanding, I still think that incorporating more terms from SFL would have potentially created more challenges for many of my students. The design in the next cycle would continue to provide students with opportunities for critical consideration and discussion of the ways opinion/bias is conveyed through the use of the same SFL concepts.

Selection of Topic and Material. The concept of myside bias, which framed the questioning process and the ways language was foregrounded in expressing opinion, was also very important in selecting the material. The decision to choose a topic about which most students proved to have a strong opinion was in many respects useful in facilitating discussions of the incident and opinions expressed. At the same time, sharing a strong opinion on the issue may have also limited students' ability to exercise their criticality and reflect on their own bias before positioning themselves. Such critical awareness and evaluation may have resulted in the expression of more opinions and perhaps more careful consideration of how targeted resources could be used to foreground these opinions through linguistic choices in students' writing. This consideration indicated a need for the design to develop ways of critically approaching language regardless of the content discussed. To address this need, the design of Cycle 3 will involve students in practices of critical analysis and use of language through various topics.

Guidelines for Analysis. A final consideration informing the pedagogic design was the use of guidelines to support critical questioning of the material in terms of content (Critical Analysis Handout 1; see Appendix J) and discussion of the functional possibilities offered by targeted resources in expressing myside bias (Appendix F). Based on the analysis of data from A27 in Critical Analysis Handout 1 (CAH1), supporting critical questioning of content, was

effective in foregrounding information learners needed to consider in exploring the expression of opinion/bias in the video and transcripts provided. The questions on CAH1 facilitated meaningful dialogue between students, which allowed iteration and modelling of the pedagogy used in previous activities. Considering how ways of foregrounding and discussing the connections between language and content have been developing with the inclusion of SFL terms, I saw the need for the handout to be re-designed. In the next cycle the terms *participant* and *process* would be included in the questions and examples guiding students in critically questioning content through language.

The guidelines outlining the functions of reported speech and modality were used to support students' understanding and use of language in both A27 and A28. Because students' overdependence on the specific guidelines in previous activities had limited their answers and consequently their ability to demonstrate understanding of the functions of targeted resources, there were no explicit instructions for their use in the design of the two activities addressing the second objective. Although some student reflections pointed to the effectiveness of the guidelines in providing ways of talking about the functional possibilities offered by reported speech and modality in critical discussions (A27), there is no evidence that the development in students' understanding and use of language were directly related to the use of the guidelines. This may indicate a success of the design, considering that guidelines were designed to scaffold the development of students' criticality. Frequent use of the guidelines in critical analysis and discussion practices appears to have developed, at least for some students, the ability to use them in synthesising their thinking without over-relying on them.

Cycle 3 Analysis

The last cycle comprised five lessons and 32 activities in total. Six activities in total were analysed to assess the effectiveness of the design towards the two objectives of Cycle 3. For the purposes of the thesis I selected and present the analysis of two activities (A12 and A31) under the first objective, and one activity (A32) under the second. These are the most important in demonstrating the evolution of the design.

A12 required groups of students to answer the questions on their revised critical analysis handout (CAH2; see Appendix N) about an article titled “Complete facial transplants possible in the near future” (Appendix P), which the students had discussed as a group in previous activities. Student and researcher reflections were used to assess how repeated practices of identification, reconstruction, and discussion developed participants’ ability to critically discuss the contribution of nominalisation, passive, reported speech, and modality in expressing opinion. Analysis of students’ written comments were used to evaluate the design’s impact on students’ ability to critically analyse texts using the provided guidelines (Appendix N).

In A31, learners individually analysed an article of their choice, using CAH2. The articles were selected for their relevance to the topics students had decided to explore for their group project (for a description, see Appendix O). Analysis of student texts and reflections served to evaluate the design in developing their ability to independently employ the critical analysis practices, repeated and developed through the design, on material they themselves selected.

Finally, to assess the design’s second objective of Cycle 3, I analysed students’ articles (A32). These were written in collaboration on the topics the students had selected for their group project and were based on the critical analysis they had completed in A31. SFL analysis of the articles served to identify the positions communicated in the articles and then to assess students’

development in using targeted resources based on how these function to express opinion.

Analysis of student reflections on A32 served to assess the design in developing their ability to use targeted resources in support of an opinion.

Objective 1

Implementation. The following section discusses how the design was assessed towards its effectiveness in developing students' ability to critically analyse and discuss the contribution of text in expressing opinion. The design was effective in developing students' understanding of how language can be strategically used to provide choices in communicating a position. Analysis highlighted that requiring students to appropriate and use the material and guidelines in a less controlled way, supported critical analysis and discussion of language–opinion connections.

To assess the design's effectiveness towards the first objective, I analysed A12. This activity involved students in answering critical analysis questions on extracts from an article (Appendix P) to uncover how targeted resources functioned to express opinion. The article was adapted from a longer reading comprehension passage in one of the course textbooks and included quite a few instances of the targeted resources.

As mentioned, the content of the article had already been discussed in previous activities through sentence reconstruction examples and modelling of how students should be explaining the use of targeted linguistic resources in their analysis. As specified by the design in Cycle 3, instead of answering specific questions on the article, students were to use the questions in CAH2 (Appendix N) as a guide to discuss the content and language in relation to the opinion(s) expressed. This handout – a new version of the critical analysis guidelines I had used in previous cycles (CAH1; see Appendix J) – was revised to include the concepts of *participant* and *process* and was designed to support students in questioning content and foregrounding specific

information in an article. The questions were designed to guide students in identifying participants, main arguments, and evidence in the article and discussing the ways targeted resources functioned to present information in support of opinion. As shown in Appendix P, specific words or phrases in the article were marked to draw students' attention to language they should consider in their analysis. The aim was to assess students' ability to appropriate and employ critical thinking practices and guidelines. This entailed the identification, reconstruction, and discussion of the resources' functions in expressing myside bias as these were developed through the instructional design up to that point. In their analysis, students had to identify and discuss the position communicated in the article on facial transplants by analysing and explaining the ways the author had chosen to refer to the different sides (medical vs. psychological/ethical) and provide evidence for and against the procedure.

Students worked in groups and I monitored their progress by observing and intervening when necessary. I created the groups and made sure that these included students of various achievement levels. Collaboration was important in this activity, especially in the absence of specific questions guiding critical analysis. Volunteers from each group shared and explained examples from their analysis (using a projector) in a whole class discussion. Because the activity involved students in appropriating the guidelines on critical analysis quite independently, it was important to allow them to share their thoughts on how these practices were employed to uncover opinion. Even though not all groups agreed on the position communicated in the article, students overall performed quite well in identifying the different opinions and connecting the use of targeted resources to these opinions. All groups referred to at least two of the targeted resources in their analyses. The examples presented below were chosen to represent groups of various competence levels. The following is an answer given by Group 3 students:

The author is challenging the new surgery, that is why he uses more indirect quotes. With using this form of speech, the author has more possibilities to manipulate the article and to express the doubts that he or she has about this new procedure and also this way the author can add possibility to the article. If the author would use more direct speech, he/she would not have these possibilities. The author uses many times the words that express doubt and possibility: could, are likely to, predicted, would. (Instructional log, 31 March 2016)

In the extract above, students accurately identify the functional possibility offered by indirect speech to present information in support of the author's opinion against the procedure discussed. It is interesting how students in this group made connections between the author's use of indirect speech and modality, and the position communicated. They also indicate an understanding of how direct speech would not have functioned in the same way in the specific part of the article. Students' recognition of the possibilities offered by targeted resources in supporting or questioning information and how these affect the opinion expressed points to the effectiveness of the A12 towards the first objective.

In the following answer, Group 8 students compare and comment on the use of different reporting verbs to introduce different types of quotes. The verb "stressed" is used to introduce indirect quotes by a plastic surgeon and a psychologist in support of the facial transplant, while for the opposing view, the author uses a direct quote which he introduces with "said":

The author is supporting the first viewpoint expressed on the issue, that everyone could use the facial transplant for their own good. For example, in the saying of the plastic surgeon and the psychologist he uses "stressed" for a more specific and stressing tone, in

contrast to the words he used to introduce the sayings of the chairwoman, who has a totally different opinion than the other two. (Instructional log, March 31 2016)

Students in this extract acknowledge the ways in which language is used to communicate a position. Specifically, their reference to the use of reporting verb, “stressed”, as opposed to “said”, to create “a more specific and stressing tone” indicates their understanding of how language or the quote used contributes to the position advanced. Again, students indicate here an acknowledgement of how language choices can function to communicate a position.

Analysis of students’ responses in the instructional log show a development in their understanding of how reported speech functions to present information or evidence in support of a personal view. Although students were not always accurate in their comments on the positions communicated through language, there was a development in becoming aware of the possibilities provided. This is an important consideration as regards the design, as it relates to an understanding of how opinion is expressed and the ways in which it can be realised through specific linguistic choices.

Expressions of modality were identified and discussed in 7 out of 10 groups. In these, students commented on the functions of modality to either add possibility to an event or question the validity of a statement. In the analyses, students mostly used modality to support or question the effectiveness of the surgery described in the article. Their comments indicated a good understanding of the functions of modality in expressing opinion as these foregrounded by the instructional design. Most instances were related to uncertainty, low possibility, or lack of evidence in presenting information. Group 3 commented on modality in the following way: “Expressions of modality like ‘could’ and ‘likely to be’ are used in the text to weaken the verbs, because the techniques mentioned in the article haven’t been tested yet and we don’t know if

they are beneficial or not” (Instructional log, 31 March 2016). The students are suggesting that modal expressions used with verbs can make statements weaker; they convey the possibility that the surgery is not as beneficial as suggested. This comment indicates an understanding of the ways in which modality functions, as discussed through the design, to question the effectiveness of the facial transplant in support of the position communicated.

Similarly, students in Group 8 commented on the use of the same expressions in turning a statement into possibility: “These words add possibility to the sentence. It put emphasis on the fact that this new surgery might do something, but it very well might not. It makes a statement, without truly stating that something is going to happen” (Instructional log, 31 March 2016). The students are discussing modality for its function to add possibility to an event, which was also a function foregrounded in the instructional design. While not completely accurate in their evaluation of how modality functions in the specific part of the article, the students’ comment shows an understanding of this functional possibility in promoting a point of view.

However, not all groups showed understanding of how modality functions in their analyses. Group 6 commented:

Words such as “are likely to be”, “could” are examples of modality which is often used in news reporting because it gives journalists a means of presenting approval or disapproval in the way events are told. The author shows his approval to the words he presents.

Because the words “could”, “are likely to be” have positive meaning. (Instructional log, 31 March 2016)

While students in this group identified instances of modality effectively, they also borrowed their conclusions directly from the instructional material. Their comments didn’t seem to have a

connection to the context of the article; it is thus not evident whether the students understood how modality functions in the article to express opinion.

Apart from Group 6 and another group that did not address modality in their analysis at all, the rest of the data shows a development in students' understanding of the possibilities provided by modality in relation to myside bias. This understanding is important in assessing the design, as it points to a development in students' critical approach to language.

Records in the instructional log and researcher's journal show there were fewer references to nominalisation and passive voice. Only two groups commented on these resources in their analysis. Group 8 said:

We believe the word "disfigurement" was placed in the beginning of the sentence as participant because the author wants the reader to realize how important this surgery is for some people. The word "disfigurement" is much stronger and makes the reader understand why for these people this surgery is so important. (Instructional log, 31 March 2016)

The group emphasised the use of the nominal "disfigurement" as the participant in the beginning of a sentence to suggest the importance of the transplant for those directly affected by it. In this comment, students show an understanding of how nominals may function to position information in a sentence to emphasise it in support of an opinion. Students in the same group also commented on the use of the noun "procedure" as the subject in sentences replacing the term "facial transplant".

The author avoids to repeat the name Facial transplant and replace it with the label "the procedure" because he wants the readers to consider it is similar to other surgeries and not something completely unknown or dangerous. We also see this expression as the

subject in some sentences in which the passive voice is used to give it an important position and to emphasise the surgery rather than experts' worries and risks about it.

(Instructional log, 31 March 2016)

Although not correct in identifying “the procedure” as a nominalisation, students were in a position to understand and comment on the use of “the procedure” as a participant in many sentences to “pack” or de-emphasise information that the author would like to avoid (e.g., the risks involved) and present it as a common surgical process similar to other important procedures. It is also interesting to note that students commented on the functions of the passive voice to topicalise the procedure, by placing it in the position of subject, to emphasise its benefits in support of the author's opinion. Only Group 3 commented on the use of passive voice:

Referring to the transplant, the author uses the passive voice in “but warned it could be abused” to avoid talking about who may use this procedure in a dangerous or abusive way. If we were to change the passive voice into active the new participant of the two sentences would be People / Doctors/ Plastic surgeons who could be using this surgery for wrong reasons e.g. to make money, to get a more beautiful face, to look like someone else etc. (Instructional log, 31 March 2016)

The group commented on the use of the passive in eliminating the subject from a sentence in order to allow for multiple interpretations of a statement. The specific function of the passive voice was discussed in relation to myside bias many times in the instructional design of Cycle 1. It is very important that the students in this group followed the practices developed through the design to reconstruct the sentence and discuss the functional possibilities presented by the different options in their comment, without having had specific instructions to do so. They also used the term *participant* which was included in CAH2, effectively. This indicates an

understanding of the term and how the information placed in this position can provide options. It also points to a development in students' critical approach to how choices in language can communicate opinion.

Reflecting on the first objective, students generally performed well in critically analysing the contribution of targeted resources in expressing opinion. Students performed better in discussing reported speech and modality, while fewer comments were made on nominalisation and passive voice, which may relate to different factors. First, the linguistic resources targeted by the design in Cycle 1 had not been practiced as recently as reported speech and modality. Second, as shown in previous activities, identifying and discussing nominalisation is generally more challenging for students. Finally, there were fewer instances of passive voice and nominalisation in the article compared to reported speech and modality. This may very well be a limitation of the material, but it also highlights the fact that authentic texts vary in how frequently they feature specific linguistic resources, making them difficult to adapt and use in instruction.

Drawing on these conclusions, I realised that key to the development targeted by the design is cultivating the ability to understand if or when linguistic resources become important in expressing opinion or bias. The role of metalanguage is also highlighted in this development. Such considerations were reflected in my journal:

I realize that in this development the use of metalanguage can be very useful, as it can help students concentrate on clause or sentence constituents that are easier to identify because they relate to meaning (participant, process) and not specific linguistic resources which may vary from text to text. Linguistic resources would only be relevant if they contributed to presenting information in such a way so as to promote a point of view.

Engaging in analysis of personal views based on a line of questioning which would highlight information for its importance was the critical thinking and linguistic practices students should be employing and these should be relevant to any text carrying perspective. (Researcher's journal, 2 April 2016)

Such reflections are indicative of how the design developed. In these, the benefits from developing students' criticality with regards the contribution of different linguistic resources to meaning emerge. The development, as highlighted in the entry above, entails cultivating students' ability to examine information placed in the *participant* and/or *process* position, to consider the language used to present or position that information, and connect this language to the opinion expressed. To achieve this, the design targeted the development of critical practices enabling learners to identify language, reconstruct it and critically consider any type of information by focusing on the ways different linguistic resources function to present that information in support of personal opinion.

Student reflections on A12 were quite positive. A number of students commented on the effect critical analysis has had on their ability to express themselves:

Ναι, η κριτική ανάλυση έχει επηρεάσει τον τρόπο που μιλώ. Γνωρίζοντας περισσότερα για τη γλώσσα, κάποιος μπορεί να χρησιμοποιήσει περισσότερες τακτικές και ήδη λόγου για να εκφράσει συναισθήματα και σκέψεις στους άλλους. Γνωρίζοντας κάποιος τι μπορεί να κάνει η γλώσσα, γίνεται πιο προσεκτικός όσο αφορά στις γλωσσικές επιλογές που κάνει.

Yes, critical analysis has influenced the way I speak. You know more about language and therefore can use more strategies and different forms of speech to express the way you feel, what you are thinking and how you can explain things to others. Noticing what language can do makes you more aware of the choices you make.

The student supports that the critical analysis for A12 helped to clarify the connections between language choices and opinion, and positively influenced their ability to express themselves. What is interesting in this quote with regards the activity is the student's acknowledgement of how the focus on understanding linguistic choices through critical analysis improved their understanding of language in general. The student here shows a development in their understanding of how myside bias manifests in language. They are not making clear points relating to how language positions points of view, but there is a growing awareness about choices, and this is beginning to impact how they understand strategic use of language. While students are not yet showing a development in evaluating peoples' stance, there is an increasing understanding of choices, critical evaluation, and the possibilities provided by language for doing that.

Finally, some students commented on how the design of the activity required them to exercise more independence in their analysis:

Πιστεύω ότι αυτή η δραστηριότητα ήταν πολύ πιο απαιτητική γιατί είχαμε να σκεφτούμε εμείς τις ερωτήσεις και να ψάζουμε για τα γλωσσικά στοιχεία που θα μας βοηθούσαν να αναλύσουμε και να καταλάβουμε τις διάφορες απόψεις. Παρόλα αυτά, ήταν πιο ενδιαφέρον, και τελικά καταφέραμε περισσότερα με την συμβολή όλων στην ομάδα. Ένιωσα ότι είχαμε πιο πολύ έλεγχο.

I think this activity was much more demanding because we had to think of the questions and then we had to look for the language to help us analyse and understand the different views expressed. However, it was more interesting, and we accomplished more with the help of everyone in my group. I felt that we had more control.

As students were guided by the general CAH2 questions, they were able to focus on the content and language they needed for their analysis. The student here comments on how the design of the

activity required them to collaborate and encouraged them to be more critical in their evaluation of the information on the different opinions expressed. Finally, it is interesting to note that the student acknowledges the effectiveness of the activity in giving them better control of linguistic and critical thinking practices and suggests that this may relate to the absence of specific questions, which allowed them to assume more responsibility in their work and develop their critical thinking skills.

A12 was useful in developing learners' ability to critically analyse and discuss the contribution of text in the expression of opinion, which was the first objective of this cycle. It provided opportunities for developing students' ability to collectively engage in practices of identification and discussion of language with the use of guidelines to uncover the connections between targeted linguistic resources and opinion or bias.

Finally, the absence of specific questions to guide critical analysis of the article seems to have had multiple effects. First, it allowed students to reflect on and acknowledge their ability to independently identify bias and use it as a tool in evaluating language. Second, in the absence of specific questions, students relied more on both the handouts provided (i.e., CAH2 and the language function guidelines). This developed their understanding of how personal opinion and bias is part of any text. It also demonstrated that criticality does not relate to the knowledge of grammar, but the ability to question grammar in relation to meaning. Finally, having no specific questions created the need for learners to make use of each other's knowledge and developing skills. These are affordances of the design that should be exploited further.

Evaluation. To assess students' development towards the first objective at the end of Cycle 3, I analysed A31. It aimed at involving students in critical analysis of articles selected by them for their course group project (see Appendix O). A31 was designed to involve students in

individual critical analysis of an article related to their topic. They had to identify the main arguments and supporting evidence and then discuss the contribution of the targeted linguistic resources in expressing opinion and bias.

Students were encouraged, as in the previous activity analysed (A12), to refer to the questions on CAH2 (Appendix N) for their analysis. They were also reminded of the critical analysis practiced in class relating to identification, reconstruction, and critical consideration of targeted resources for their contribution in expressing opinion and bias. Reference was also made to the language function guidelines (Appendix F) and how these could facilitate them in their discussions of language. Finally, students were asked to consider information in other modalities such as accompanying images or videos and critically discuss their role in advancing the opinions portrayed in the articles.

A31 was preceded by a number of other activities preparing students for the group project. For example, I wrote the eight topics suggested on a sheet of paper and asked students to put their name under the topic they would be interested in working on. The aim was to have 8 to 10 groups of 3 to 5 students, each working on a topic. I emphasised that most of the project activities would be assessed, so it was important for them to work with peers they could collaborate with and benefit from. It was interesting to see that students were generally careful in their choice of partners and that most groups were of mixed ability. Once groups were formed, they were asked to collaborate in refining their topic. They visited different websites and saw how their chosen topic was portrayed across different media. They also identified and focused on a particular aspect of the topic. For example, “gender stereotypes in the media” could be refined to “women are portrayed as the weaker gender in advertisements”. In the process of refining the topics, another two groups were formed which resulted in 10 groups consisting of 4 to 5 students.

Students worked together to find material related to their topic. Through this process, each group member had to identify one related article for individual critical analysis (for A31).

In preparation for critical analysis, one of the activities involved each group in presenting the topic and related material to the rest of the class. Following each presentation, I provided feedback on the appropriateness of the articles for critical analysis and their relevance to the topics. I made further suggestions where necessary, but did not discourage students from their choices. The students then reviewed their work based on my feedback and the suggestions of their peers so as to decide on the articles to be analysed. Individual critical analysis of the articles chosen by each student, as already mentioned, was one of the assignments comprising the group project (Appendix O) and formed the data for A31. As this was an assignment, student work was marked; having students select their own articles made it challenging both to control the quality of the articles and to have a clear set of criteria for assessment. These challenges will be further discussed in my analysis of the activity's effectiveness towards the design objective.

There were three criteria for assessment and these were consistent with the guidelines I had provided students on CAH2 (Appendix N). The final mark and feedback therefore were based on students' ability to identify the expression of personal opinion (content), their performance in using CAH2 questions to reflect on how language functioned to express opinion in specific parts of the articles (language), and grammatical accuracy. I organised the questions on CAH2 to address the introduction, main development, and conclusion, as I wanted students to notice how language was used to present information in different parts of the text. Feedback was focused on the quality of student responses and was intended to draw their attention to the connections between targeted linguistic resources and opinion. Feedback was also designed to

serve as a scaffold for the next activity (A32) in which students were required to produce their own articles.

Analysis of the 40 assignments was based on the same criteria as those for the CAH2 questions: (a) the identification of opinion and (b) students' critical evaluation of how targeted resources were used to convey opinion and bias in the articles. Students were categorised according to achievement level based on their prior assignment grades in this module. Table 5.14 shows how students from each achievement level identified personal opinion in the articles and commented on the use of targeted resources in expressing personal opinion.

Table 5.14

Student Achievement in Relation to Assessment Criteria in A31

Student achievement level in prior assignments (out of 40)	No. of students	Content	Language			
		Identification of personal opinion	Passive voice	Nominalisation	Reported speech	Modality
Low (below 20)	11	11	2	2	7	2
Medium (20-30)	19	19	11	4	12	4
High (30-40)	9	9	6	3	7	3

As indicated in the table, all students used the questions provided on CAH2 to identify personal opinion in the articles. Looking at students' performance in commenting on the use of language to express opinion, it is interesting to note that reported speech and passive voice were the two resources most frequently commented on by students across levels of achievement.

Generally, students commented more on reported speech and less on passive, with which they seemed somewhat less confident. Analysis highlighted two possible reasons for this. The first was that these two resources occurred more frequently in the articles than nominalisation and

modality. The second related to the possibility that students felt more comfortable commenting on these resources than the others.

Regardless of which resources were most frequently commented on, one can see that all targeted resources were critically discussed by students at every level. All the targeted resources were critically evaluated by at least 20% of low achievers, while more than 60% commented on at least one instance of reported speech. There were, however, fewer comments on the rest of the targeted resources, which indicates a lower comfort level with these resources. With medium- and high-level students, reported speech and passive voice were commented on fairly frequently. While this was expected of high achievers, the fact that roughly 60% of medium-level students commented on the passive voice in their analyses was quite interesting. There was, however, a considerably lower number of comments on nominalisation and modality. As already mentioned, this may relate to the criteria students were using to select their articles. Considering that students were more comfortable with certain targeted resources than others, their choice of article may have been influenced by the frequency with which a given resource appeared in the articles. On reflection, it would perhaps have been more beneficial, both in terms of assessment as well as analysis, to have students work on a single article. Such considerations will be further discussed in the next section, in which I look into students' argumentation on the use of targeted resources to express opinion.

Detailed analysis of assignments allowed me to look into the quality of students' arguments in explaining the functions of targeted linguistic resources and provided insights into students' understanding of the contribution of these resources in expressing opinion. The basis for sampling was students' previous grades in the module and assignments were selected to

represent students from the three achievement levels. Analysis focused on the students' performance in relation to the criteria in CAH2.

Identification of Personal Opinion. As already discussed, students of all three levels analysed articles to identify opinion. While medium and high achieving students were expected to perform well, it was interesting to note that weaker students also managed to identify the expression of opinion, commenting, for example: "The main argument supported in this article is how marriage between people from the same sex should be allowed. It is based on the views of homosexual people for who the law has changed". These students were able to identify the main opinion or argument with the help of the general questions included in CAH2. Guided by the questions, students identified both the main arguments raised and the source of the evidence in support of these arguments.

Students in the medium and high levels demonstrated the expected greater level of competence in identifying opinion and relating this to the evidence provided: "The article promotes a negative view of Snowden's revelations about the government. The author provides information mostly by CNN -Media organization that promotes only the attitude Snowden is wrong and that he has betrayed his country". Here, the medium-level student identifies the opinion communicated in the article and highlights the contribution of information/evidence from a specific source (CNN) in supporting this opinion. Once again, the student's reference to the source to provide a more sophisticated justification for their claim may have been guided by the questions on CAH2, indicating the usefulness of the guidelines even for students of higher levels.

In this next extract, a high-level student relates the identity of the author to the information presented as a way of justifying the opinion expressed:

Hunter Walker (Yahoo News White House correspondent) is the person who covers president Trump's presidential campaign, the people running to replace him and the various investigations into his administration. He is clearly against Trump and we can see that from the way he is using Trumps' statements to represent him as a racist who claims to save America by sending all immigrants away.

The student is critically questioning the objectivity of the author because of his position.

Regardless of whether the student has enough evidence to support this argument, it is evident that they have considered the identity of the author in identifying the main opinion expressed and in evaluating the evidence provided (use of Trump's statements). While this is a student of high achievement level, critical assessment of the information seems to be influenced by specific questions in the guidelines (who is the author, does he/she have a personal interest in promoting a specific view).

Analysis of students' assignments indicated a good level of performance in identifying personal opinion in the articles. It seems that, in many cases, students' identification of the main opinions in the articles depended on critical evaluation of the evidence and the sources provided in support of these opinions. This is an interesting observation with regards the design, as both the practices of critical analysis employed in class and many of the questions on CAH2 were designed to develop students' criticality in assessing information in relation to personal opinion. The second criterion used both in the assessment and in the analysis of students' work was the quality of their argumentation in discussing how targeted resources were used to express opinion.

Use of Targeted Resources in Expressing Opinion. In the following section, analysis of student explanations on the functions of targeted resources in expressing myside bias is

organised based on the four resources targeted by the design: passive voice, reported speech, nominalisation, and modality.

A. Passive Voice

There were quite a few instances of passive voice in all the articles chosen. Passive was the second most frequently discussed resource in students' assignments. In their analysis of an article discussing the consequences of excessive video gaming on young people, a student of low achievement level explains the use of the passive voice in the sentence "Lives, dreams and friendships can be destroyed":

In the article we can see the hidden attitudes and biases because of the language choices of the author. The author by using passive voice is trying to avoid emphasize a participant, in specific positions to shift the focus of attention. He tells us about the negative effects but doesn't blame the games directly for destroy everything.

Although not grammatically accurate, the student's explanation of how the passive is used in the article to convey the author's opinion is consistent with the functional possibilities discussed through the instructional design. In their justification, the student is clearly borrowing language from the guidelines on resource functions ("to avoid emphasising a participant, in specific positions to shift the focus of attention", see Appendix F). Nevertheless, their explanation indicates an understanding of how the passive functions to refer to the destructive effects of gaming, but at the same time de-emphasise the participant "games" as the cause of the problem or the destruction. It is also interesting to note that a student at this level was able, albeit aided by the guidelines, to identify and accurately refer to language choices and the ways in which participants in specific positions can shift the focus of attention.

In their analysis of an article on the same topic but representing the positive side of playing video games, a medium-level student explained the use of the passive in the following way:

In the sentence “Games have been accused through unreliable sources of making players violent, but evidence has been building over the years that they can have positive effects” the author is using the passive voice to imply that games are unfairly accused but without mention of who is the accuser... he is indirectly blaming “unreliable sources” for creating this negative impression.

In their explanation of how the passive functions to de-emphasise the source of the accusations, the student demonstrates a good understanding of the contribution of the resource in indirectly promoting the author’s view. It is also interesting to see that, while the student is referring to the functions of passive voice as included in the guidelines, they are using their own words to support their point. This indicates a clear understanding of how the passive functions to express opinion in the article.

B. Reported Speech

As the resource most frequently discussed, reported speech of either type was commented on in almost all the assignments. The majority of students explained how the use of direct quotes functions to make information more reliable in support of an opinion or argument. In the extract below, a student in the low-achiever group explains how direct and indirect speech are used to present information in an article on the increase of weddings between gay people following the legalisation of same-sex marriages:

The article include a lot direct speech from homosexual people and that is the reason the author includes the words unchanged, to express publicly the opinion of these people who

the law changed for them... he also included indirect speech of the Office for National Statistics because is an also important source of information on the topic but is functions as secondary source.

In their analysis, the student explains how the choice of different types of reported speech helps the author emphasise information from different sources to build a stronger argument.

Specifically, the student highlights the author's use of direct speech to present the views of the people affected by the law in "their words unchanged", as opposed to indirect speech to present information from a less important or secondary source. This indicates a significant development in the student's understanding of the function of the two types of reported speech in presenting information from different sources based on how important these sources are.

Analysis of assignments from students at medium and high levels showed a higher level of understanding of the functions of reported speech in expressing opinion. The following is a sample of the work of a medium-level student on an article describing an investigation into the causes of a tragic airplane accident. In the extract, the student explains how the author used indirect speech to present his own opinion:

The author used statements from the chief investigator and the company representative but through indirect speech he was able to promote his own opinion that the accident was the fault of bad maintenance. He did this by using reporting expressions like "appeared to confirm", "maintained" "seemed to claim", "seemed to believe" These words show his disbelief.

In this extract, the student identifies and explains the use of reporting expressions as a way of presenting information to convey a personal opinion. Looking at the explanation, it seems that, by identifying and critically reflecting on the specific reporting expressions, the student was able

to understand the author's intention to present the available information, but also to convey a personal evaluation on the causes of the accident. This is interesting as it indicates a development in the student's understanding of how language connects to the expression of opinion.

In their analysis of an article on how the media misinforms people about Donald Trump by manipulating his words, a high-achieving student comments on the use of reported speech to communicate specific views: "We can see that direct speech is used to emphasize Trump's words usually in aggressive and racist statements. On the contrary when his words are not offensive, we see that they are reproduced and de-emphasized through indirect speech". The student demonstrates a very good understanding of how different types of reported speech serve to emphasise or de-emphasise information in Trump's statements to establish his image as a highly racist person and influence the reader's opinion of him. Justifications of the use of direct speech in adding validity to a statement and indirect speech in manipulating information were the most frequent in students' writing and students from all levels seemed to have a greater comfort level in discussing reported speech.

C. Nominalisation

There were fewer instances of nominalisation than reported speech and passive voice, and very few students (as shown in Table 5.14) commented on its functions in expressing opinion. The smaller number of comments on nominalisation could therefore relate to both challenges in identifying instances of the specific resource in the articles, as well as a lower level of confidence in discussing nominalisation. In the following extract, for example, a low-level student identifies the expression "getting married" as a nominalisation and explains its use in an article on the legalisation of same-sex marriages:

The author is using a nominalisation “Getting married” to talk about the situation of which a person creates stability, have option to have family, and of which he is not different from his friends and neighbors. In this case, nominalisation is using to avoid giving specific information allowing for multiple interpretations of the marriage.

Although not accurate in their identification of the expression “getting married” as a nominalisation, the student explains its use as the author’s way of arguing that different people have different perceptions of the concept of marriage (“allowing for multiple interpretations of the marriage”). The language used by the student in supporting this claim was clearly borrowed from the guidelines on resource functions (Appendix F) and this indicates limited understanding of the function described. Nevertheless, while the student misidentifies a nominalisation, the explanation they give for its use in the specific context indicates an understanding of how the specific resource functions to present information in an abstract way.

The use of nominalisation to indirectly express an opinion by making information abstract was also explained by a medium-level student in their analysis of an article on the negative effects of video gaming: “By using the nominalisation ‘Gaming’ as the subject /participant in several sentences in this article which discussed the negative side of video games, the author connects video games/gamers to risky behavior and drug abuse without directly blaming anyone specific”. The student quite accurately explains how the use of nominalisation helps the author position and present the abstract term “gaming”, as opposed to the people who play or create video games, as responsible for the negative effects associated with their excessive use. This explanation indicates an understanding of how nominalisation functions to make information in a sentence less specific so as to promote an opinion without directly assigning

responsibility. This is an indication of the effectiveness of the design in broadening students' acknowledgement of the functional possibilities of language.

D. Modality

There were also very few comments (nine in total) on the use of modality in the articles. This was particularly surprising, as the actual frequency of modality instances in the articles analysed was quite high. Considering that modality is a much easier resource to identify than nominalisation, the relatively small number of comments may have resulted from the instructions given to students. They were required to discuss as many resources as possible, but they were not explicitly instructed to discuss all four. This may have led students to restrict their analysis to the resources they felt more comfortable with.

In their analysis of the article on excessive video gaming, a medium-level student argued around the use of a modal verb in promoting the view that playing video games may be related to female depression.

The author is clearly trying to push a personal view by referring to Female gamer's depression as a possibility. This is clearly based on his own opinion and not on facts or research and this is why he uses the modal verb "may" to introduce this possibility.

The student demonstrates a good understanding of how modality functions to express a view by highlighting the use of a modal verb to introduce a possibility in the absence of evidence. It is interesting to note that the same student inaccurately identified the expression around the female gamer's depression as a nominalisation functioning to promote the same view by making information abstract.

Finally, in their analysis of an article on the Charlie Hebdo terrorist attack, a high-level student criticised the way media may portray specific news to serve different purposes.

The author highlights that there is a whole other side to the story (terrorist attack) and he is using the modal verb “could” to promote the opinion that the media is selectively covering specific news to create false impressions and stereotypes. We can see that modality functions in this part of the article to add possibility to a claim which is not based on facts.

The student explains how the modal verb “could” allows the author to express a personal opinion by presenting it as a possibility, even if this cannot be supported by evidence or facts. This shows a development in the student’s thinking both in terms of identification of personal opinion and understanding of the contribution of modality in expressing that opinion. This development may be traced back to the critical analysis questions included on CAH2 (Appendix N). Furthermore, while this is a high-level student, it is interesting to note that, in his justification of the use of modality, he seems to draw from the language in the guidelines on functions (Appendix F).

Critical analysis and discussion of the contribution of targeted resources in expressing opinion was the first objective of Cycle 3. Analysis of data indicates that the activity was useful for developing students’ ability to individually question a text and identify opinion. It also highlighted the effectiveness of the design (activity and guidelines) in developing learners’ disposition to discuss targeted resources for their connection to myside bias. Students across achievement levels demonstrated good performance in selecting and appropriating questions on CAH2 as shown by the analysis of their work. Performance in explaining the contribution of targeted resources in expressing opinion was considerably better for some resources than others. Specifically, analysis shows that most students performed quite well in identifying and discussing the functions of reported speech and passive voice to express opinion in their articles.

An important consideration in assessing the effectiveness of the design of the activity relates to the use of guidelines (Appendices F and N) that students were encouraged to use in their assignments. Analysis indicates that the questions included on CAH2 (Appendix N) were quite useful in foregrounding information such as opinions and arguments, evidence, and sources from specific parts of the texts (introduction, main development, conclusion) that students were required to critically evaluate. The use of the guidelines on resource functions (Appendix F) was also quite evident in the assignments, as students often used the language and rationale included in the guidelines in their justifications of language use. While students of medium and high levels managed to effectively adapt the language and demonstrate a good understanding of the functions of targeted resources, low achievers did not always manage to do so. Analysis showed that some weaker students over-depend on the guidelines in their explanations of how resources functioned and this made it difficult to assess their performance.

Students' overall performance in discussing the contribution of some of the targeted resources in expressing opinion was considerably lower. While there were instances of all the targeted resources in the articles chosen, very few students identified and discussed nominalisation and modality in their assignments. On reflection, it seems that the decision to have students select their own articles, as a way of making their engagement with language more meaningful, has created challenges both in terms of assessing and analysing their work. Having students work on different articles made it more difficult to have clear criteria for formative assessment and analysis. Even when these criteria were identified, it was impossible to control the quality and complexity of the articles in terms of content and language. Moreover, as mentioned earlier, there were no specific instructions requiring students to critically discuss examples of all four resources and this may have again allowed them to work on the resources

they felt they could analyse more proficiently. Finally, in A31 students were working individually and did not benefit from collaborative discussion and negotiation of the content of the articles. Collaborative analysis and discussion of content in support of students' understanding of the connections between language and opinion has indicated significant benefits, especially for lower achievers, in the previous activity (A12).

Implications. The first objective of the cycle was to develop students' ability to critically analyse and discuss the contribution of text in expressing opinion. Despite the challenges encountered, designed activities were effective in developing learners' ability to critically discuss the possibilities offered by targeted resources in communicating a position. Use of the guidelines supporting students in independently engaging with language through the critical analysis practices repeated in this and previous cycles, has been useful in this development. The following considerations emerged as a result of design assessment towards the first objective.

Guidelines for Analysis. The absence of specific questions guiding critical analysis of the articles seems to have provided opportunities for students to appropriate and use CAH2 in discussing the ways language functions to express opinion/bias. The potential of the handout in facilitating students' thinking and language development in the activities was highlighted as an important consideration in assessing the design. Analysis of students' assignments and reflections showed that the language and the questioning rationale – foregrounding and relating to the expression of opinion in the guidelines – were used in a critical manner even though students' engagement in analysis practices was more independent and less controlled by instructional practices and material. Being more independent seems to have allowed students to reflect on their critical engagement with language and to realise how questioning grammar in relation to meaning, as opposed to learning grammar rules, can support both criticality and

language. Although the use of SFL terms in CAH2 may have facilitated students' in using the guidelines, it is not evident that their inclusion in the handout affected students' ability to think about and discuss language. The SFL terms were not generally used by students in their answers and I realise that this possibly relates to my decision not to replace but rather supplement textbook language with these terms. Students will be encouraged to refer to the guidelines in synthesising information and writing their own articles in the next activity (A32).

Critical Practices of Analysis. A number of students commented in their reflections on the effectiveness of the activities in involving them in critical analysis practices, in a less controlled manner. Although students were not specifically instructed to go through identification, reconstruction and critical discussion practices in the same structured ways repeated in previous activities, the language and thinking patterns developed through the design were documented in the data. Even in activities conducted individually (A31), analysis indicated that despite the challenges, most students were able to revisit and apply critical analysis practices to identify and discuss strategic use of language in support of expressing opinion, in the articles they had selected. Collaboration was a facilitating factor in the absence of specific questions and instructions and will be a feature of the design of the next activity.

Selection of Material. As already mentioned, the decision to allow students to select topics and material based on their own interests created challenges both in the implementation and evaluation of activities. Among these were the complexity or inappropriateness of selected articles and /or the fact that, in the absence of specific critical analysis questions, students generally chose to comment on the resources they felt more comfortable with. Despite these challenges, analysis shows that the design had a positive effect in engaging students and in developing their critical awareness of language–meaning connections, regardless of the topic or

material analysed. The design thus continues to allow selection of topics and material based on students own interests and to target the appropriation of critical thinking practices and guidelines in the next and final assessed activity.

Objective 2

Implementation. In this section, I assess the design's effectiveness in developing students' ability to critically use the targeted resources in synthesising and collaboratively presenting information to express opinion. Although challenges were created from the use of self-selected material, analysis pointed to a growing ability in strategically using targeted resources in support of opinion. This ability, according to student reflections, developed as the result of repeated critical analysis practices preparing them to independently identify, discuss and use targeted resources to express opinion.

To assess the design towards the second objective, I analysed A32, which was the last activity in the group project (Appendix O) and required the same groups of students to collaboratively write an article representing the different perspectives on the topic they had chosen to explore for their projects. To write their articles, groups had to select information/evidence from the critical analysis they had done individually for A31, and synthesise it by using targeted resources in support of the position they wanted to communicate. As in previous activities, I advised students to refer to CAH2 (Appendix N) as guidance on content, organisation, and language. I highlighted the use of the *participant* and *process* in the handout and emphasised how students should be thinking about these terms in deciding on the contribution of the information and sources they would be using in their articles to express opinion. I also suggested they used the language function guidelines (Appendix F) to consider ways of employing targeted resources in support of expressing opinion in their writing. At this

point, it was important to assess the design towards enabling students to independently engage in critical thinking practices, so the instructional design did not involve students in whole class activities or discussions for A32. Most of the work (selecting, discussing, and synthesising information) was conducted for homework and I only provided feedback in separate meetings with each group.

Each group member (12 groups of 4–5 students) wrote a section of the article. Students used Google Drive to share their writing through a common document. This allowed students to benefit from observing each other's work and exchanging feedback. Putting the sections together and deciding on the headline and images to accompany the article was thus done collaboratively. The articles were assessed based on three criteria: (a) students' ability to present different sides of a topic and use information to support an opinion (content), (b) their ability to use targeted resources based on their functions in presenting information to communicate opinion (language) and (c) grammatical accuracy and correctness of format. As already mentioned, students were advised to form groups with peers they would benefit from, which led to consistently mixed-ability groups.

Evaluation. To assess the effectiveness of the design towards the second objective of Cycle 3, I analysed students' articles and reflections for A32. As already mentioned, A32 aimed at engaging students in critical practices of analysis and synthesis of information in support of an opinion, to assess the design's effectiveness in enabling students to perform these practices independently. It required students to select information from the critical analysis they had done individually for A31, discuss how to use this information in relation to the topic, and then synthesise it by using targeted resources to position themselves.

As with A31, I analysed the articles based on the assessment criteria of content and language to determine overall performance. The content was evaluated based on students' ability to present and support a well-balanced argument and a clear position on the topic. For language analysis, I initially focused on the students' use of targeted resources to express opinion. This was followed by transitivity and modality analysis of each article, where I examined data to evaluate students' understanding of the ways targeted resources were used to synthesise and present information to express opinion. Data consisted of 12 opinion articles of approximately 300-500 words, each including a headline, byline and image. Table 5.15 summarises group information and achievement in fulfilling the criteria in A32.

Table 5.15*Group Achievement in Relation to Assessment Criteria in A32*

Group	No. of students in group	Group achievement level ^a	Group mark (/100)	Topic		Language		
					Nominalisation	Passive voice	Reported speech	Modality
1	4	1	87	Donald Trump: Rich or Poor?	Unsuccessful ^b	Successful - "If anyone differs must be respected" - "Racism and prejudice cannot be promoted through any public figure"	Successful - "The president to be accused Mexicans as drug dealers and rapists" - "He promised to force Mexicans to pay for a wall that will keep them out"	Successful - "There is a lot of people who can be affected by what he says" - "People should be aware of that and not judge based on race or culture"
2	4	2	75	Women and beauty in the Western world	Unsuccessful ^b	Successful - "The way 'beauty' is perceived has to do with more than biological instincts" - "How female beauty is looked upon"	Successful - "Naomi Wolf supports the idea that the beauty industry uses images to oppress women" - "She says 'Beauty is a currency system'"	Unsuccessful ^b
3	4	1	90	Donald Trump: Through the eyes of the American Press	Successful - "The direction of thought" - "The manipulation of words"	Unsuccessful ^b	Successful - "He indirectly suggests that people need to stop showing support" - "David Masciotra supports this by using data related..."	Successful - "His views are the standard by which Trump ought to be judged" - "We should be more critical"

Group	No. of students in group	Group achievement level ^a	Group mark (/100)	Topic	Language			
					Nominalisation	Passive voice	Reported speech	Modality
4	5	3	65	How the Internet represents Video Gaming	Successful - “The addiction also affects” - “Video gaming increases risky behavior”	Successful - “Marriages and friendships are destroyed” - “Many health problems are caused”	Unsuccessful ^b	Successful - “Video games can develop mindfulness” - “They may be used as pain relief sometimes”
5	4	2	78	What’s the truth behind the Charlie Hebdo attack?	Unsuccessful ^b	Successful - “Muslims are presented as violent” - “The effort to blame Islam is linked with terrorism”	Successful - “In the article, he directly blames the Quran” - “They criticize a whole religion because a few brainless people”	Unsuccessful ^b
6	4	1	90	How does the Dutch media view their own government?	Successful - “Creation and maintenance of this image” - “Manipulation of information”	Successful - “An article which can be described as biased” - “The Netherlands are criticized for not being tolerant”	Successful - “Dutch media underline that there is still room for improvement” - “The government supports studying for future journalists”	Successful - “The readers should be aware of who the author is” - “Criticality should be supported through education”
7	4	3	58	A new door opens	Unsuccessful ^b	Successful - “Gay marriages were legalized” - “Gay people are considered bad people”	Successful - “He criticized gay people for their choices” - “They claimed gays promote wrong values”	Successful - “Now they can be free in their lives” - “The society should treat people equally”

Group	No. of students in group	Group achievement level ^a	Group mark (/100)	Topic	Language			
					Nominalisation	Passive voice	Reported speech	Modality
8	4	2	78	A closer look on Sharapova	Unsuccessful ^b	Unsuccessful ^b	Successful - “Maria Sharapova says she is determined to fight back after testing positive to...” - “Sharapova criticized social media reports as...”	Successful - “We must admit that it’s not easy to do what she has done” - “Pound could be gentler with Sharapova”
9	4	1	90	The untold truth of the media: The Charlie Hebdo incident	Successful - “Funding rebel groups with weapons” - “News coverage is selective”	Successful - “They are given the chance to impose their own interpretations” - “Elites are given the power”	Successful - “The western society unanimously condemned the terrorists” - “These results confirm Stuart Hall’s theory...”	Successful - “Racial discrimination can cause violent behavior” - “Mass media can be influenced by public and private interests”
10	5	3	75	Natura 2000 Akamas Peninsula. A green investment or a green catastrophe?	Unsuccessful ^b	Successful - “A substantial effort was being made to solve the problem” - “A mild development of the area is allowed for the landowners”	Successful - “The chairman of the Environmental committee showed his intense concern by saying...” - “Conservationists express strong objection to any development”	Successful - “The government should reconsider their latest decisions” - “We can say that festivals similar to this one are perhaps the best way to accomplish...”

Group	No. of students in group	Group achievement level ^a	Group mark (/100)	Topic	Nominalisation	Passive voice	Reported speech	Modality
11	4	2	71	The history behind the Helios flight air crash	Successful - “Incapacitation of the flight crew due to hypoxia” - “Continuation of the flight without realizing the depletion of the fuel led to engine flameout”	Successful - “The plane’s communication system has been set to the wrong frequency” - “Two F-16 fighter aircrafts were summoned to intercept the plane”	Successful - “Relatives begged officials to tell them about their loved ones” - “According to Reuters three executives of the Helios company and a British engineer were sentenced to...”	Unsuccessful ^b
12	4	2	75	Snowden: Traitor or threat?	Unsuccessful ^b	Successful - “The daily lives of 10.000 account holders were catalogued without their permission” - “The privacy of the general public was disregarded”	Successful - “With this statement the author wants to emphasize the scale of damage” - “The author blames Snowden and labels him as a traitor”	Unsuccessful ^b

^a 1-high achieving; 2-medium achieving; 3-low achieving.

^b No examples met criteria.

All of the groups met the criteria I had set for content. Articles included a good presentation of the arguments and evidence on the topic selected as well as a clear position. Half of the overall mark (50%) was given for content and the rest for language use (35%), grammatical accuracy (10%), and format (5%). About 75% of the marks students received for this assignment were in the satisfactory range (over 70), 25% of these were in the outstanding range (over 90), and only about 16% were below satisfactory (lower than 70). These results were slightly higher in comparison to the ones received for the same assignment in previous years, indicating improved performance. It was interesting to note that all groups integrated at least two of the targeted resources in their writing to express opinion. The passive was used by 10 and nominalisation by 5 out of 12 groups. The most prevalent resource once again, was reported speech, which appeared in 11 out of 12 articles. Modality was integrated to express opinion in 8 articles. As already mentioned, I used transitivity and modality to analyse each article.

Transitivity Analysis. Transitivity analysis provided more detailed insights into the ways students had used targeted resources to synthesise information in relation to myside bias. It served to assess the effectiveness of the design in developing students' understanding of the functional possibilities of the resources foregrounded for their potential in communicating opinion or bias.

A. Passive Voice

To analyse how students used the passive voice, I examined the information they selected to put in different participant positions in a sentence. Looking at information realised by participants or placed in the subject/object position, as referred to in teaching, was important in evaluating students' understanding of how the passive functions to emphasise or de-emphasise information in support of an opinion. Most students, as indicated in the examples below, used the passive to shift the focus of attention to or from information.

1. Most people are partially informed about events that draw the attention of Mass Media.
2. A motto called 'Je suis Charlie' was established and widely used in social media.
3. The plane's communication system was set to the wrong frequency.

In the examples above, the information placed in the subject position allows the authors to avoid reference to the agents (subjects in active structure) potentially responsible for the actions described (Bloor & Bloor, 2013). Following instructional practices, students' choices reflected their intention to express an opinion without directly positioning themselves or explicitly conveying judgement. In sentences 1 and 2, the authors are focusing the reader's attention on the actions and the participants affected by these actions to de-emphasise the influence or responsibility of specific media outlets in the representation of events. In sentence 3, the passive voice is used in the same way to portray the event (airplane crash) without directly accusing someone for the accident. The students here are making specific linguistic choices allowing them to emphasise information in support of the position communicated.

Students' use of the passive voice served to encode a more personal perspective on the issues portrayed. Here are three of the examples.

4. The Netherlands are very much criticized for not being tolerant in the case of Black Pete.
5. How certain news (in Western media) are more exposed than others.
6. Actually, trolling Maria Sharapova was negatively viewed.

In the sentences above, the responsibility of the media for misrepresenting events is downplayed through the use of the passive voice. At the same time, the use of more general verbs realised by

relational and mental processes (“criticized”, exposed”, and “viewed”) allows the reader to make assumptions about the responsibility for this misrepresentation. Considering the functional possibilities of the passive as foregrounded by the design, students here seem to have understood how to use it in their writing to present information in support of a point of view.

It was interesting to note that the active voice was used in more than half the articles to present facts rather than opinions:

7. Snowden stole important files which contained sensitive information. In there were proofs that the government watched or at least gathered everything about people’s online activity.

8. Couple of minutes after the airplane depart, the cabin pressure was lowing and the oxygen masks fell off. At 12.04 pm, the Helios Airways flight HE178 crashed into the mountain near the community of Grammatikos.

9. On the morning of 7th January 2015, two armed individuals attacked the office of a famous satirical magazine and killed 12 people, while they injured several others.

Analysis indicated that students used active voice mostly with material processes to represent facts (details surrounding completed events), concrete doings, and happenings (Halliday, 1994). Students’ use of the active voice in sentences 7 to 9 above, allowed actors to be placed in the subject position, emphasising their responsibility for inflicting the actions to highlight the events as another way of conveying opinion.

B. Nominalisation

There were fewer nominalisations in the articles. Most of these were used to condense information in support of a point of view:

10. News coverage is selective.

11. Funding rebel groups with weapons resulted in numerous casualties in Syria.

In four instances, the use of nominalisation, like in sentences 10 and 11, was identified and analysed as a choice functioning to encode personal opinion by deleting agency and thus making information more abstract (Billig, 2008). Making nominals “News coverage” and “Funding” the subjects of the sentences here allows the writers to refer to these events while allowing for multiple interpretations of who selects which news to cover or who funds rebel groups with weapons.

There were also three instances of nominalised expressions in the texts generalising information to create a category or trend:

12. Addiction also affects their personal health

13. Gaming makes people more aggressive

14. Racial discrimination can cause violent behavior

Nominalisations served to represent processes as entities and typically assume the existence of these entities as established, commonly known and accepted situations (Billig, 2008; Halliday, 1998; Klingelhofer & Schleppegrel, 2016). As a result of sentence reconstruction, actions placed in the subject position were emphasised in students’ texts as illustrated in sentences 12 to 14 above through the use of nominalisation, deflecting in this way the reader’s attention from the agent responsible for these. This was done following instructional practices, to avoid explicit expression of opinion by directly assigning responsibility.

Most instances of nominalisation were found in articles written by groups in which there were more students of high achievement. This was not surprising, as data from previous cycles of implementation has shown that students generally found nominalisation more challenging than the other three linguistic resources targeted by the design.

Despite the challenges, it was interesting to note that both passive voice and nominalisation were used quite a few times in the articles to place information in the subject/object position, so as to emphasise or de-emphasise it to encode opinion. Data analysis of these instances highlighted students' understanding of how the position of information in a sentence makes a difference in the significance given and consequently the position communicated. As in the previous cycle of implementation, regardless of the frequency and grammatical accuracy of these instances of use, students of different linguistic levels performed well in using nominalisation and passive voice to express opinion. This may be an indication of the development in students' language and thinking deriving from practicing critical analysis through identification, reconstruction, and discussion of language to explore different possibilities in meaning.

C. Reported Speech

At least one instance of reported speech was found in 11 out of 12 articles functioning to express opinion. Most of the direct quotes (15 instances) were strategically chosen to represent the opinion of an important source or an expert and used to endorse or give authority to a statement in support of the students' position. This was potentially a result of practicing critical analysis, which highlights the function of direct speech to create a compelling argument in support of opinion.

Indirect quotes were also prevalent in almost all articles to control information and encode opinion. To look at how students employed reported speech and assess their understanding of the different functions, I did transitivity analysis of projections and looked at their choices in process types.

While almost all direct quotes were introduced by the unmarked verbal processes "said" and "told", indirect quotes and paraphrases were reported with the use of different verbs (such as "claim", "support", "suggest", "blame") discussed in instructional practices for their functions in

controlling information and encoding opinion. Students placed themselves or various primary sources as participants (*sensers* or *sayers*) of mostly mental and verbal processes in the texts to encode an element of personal evaluation, by selectively presenting information and/or by using reporting verbs and expressions to position the authors towards this information.

Examples of reporting verbs used in projecting clauses to encode opinion towards the statements projected are presented below:

15. CNN as a world acknowledged medium underlines that there is still room for improvement.
16. The article published on the 20th of March 2016 supports that uneducated people who have dropped out of school are the main cause of Trump's rise.

Reporting verbs “underlines” and “supports” in sentences 15 and 16 are used to highlight the information coming from CNN and another source not mentioned but acknowledged by the students, to implicitly encode their support of the larger arguments made in the text. These reporting verbs, in combination with the source (in 15) and publication date (in 16), validate and endorse the statements to potentially signify the intention of the students to support the same view, and also their acknowledgement of the primary source, or both. Considering how these reporting verbs were discussed through instructional practices and scaffolding, this is indicative of the effectiveness of the design in developing students' ability to employ them based on their functions to promote opinion.

Similarly, in the sentences below, students' use of specific verbs in their texts indirectly expresses an opposition to the statements projected:

17. The author claims that there are a lot of people out there who urge other people not to vote for Trump.

18. The Press is filled with various articles which directly or indirectly blame the whole Islamic society for all the fanatical and violent actions.

In these sentences, the verbs “claims” and “blame” were used as a way of “standing away” or disassociating from the projected material (White, 2012). In example 17, “claims” allows greater room for doubt and indicates a lower level of reliability towards the statement “there are a lot of people out there who urge other people not to vote for Trump” in support of the position advanced in their article. In the same way, “blame” is used in example 18 to encode criticism of the press’s tendency to shift all responsibility around fanatical and violent actions on Islamic society. Reporting verbs “claim”, “suggest”, and “blame” were used in 5 out of 12 articles to present an opposing opinion. Considering how the functional possibilities offered by these reporting verbs were foregrounded by the design, it is important to notice the development in students’ understanding of how these function to express opinion.

The high occurrence of reporting expressions recorded in students’ articles to communicate a position indicated an overall good level of understanding of the functions of the specific linguistic resource. Furthermore, it seems that, in relation to the second objective, the design has been effective in developing students’ general ability to use reporting expressions and reported speech to present information in support of an opinion in their writing. This could be a result of repeated, design-supported practices targeted at engaging students in identifying, manipulating, and discussing the contribution of the specific resource in presenting information to convey opinion.

D. Modality

The system of modality realised in the mood part of clauses was used to analyse the resource’s use in students’ articles (Halliday & Matthiessen, 2014). Based on Halliday’s categorisation of modality types (modal verbs as finites, mood adjuncts, and metaphorical realisations of modality), quite a few

instances of modality were identified in students' articles and analysed in the context of each article. Specifically, students' choices were assessed based on Halliday's classification as explicit or implicit, objective or subjective, to reveal the students' positioning towards the issues or events. These were then related to the functions of the modality as included in instructional practices.

Overall, 32 modalisations were identified in the data. Most were implicitly subjective realisations through modal verbs as finites, expressing possibility (can/could, would, may) or obligation (must, should) to attribute potential to, or to criticise, a statement or an event. Below are some examples from students' texts:

19. Action games like 'Call of duty'(S) can (F) make (P) your eyesight, aiming and reflections much better (R)...video games (S) could (F) be (P) a pain relief in some situations (R). They (S) can (F) help (P) stroke victims (R).

20. Female beauty in western societies (S) can (F) be used (P) as an oppressive mechanism by companies and patriarchic structures (R)...Beauty (S) can (F) be used (P) by women to identify themselves in society (R)...Naomi Wolf (S) would (F) support (P) the idea that the beauty.

In example 19, students make use of low value modals "can", "could", and "may" in the finite to implicitly introduce the positive effects of video games on young people. Considering the functional possibilities of modality highlighted by the design, it is assumed that modal verbs were used in this text to communicate a positive opinion towards the use of video games.

In example 20, "can" is used as part of the finite in the conclusion of the article to implicitly express students' judgement on the possibility that female beauty is used by the advertising industry as a mechanism objectifying women and forcing them to differentiate themselves from men. To further support the same position, the modal verb "would" is used in this sentence to implicitly

introduce an objective evaluation of how an important external source (i.e., Naomi Wolf) would react to the same ideas. The use of modal verbs in the finite to implicitly express subjective and in some cases objective assessments (as in example 20) were the most commonly used type of modality in students' articles.

Apart from expressing possibility, modal verbs in the finite were also used to introduce obligation:

21. This legislation for Gay marriages (S) should (F) be (P) the start and the example of how (R) society (S) should (F) treat (P) different people and start a new era of new way of thinking (R).

22. Statements like that (S) should (F) worry us(P)... we as human beings (S) should (F) not treat (P) each other like that (R).

In their use of the modal verb “should” in the finite in support of same-sex marriage, students in example 21 indicated a position in support of society’s obligation to change the way they treat homosexuals. In example 22, students use candidate Donald Trump’s statements, and their impact in shaping public opinion, to express their concern about the ways people should react to misrepresentations of specific groups of people resulting from such statements. To achieve this, students use the modal verb “should” as part of the finite to introduce an implicitly subjective element of obligation in their writing.

Modal adjuncts of possibility were also used in students’ texts to construe evaluation through the assessment of information:

23. **Undoubtedly** (A^{mod}) Trump’s statements caused many reactions all over the world.

In example 23, the high value adverb “undoubtedly” is used as a modal adjunct to provide the reader with the students’ implicitly subjective assessment of the impact of Trump’s statements in the

introduction of the article. Based on their research and analysis of relevant material, the students most likely opened with the modal adjunct to indicate their high commitment to the proposition “Trump’s statements caused many reactions all over the world”.

Metaphorical realisations of modality, as defined by Halliday, were also used in some student texts, mostly in the conclusions to convey a position towards beings, things, or happenings, by expressing inclination or obligation:

24. **We think** (mental clause) she is not just a good player she (Maria Sharapova) is a strong player in life.

25. **It is possible** (attributive clause) that the mass media used this strategy as they know it was an effective way to attract the attention of the readers.

There were overall 12 instances of metaphorical realisation in the articles, expressed in different ways as shown in the sentences above. In example 24, a mental process is used to make a subjective assessment of the possibility expressed and allows students to position themselves towards the proposal that follows. In this way, students strategically communicate their support for Sharapova through the proposal, “she is not just a good player she is a strong player in life”. In example 25, a nominalisation of probability was also used to communicate the authors’ position towards the assessments made explicitly objective through the adjectives “possible” and “obvious”. These expressions enabled them to encode their support for the possibilities presented, which indicates a good understanding of one of the functions of modality as foregrounded by the design.

Text analysis in A32 indicates that students performed quite well overall in relation to the second objective, i.e., using targeted resources to collaboratively synthesise information in support of an opinion. Analysis further indicates a proportionate increase in development in terms of both language and critical thinking in most students. Considering the variation in students’ language level

before the implementation of the design, it wouldn't be possible for this development to have occurred homogeneously.

As already mentioned, students' performance with regards content was overall very good. In analysing for content, I focused on the organisation of the articles and the synthesis of ideas to communicate position. Analysis showed that all articles had a balanced presentation of arguments and a clear position. Reflecting on the analysis, perhaps using the term *genre* instead of *content* would have facilitated students' understanding of conventions and patterns in this type of writing. It would also have helped me in determining and explaining the requirements/criteria for analysis and assessment of the articles. The challenges and implications from using textbook language will be further discussed later on.

Students' performance in using targeted resources to communicate opinion was better for some resources. This may be attributed to challenges in using specific resources as already discussed. Despite these challenges, which at times resulted in grammatical inaccuracies, there were clear indications of development in students' understanding of the functions of targeted resources in conveying opinion as this was targeted by the design. Specifically, developing an understanding of myside bias by foregrounding the connections between personal opinion and specific linguistic resources through the design seems to have cultivated students' awareness of how linguistic choices position point of view.

A number of students commented on the effectiveness of A32 in their reflections, for example:

Οι επαναλήψεις σε αυτές τις ασκήσεις (κριτικής ανάλυσης) σίγουρα έχουν επηρεάσει τον τρόπο σκέψης μας. Πλέον μπαίνω στην διαδικασία να σκέφτομαι το νόημα και μετά πως θα μπορούσε η γλώσσα να το αποδώσει.

Repeating these activities (critical analysis) has definitely influenced the way we think. I now put myself in the process of thinking about meaning and then how language could express that meaning (Student reflections, March 2016)

What is particularly important is the student's acknowledgment of how repetitions of the critical thinking practices have raised their awareness of the connections between language and meaning. It is also worth noting the student's reference to the development of a thinking pattern – "I now put myself in the process of thinking about meaning and language" – made possible by practicing the activities again and again. Reflecting on this quote, it also seems that the student perceived this development as the result of a series of activities, which prepared them to work collaboratively on critical practices of analysis and synthesis to present information in support of opinion, with limited scaffolding

Implications. The second objective of Cycle 3 was to develop students' ability to critically synthesise and collaboratively present information to communicate a position. Analysis indicated a growing ability in strategically using targeted resources in support of opinion. It also highlighted the potential of the design in developing students' criticality through repetition of the critical thinking practices foregrounding the connections between language and myside bias.

Critical Practices of Analysis. In two of the three activities analysed in this cycle (A31 and A32), students engaged in instructional practices of language identification, reconstruction, and discussion repeated in previous cycles, through material and topics of their own choice. This allowed for an assessment of the design in developing students' ability to appropriate and engage with critical thinking practices and guidelines in a more independent way. This decision had implications for both pedagogy and research as already mentioned.

Making students' engagement with language less controlled in terms of instructor intervention placed additional demands on students and made data analysis more challenging. While students' engagement in the activities was scaffolded to a certain degree, it was not as structured or controlled as in previous activities, and so their performance could not be easily monitored or assessed. However, there were significant benefits from the shift in the design of activities. Text analysis, as already mentioned, indicates a development in students' awareness of how linguistic choices communicate position as well as a growing ability in strategically using targeted resources in support of that position. Analysis of students' reflections further highlights the effectiveness of the practices and guidelines repeated through the design in developing thinking patterns or a critical mindset in learners.

The effectiveness of DBR methodologies was even more evident at this point: iteration, evaluation, and refinement of these practices had clearly been significant in the development targeted by the design. Although I recognised that there were weaknesses in the ways I was positioned in the study as teacher and researcher, my double role had also been quite important in identifying and addressing learners' needs and challenges in this development.

Guidelines for Analysis. Data from the activities analysed in Cycle 3 demonstrates that students used both CAH2 and the language functions guidelines to effectively organise their texts in the analysis and synthesis of information. What is particularly important to note, is that following the organisation of text parts (introduction, main development, conclusion) on CAH2, students mostly integrated targeted resources, as foregrounded by the design, for their potential in expressing opinion either in the introduction or the conclusion of their analyses (in A31) and articles (in A32). This is parallel to instructional practices, resources, and guidelines in which the identification and discussion of personal opinion, as opposed to the description of facts were highlighted in the

introduction and conclusion parts of the texts critically analysed throughout the intervention. Moreover, questions on the handout seem to have facilitated students' ability to critically think and analyse the connections between important information/evidence and the ways this would be synthesised and presented in support of a position.

Analysis of reflections and entries in the instructional log and journal indicate that students made use of the instructional practices and guidelines in line with how they were modelled and employed in previous stages of the intervention. Analysis points to a development in students' ability to appropriate and use these pedagogical resources in their work. Students further highlighted that collaborative engagement with material and topics of their own choice in activities A31 and A32 allowed them to "discover" the potential of the guidelines they had available and which they could appropriate regardless of the content/context they had chosen to engage with.

Critical Discussions: The Contribution of SFL. Moreover, students' decision to collaborate with peers of equal or higher achievement level in their project indicates their acknowledgement of the importance of these practices for their development. Specifically, students' involvement in repeated critical practices seems to have highlighted the benefits of engaging in collaborative analysis and discussion of the connections between meaning and opinion in support of developing language. This is an important consideration in assessing the design as it indicates something beyond grammatical development. It relates to a development in thinking about and with language. Specifically, it points to a development in students' awareness of the importance of language in uncovering opinion. It also points to an acknowledgement that their ability to critically question, understand, and communicate opinion by appropriating thinking and language practices was gradually cultivated and scaffolded by the pedagogic design. The concepts of *participant* and *process* from SFL, which were used in the design to focus on the grammatics of myside bias in

discussions of language, were also very important in this development. Data from all the activities analysed in Cycle 3 indicated that these concepts supported instructional practices and provided learners with more informed ways of thinking and talking about the potential of language in relation to myside bias. On reflection, I realised that if I had instructed using SFL concepts and/or language from the field, rather than from the textbooks, both my own and my students' understanding of important ideas and terms would have been facilitated. It would also have made things easier in outlining and discussing my criteria for analysis and assessment. Furthermore, I realised that the concept of myside bias could have been more effectively used in the design to create a focus linking to the targeted language. Instead, conversations at times moved further from myside bias to traditional 'textbook talk' on opinion and bias and this made both instruction and assessment more challenging. Nevertheless, acknowledging the challenges created by using different types of language has deepened my own knowledge as I progressed through the thesis. It has also raised my awareness of the resulting implications for teacher education.

The development in students' language and thinking described above was gradual and would not have been possible without the initial stages of the intervention. Students were able to critically employ language based on its functions to express myside bias more independently in Cycle 3, because of their repeated engagement in joint practices of identification, reconstruction, and discussion of language throughout the intervention. Evolving these critical practices into pedagogies guiding critical questioning of texts with the use of SFL and the creation of guidelines to support students was also a result of decisions made following the design's assessment and refinement through the three cycles. Myside bias – the key concept used in different ways to inform the design – provided the context in which the connections between language and meaning were explored. Iteration and refinement of the design as advocated by DBR, helped in finding ways to facilitate

learners in making these connections and gradually developing critical thinking and language practices into habits of mind that could be appropriated and used in different contexts. As in the previous cycle, DBR methodologies continued to prove effective in this study. My double role of instructor and researcher in the three cycles of this intervention were quite a challenge but it also made it possible to observe and record the implementation of the design, reflect on the data collected, and make informed decisions about refinements. This allowed me to draw conclusions on the effectiveness of the design in relation to the research questions.

Reflection on the Three Cycles: Data Synthesis

In the following section, I present the analysis conducted after the end of the implementation of the intervention at the reflection stage. First, focus group data was integrated in the existing dataset in NVivo, to review the categories and themes created prior to and during the implementation of the research design. Through this process, I maintained recurrent themes and categories supported by the analysed data and related them to the research questions. Second, I present findings from the analysis of student questionnaires administered before and after implementation. Analysis of the questionnaires served to triangulate findings from other data sources with regards students' perceptions on the effectiveness of the design.

Focus Groups

I coded data from the student focus groups and merged the codes in NVivo with data from the researcher's journal, instructional logs and student reflections. The result of this final round of analysis was a refined set of three broad categories detailed by a number of recurrent (sub-)themes indicating trends in the data. A full list of themes and subthemes is included in Appendix G.

Category 1: Critical Thinking Practices in Support of Language and Thinking Development. This was the first of the three categories to emerge from the data. It referred to the

critical thinking practices incorporated into the design of activities that were informed by the construct of myside bias. In the designed activities, practices of identification, reconstruction, and discussion of language to foreground the connections between specific linguistic resources and the expression of personal opinion were iterated through a standardised critical analysis process, enhanced by guidelines and instructor scaffolding. Iteration of these critical analysis practices and guidelines gradually developed beyond a set of instructions into practices of thinking (critical mindset). Table 5.16 summarises the most important recurrent themes and sub-themes identified under Category 1.

Table 5.16

Category 1: Themes and Sub-themes

Critical thinking practices in support of language and thinking development

- Theme 1: Development from repetition of critical practices
 - Theme 2: Co-development of language and thinking
 - Theme 3: Shift in students' thinking
 - 3.1 Lesson value for personal and professional development
 - 3.2 Different levels of engagement
 - 3.3 Using language as a tool
 - Theme 4: Shift in teachers' thinking
 - 4.1 Emerging forms of scaffolding
 - Theme 5: Design evolution
 - 5.1 Emerging forms of scaffolding
-

Recurring themes, as shown in Table 5.16, were labelled and connected to extracts from the data.

The following extract was connected to Theme 1 (“Development from repetition of critical practices”):

I believe through the exercises we learned how to put our critical thinking into practice through the repeated practices we followed in the analysis of sentences and longer texts in class. The type of questions we repeatedly asked like... “who is the speaker?” “why are they saying that?”, as well the changes we made to the sentences to see how the meaning changed were really useful in developing our thinking and in improving our language. (Focus group, April 2016)

The student above is highlighting the ways in which repeating critical analysis practices benefitted their thinking and language development. What is interesting is the reference to the repeated questions and changes to sentences. These relate to the critical questioning and language reconstruction practices repeated throughout the design. In the comment, the student thus acknowledges how the design through critical questioning enhanced their understanding of how language possibilities relate to meaning. This points to a perceived development in thinking and language. References in the data mostly related to the ways critical analysis practices allowed students to understand language (linguistic development) and how steps in the activities enabled this understanding.

Other themes referring to the connections between thinking and language and related to the critical analysis practices emerged in the data. The following extract was connected to Theme 2 (“Co-development of language and thinking”): “I realized that these [critical analysis practices] also helped our thinking develop... because the questions and guidelines provided us with options to choose from and it was somehow up to us to decide how to view each situation” (Focus group, April 2016). What the student is pointing to is the effectiveness of the critical analysis practices and guidelines in raising their awareness of the possibilities offered by language and how these could impact their view of a situation.

Two other themes (3 and 4 in Table 5.16) recurring in all categories were identified and recorded as “Shift in students’ thinking” and “Shift in teacher’s thinking”. Although overlapping, these two themes were defined by distinct sub-themes for each category. In Category 1, the shift in students’ thinking was indicated by an appreciation of their language course in terms of its contribution to their personal and professional development (Sub-theme 3.1 “Shift in students’ thinking: Lesson value”):

Πιστεύω πως επειδή γενικά είμαστε μια συντηρητική κοινωνία με πολλές προκαταλήψεις σε πολλούς τομείς όχι μόνο σε τοπικά αλλά και σε διεθνή θέματα... έτσι ένα μάθημα το οποίο εξηγεί στους νέους ανθρώπους και ειδικά στους φοιτητές πως να εντοπίζουν την προκατάληψη, να την καταλαβαίνουν και να την χειρίζονται, σίγουρα θα τους βοηθήσει να ξεχωρίσουν ως επαγγελματίες και να αναπτύξουν αποτελεσματικά δεξιότητες και στρατηγικές όπως το να σκέφτονται «έξω από το κουτί».

I believe because we are generally a conservative society with many biases in various areas not just in local but in international issues as well...so a lesson that explains to young people, especially students, how to spot bias, understand it and deal with it, will definitely help in making them differentiate as professionals by enabling them to effectively develop strategies and skills like “outside the box” thinking. (Focus group, April 2016)

The student is highlighting the importance of learning to identify, understand, and deal with bias as a way of developing critical thinking skills in differentiating oneself professionally. What is interesting here is that the student acknowledges the effectiveness of the English language lesson in developing these skills necessary to achieve this requirement.

The shift in students’ thinking was also evidenced in their comments on how they engaged with the language (Sub-theme 3.2 “Shift in students’ thinking: Different ways of engagement”):

Yes, the difference was that we were not learning the language just because we have to... we had something else to do, to uncover bias for example... and in order to do that we had to learn the language... it came with the task and this is what made it more engaging for me.

(Focus group, April 2016)

The student is highlighting the effectiveness of the design in creating a need to learn language because it was important in discussing and uncovering bias. This indicates a shift in the way the

student perceives language not as a module they “have to” take, but as a tool that will facilitate them in carrying out more engaging tasks. The shift in thinking was also indicated in students’ comments relating to how the design’s critical analysis practices facilitated the learning process (Sub-themes 3.2 “Different ways of engagement” and 3.3 “Using language as a tool”):

Για μένα, το να διαβάζω στα Αγγλικά πριν ήταν αδύνατο λόγω των πολλών άγνωστων λέξεων που έβρισκα. Αυτό το εξάμηνο έμαθα, μας μάθατε να διαβάζουμε με ένα σκοπό... μάθαμε στρατηγικές να εντοπίζουμε συγκεκριμένες λέξεις, να τις αλλάζουμε και να εξετάζουμε τις αλλαγές σε σχέση με το νόημα. Αυτό έκανε την γλώσσα πιο κατανοητή.

For me, reading articles in English was an impossible task before because of the many difficult words I found. This semester I learned, you taught us, to read with a purpose... we learned strategies of identifying specific words, changing them and questioning these changes in relation to the meaning. This made language more easily understood. (Focus group, April 2016)

The student’s comment here reveals how critical analysis practices provided a purpose for reading. Their shift in thinking relates to developing new ways of using language to improve understanding. The student highlights the usefulness of the practices and strategies in dealing with difficult text and facilitating their understanding of the meaning. Finally, it is important to note that they comment on how the specific practices facilitated their understanding of language.

As already mentioned, there was also a shift in the instructor’s thinking, which was identified in Sub-theme 4.1 “Shift in teacher’s thinking: Emerging forms of scaffolding (practices)” and Sub-theme 5.1 “Design evolution: Emerging forms of scaffolding (practices and guidelines)”: “The repetition of critical analysis practices and function guidelines facilitated the discussion around language especially for those students who could identify attitude in the text but could not easily

express themselves in English” (Researcher’s journal, March 2016). The extract records my reflections as the instructor and researcher on how repeating practices supported by guidelines on critical questioning and resource functions facilitated the discussions, especially for low achieving students.

Synthesis of data indicates that critical analysis practices – informed by the construct of myside bias and repeated throughout the design – were effective in developing learners’ ability to understand and use targeted resources. This development is evident in students’ comments on how repeated critical practices allowed them to better understand the connections between language and meaning. It is also indicated in their descriptions of how these practices supported and facilitated their engagement with language, allowing them to develop skills they consider useful for other lessons or future professional engagement. Finally, the development in students’ ability to discuss targeted resources for their potential in expressing myside bias as a result of repeated critical analysis practices was also recorded in the researcher’s journal.

Category 2: Language as a meaning-making tool in the development of thinking and language. This emerged as the second main category in the data and related to a development in students’ understanding of the contribution of language in understanding meaning. Data also indicated participants’ raised awareness of how linguistic choices relate to ways of thinking.

Table 5.17

Category 2: Themes and Sub-themes

Language as a meaning-making tool in the development of thinking and language
<ul style="list-style-type: none">● Theme 1: Co-development of language and thinking<ul style="list-style-type: none">➤ 1.1 Linguistic development● Theme 2: Shift in students' thinking<ul style="list-style-type: none">➤ 2.1 Using language as a tool➤ 2.2 linguistic development● Theme 3: Shift in teacher's thinking<ul style="list-style-type: none">➤ 3.1 Emerging forms of scaffolding (practices)➤ 3.2 The potential of SFL in teaching language● Theme 4: Design evolution<ul style="list-style-type: none">➤ 4.1 The potential of SFL in teaching language

A recurrent theme in this second category was again the co-development of language and thinking (Theme 1):

Μάθαμε να διαβάζουμε πίσω από τις λέξεις και να βλέπουμε τις πραγματικές προθέσεις του συγγραφέα... Δεν το έκανα αυτό στο παρελθόν... Διάβαζα και έπαιρνα τα πάντα σαν δεδομένα... Πιστεύω πως το ότι μάθαμε να χρησιμοποιούμε την γλώσσα ως ένα τρόπο για να αξιολογήσουμε κάποια πράγματα είναι πολύ βοηθητικό.

We've learnt how to read between the lines and look at the real intentions of the author... I didn't use to do that in the past... I used to read and take everything for granted... I think the

fact that we have learned to use the language as a way of questioning some things is really helpful! (Focus group, April 2016)

The student is highlighting a development in both thinking and language. What is interesting is the student's acknowledgement of how learning to use language to question information facilitated an understanding of the intended meaning. It also indicates the shift in the student's view of language as a tool for questioning information, which I related to the recurrent overlapping theme of using language as a tool as part of the shift in students' thinking (Sub-theme 2.1). Understanding the functional possibilities of targeted resources in expressing opinion was part of a wider development in language as perceived by the learners and was also related to Sub-theme 2.2 ("Linguistic development"):

This course and the critical thinking practices we used helped improve my vocabulary and grammar. I never really understood in the past how to use grammar... for example I never knew when to use the passive instead of the active voice... talking about facts and opinion and the different ways these are expressed through the choices we make in grammar really helped me understand. (Focus group, April 2016)

In this comment, the student is identifying an improvement in grammar and vocabulary deriving from a better understanding of the use of specific resources. Here, the student is recognising this improvement as part of a development in their understanding of the choices available in presenting and/or portraying different types of information. This is important as it was one of the objectives of the design.

The potential of language as a meaning-making mechanism was also recognised by the instructor at different stages of the intervention. The integration of social semiotic theories of language to foreground the connections between language and opinion emerged as a sub-theme

overlapping in Sub-themes 3.2 and 4.1 (“Shift in teacher’s thinking” and “Design evolution”): “SFL helped me transform students’ engagement with the language as it allowed me to talk to them about choices and explain patterns in language use and their impact on meaning” (Researcher’s journal, 8 April 2016). The extract highlights the potential of using language as a resource for meaning and is an example of my growing awareness of the contribution of SFL theories in explaining language–meaning connections in support of language development. This sub-theme was recorded in different data sources throughout the study.

Synthesis of data with regards to the second category highlights important benefits from using language as a meaning-making resource in developing students’ thinking and language. This development is recorded in the way students’ perception of language shifts from just grammar rules to a set of linguistic choices that provide better understanding of meaning. Finally, the instructor’s reflections on how learner engagement with language can be transformed highlight the potential of language as a meaning-making resource, as well as the role of SFL theories in achieving this. The contribution of DBR methodology in allowing the instructor/researcher to assess, review, and refine the design in light of these considerations was also highlighted by data analysis.

Category 3: Critical Discussions in Support of Language and Thinking Development.

The third and last category that emerged from the process of coding, saturation, and comparison of themes in the data relates to teaching methodology and more specifically, the use of critical discussions to develop language and thinking.

Table 5.18

Category 3: Themes and Sub-themes

Critical discussions in support of language and thinking development

- Theme 1: Development from repetition of critical practices
 - 1.1 Collaboration
- Theme 2: Shift in students' thinking
 - 2.1 Collaboration
 - 2.2 Steps in activities
 - 2.3 New measurements of achievement
 - 2.4 Linguistic development
- Theme 3: Design evolution
 - 3.1 New measurements of achievement
 - 3.2 Emerging forms of scaffolding (guidelines)
- Theme 4: Co-development of language and thinking
 - 4.1 Linguistic development
- Theme 5: Shift in teacher's thinking
 - 5.1 Emerging forms of scaffolding (guidelines)

This category included themes linked to critical pedagogy (CP) and by theorising critical thinking as a linguistic practice. The study used CP to facilitate learners' engagement with language through critical discussion practices informed by the concept of myside bias. Themes relating to the use of critical discussions recurred across the data sources and informed the development of the design. Most references were made to the benefits from collaboration and joint negotiation of meaning in

the discussions. The following comment from a focus group represents an example of how students perceived development as a result of participating in critical discussions (Sub-theme 2.1 “Shift in students’ thinking: Collaboration”):

Ένιωθα ότι έπρεπε να συμμετέχουμε στις συζητήσεις στην τάξη και να εκφράζουμε την άποψη μας πιο συχνά απ’ότι στο παρελθόν και αυτό ήταν κάτι που εκτίμησα προσωπικά γιατί μου έδωσε ένα λόγο να θέλω να εκφράζομαι σωστά έτσι ώστε να περνά το μήνυμά μου... ήθελα οι υπόλοιποι να καταλάβουν για να μπορέσουν να εκτιμήσουν την άποψή μου.

I felt that we were asked to contribute to more discussions and express our opinion more often than we did in the past and this was something I personally appreciated because it gave me a reason to want to express myself correctly, in order to get my message across... I wanted others to understand so that they would be able to appreciate my viewpoint. (Focus group, April 2016)

In this quote, the student is highlighting an important benefit of the repeated class discussions, specifically, their increased motivation to express themselves correctly so as to contribute substantively to the discussion. It is also interesting that the student emphasises an awareness of how developing their language would make them better understood and acknowledged in the discussions. Because the discussions were a common feature of the design, this increasing awareness developed into a need.

A number of students also acknowledged the impact of the repetition of critical questioning practices facilitated by the discussions (Theme 1 “Development from repetition of critical practices” and Sub-theme 2.2 “Shift in students’ thinking: Learning from repeated practices”):

Μέχρι να αρχίσουμε να δουλεύουμε για το project μας ήξερα πως να διαχειριστώ ένα άγνωστο κείμενο και ποια ήταν τα σημαντικά σημεία που έπρεπε να λάβω υπόψη χάρη στην επανάληψη

των πρακτικών διερεύνησης που κάναμε στο μάθημα.

By the time we started working on our project I knew how to approach an unknown text and which were the important points to consider thanks to the repetition of the same patterns of questioning in class. (Focus group, April 2016)

The student identifies the benefits of taking part in critical discussions on texts several times before being required to engage in critical analysis practices independently for their project. They emphasise the importance of knowing how to approach a text because they had repeated the same patterns of questioning in joint class discussions. The effectiveness of repeating critical analysis practices in the design was recurrent in more than one theme.

A number of students also mentioned that the repetition of questioning practices through different texts (many learners referred to these as “examples” in their comments) facilitated understanding by making their thinking more structured and sophisticated (Sub-theme 2.2 “Shift in students’ thinking: Steps in activities”):

Generally, it was the use of so many different examples you have given us that enabled the development of our critical thinking... some of them were actually the same but in a different context... [other examples] were drastically different and this helped us understand language better and made our thinking more structured and advanced. (Focus group, April 2016)

What is interesting here is the student’s awareness that going through many examples of language identification, reconstruction, and discussion in a variety of contexts facilitated their understanding of language and enabled new, more structured ways of thinking.

Another important benefit from critical discussion practices also recorded as a sub-theme in the data related to “New measures of achievement”, under Sub-themes 2.3 and 3.1: “I made sure

that students understood that the measure of achievement in the discussions would not be linguistic accuracy but participation and willingness to engage with the content and language” (Researcher’s journal, 6 February 2016). Students were encouraged to contribute their ideas to the discussions, despite possible linguistic challenges in expressing themselves. In their comments, both in reflections on activities discussed earlier and in the focus groups, learners acknowledged the positive effect of this encouragement (Sub-themes 2.3 and 2.4, as well as Sub-theme 3.1):

Στις δραστηριότητες μας ενθαρρύνετε... πραγματικά μας πείσατε να ψάχνουμε για πληροφορίες και να βγάζουμε συμπεράσματα μέσω των πολύ ενδιαφέρων συζητήσεων στις οποίες νιώθαμε πως έπρεπε με οπουδήποτε τρόπο να συμμετέχουμε... το να μην ανησυχούμε αν είμασταν σωστοί ή λάθος στις υποθέσεις μας βοήθησε στο να αναπτύξουμε μια καινούργια αντίληψη για το τί είναι η γλώσσα... ένας τρόπος να εκφράζουμε τις ιδέες μας, να επικοινωνούμε.

In the activities, you encouraged us... really pushed us, to look for the information and draw conclusions through a really interesting discussion every time to which we all felt we could contribute somehow... not having to worry about being right or wrong really helped in developing a fresh view of what language is... a way to express our ideas, to communicate.

(Focus group, April 2016)

Not worrying about language mistakes in the discussions appears to have given students a new perspective on language as a means of getting a message across, rather than a strict set of rules they should be applying in a specific way. The development of a new perspective of language as a meaning-making mechanism was critical in the evolution of the design theme. It was also interpreted as a sub-theme relating to the shift in students’ thinking that emerged across all three categories.

The development of language supported by critical analysis and thinking practices was also identified and commented on as a recurrent theme in this category (Sub-theme 2.4 “Shift in students’ thinking” and Sub-theme 4.1 “Co-development of language and thinking”). “We used language to guide our discussions. It was so interesting to see how language can guide our thinking. Trails of thought were so clear when language choices were analysed and questioned” (Focus group, April 2016). The student is highlighting the contribution of language in uncovering ways of thinking. What is interesting in assessing the design is that the student attributes understanding “trails of thought” to the critical analysis of linguistic choices. This indicates a development in how the student perceives the relationship between language and thinking. Such reflections were recorded across themes.

Another interesting pattern emerging from the last round of data analysis was the acknowledgement of the role of collaboration in advancing learners’ linguistic and thinking development. In the data, the impact of critical discussions on students’ motivation was identified as a new measurement of achievement; Sub-theme 2.3 “Shift in students’ thinking” and Sub-theme 3.1 “Design evolution:”):

Βρήκα τις συζητήσεις, ακόμα και αυτές σε μικρές ομάδες, πολύ χρήσιμες γιατί ‘έπιανα’ το εαυτό μου να προσπαθεί περισσότερο. Ακολουθώντας το παράδειγμα πιο καλών φοιτητών προσωπικά ένιωθα την πίεση...και όχι με αρνητικό τρόπο, να προσπαθώ για το καλύτερο τόσο στις ιδέες όσο και στη γλώσσα.

I found all the discussions, even the ones in smaller groups, really useful because I always found myself trying more. Following the example of stronger students, personally I felt a pressure...and not in a negative way, to bring out my best both in ideas and language. (Focus group, April 2016)

In the comment above, the student explains that taking part in the discussions enabled them to observe and adopt good practices used by more competent students and this enhanced both their will to engage with language and their performance. I interpreted and coded statements like the one above as a development in students' perception of language, leading to increased levels of participation and engagement. They were also recorded as important considerations informing the design of activities.

Data from the focus groups further highlighted the effectiveness of the guidelines (the language function guidelines, as well as Critical Analysis Handouts 1 and 2 – Appendices F, J, and N respectively) in supporting learners in the discussions (Sub-theme 3.2):

I felt that the guidelines, critical analysis questions and functions list helped me get better because we used similar questions and focused on similar parts in a text many times. We had a point of reference and in the end, we knew what we were talking about. (Focus group, April 2016)

In this comment, a student identifies the effectiveness of having guidelines to support their participation in the discussions. The student recognises the effectiveness of repeated use of – and resulting familiarity with – these resources (indicated by the word “similar”) in developing their ability to discuss language and content. In particular, what the student is showing here is an emerging confidence in critical analysis (“we knew what we were talking about”), deriving from repeated use of the guidelines.

Synthesis of data with regards to the third category highlights the effectiveness of using critical discussions framed by the concept of myside bias to develop students' thinking and language. This development is shown to inform design considerations, first through students' recognition of the benefits of repeating critical analysis practices in the discussions, as well as

through the dialogic community that was created to support their engagement with language. The development is also documented in students' acknowledgement of the importance of contributing to critical discussions, as participation – as opposed to accuracy – became the main measurement of achievement. Additionally, data highlights that through critical discussions, students recognise the potential of using language as a meaning-making resource in developing both their language and thinking. The usefulness of guidelines supporting students in critical discussions is also highlighted in the synthesis of data from all sources.

Qualitative analysis of data from the researcher's journal, student reflections, and focus groups thus highlights the effectiveness of the design in addressing the most important objectives related to the co-development of language and thinking.

Student Questionnaires

As already mentioned in the reflection stage of the design, I analysed students' answers in the questionnaire (Appendix B), which had been administered to the 40 participants prior to and then following the implementation of the intervention. This was done mainly to triangulate analysis of other data sources. The questionnaire aimed at assessing students' perceived development in specific skills related to language and critical thinking. It used rating scales assessing students' evaluation of (a) how frequently they were required to perform these skills and (b) how effectively they were able to perform them prior to and following the intervention.

Analysis and general comparison of the results, as shown in Appendix Q, indicate that students perceived an increase in both the frequency and effectiveness of engaging with language skills related to critical thinking after the implementation of the design. In line with analysis from other data sources, these results further highlight how through the implementation of the design

students became overall more effective in using language to think through more frequent involvement in activities that require criticality.

As already mentioned, questionnaires were used to triangulate findings from other data sources. Findings from the analysis of questionnaires highlighted the effectiveness of the design in learners' perceptions of their ability to use language in critical thinking activities more frequently and more effectively. Analysis of data in the reflection stage indicated that repeated joint practices of identification, reconstruction, and discussion of language in relation to expressing opinion/bias, had been effective in evolving these critical practices into pedagogies guiding critical questioning of texts with the use of SFL and creating guidelines in support of students' thinking and language. Through the design, students developed a new perspective of language as a meaning-making resource, which they repeatedly identified and acknowledged as contributing to their ability to think about and use language. The evolution of the design in the DBR cycles further developed my own perspective of how critical thinking – specifically the concept of myside bias – can transform engagement with language in support of the development of both language and thinking. Analysis highlighted the potential of specific components of the design, such as practices and guidelines, in developing ways of thinking with and about language that learners can appropriate and use in other contexts.

Reflection on the analysis conducted throughout and at the end of the intervention in the last stage of this DBR inquiry led to the generation of design principles connecting the enacted design to theoretical, methodological, and pedagogical outcomes or findings (Anderson & Shattuck, 2012; Reeves, 2000). Considerations and findings from the designed intervention are discussed in relation to the literature in the next chapter (Chapter 6). Following this discussion, the design principles

generated are discussed with regards their connection to the study's research questions to produce conclusions and implications in Chapter 7.

Chapter 6: Discussion

In this chapter, I discuss findings from the designed intervention in relation to the literature review. The discussion aims to link the results of the design-based research (DBR) study to the literature on critical thinking and critical literacy development, as well as to the use of systemic functional linguistics (SFL) and critical pedagogy.

Myside bias, or the idea that an individual can evaluate an argument and generate a conclusion based not on evidence but rather on what they want to be true (Stanovich & West, 2007), was used in this study to develop students' understanding of language. Used as a framework, myside bias informed the instructional design in the study and supported the inclusion of thinking practices related to critical inquiry as an essential requirement of 21st century literacy and education in general. Critical inquiry is also a key concept connected to critical media literacy (CML), which can facilitate students and more generally citizens to create and interpret media messages, empowering them to become active participants in a democratic society (Kellner & Share, 2005). Myside bias as a construct of CT framed the pedagogic design and practices developed to engage learners with media texts and raise their awareness of the potential of language in creating possibilities in meaning. More specifically, thinking processes related to the evaluation and interpretation of evidence to generate conclusions in support of individuals' own motives and prior beliefs (myside bias) were targeted in the instructional design to develop specific ways of engaging with text. These practices were informed by debates on CML and critical pedagogy approaches to literacy (Kellner & Share, 2005, 2007; Luke, 2004; Vasquez et al., 2019).

Myside Bias and Critical Media Literacy

Drawing on myside bias and on CML the practices developed in this study targeted critical questioning of information to identify, deconstruct, and analyse the expression of personal opinion

and bias in media texts. Critical questioning was aimed at guiding and developing students' critical thinking with and about the information, technology and media that surround them (Kellner & Share, 2019). The concept of myside bias provided a basis for questioning information; the design framed by the concept, provided opportunities for building awareness of the potential of media representations in promoting personal opinion. The use of the concept stimulated critical thinking as it was employed to raise media students' awareness of how authors can use patterns of language to promote or suppress specific ideas or opinions in their texts.

Building on critical approaches to literacy development (Luke, 2004; Luke & Freebody, 1999), students' awareness of the how media texts may perpetuate personal and /or biased views was raised through reading beyond the text. To do this, I developed ways of having students interrogate assumptions and ideologies embedded in text by identifying, deconstructing, and critically analysing language to uncover the connections between choices of targeted linguistic resources and the expression of personal opinion and bias. The questioning process, informed by critical pedagogy and designed to illuminate the fact that texts are never neutral, involved questions that opened spaces for analysis and discussion of particular points-of-view in relation to the actors (participants) in the texts and their various semantic roles.

Implementation of the critical questioning practices through the designed intervention in this study proved to be effective in a variety of ways. First, it developed students' understanding of the nature and effects of media culture by raising their awareness of how the media influences, educates, and constructs meanings, but also imposes values (Kellner & Share, 2007). To develop this understanding, the instructional design targeted the following: skills in analysing media content, abilities to be critical of information, and competencies to deconstruct and interpret the multiple messages generated by media texts. These are essential analytical and critical thinking skills, and

can no longer be considered relevant only to those interested in following a career in the media (Kellner & Share, 2019; Luke, 2004). In developing these skills and competencies, students engaged with media texts in more purposeful and interesting ways. Instead of memorising grammar rules, they looked at the ways in which topics can be represented in the media, analysed them, and learned how to identify and discuss the expression of personal opinion in texts. The results of the study showed that building these practices into the curriculum through critical discussion can engage students across levels of competence in meaningful ways, and transform their perspective on language learning. Discussions organised around topics related to learners' interests, experiences, or artifacts with which they engage in the material world as they participate in their communities contribute to the depth of the discussion (Vasquez et al., 2019). Additionally, the critical discussion that was developed through the design presented students with opportunities for active participation in the learning process by allowing them to assume new roles and responsibilities (Benesch, 2001; Morgan, 2009).

The pedagogy developed in the study aimed at foregrounding the ways personal views are expressed in media texts to develop students' awareness of how they can have an active role in reading and writing the world and the word (Morrell, 2003). More specifically, the design drew on the concepts of cognitive decoupling (Stanovich, West & Toplak, 2012) and critical distancing (Luke, 2004; Morgan & Ramanathan, 2005) to develop a pedagogy of articulated practices (Benesch, 2001; Lin & Luk, 2002) in support of such critical awareness. Through these practices and the strategic use of media texts, the pedagogy involved students and the instructor in a dialogic process of identifying, deconstructing, and critically reflecting on ways of thinking related to personal opinion, and specifically myside bias, to develop learners' understanding of language. These pedagogical practices, also influenced by SFL, can support students in developing the literacy

skills needed to participate in reading and writing media texts, while guiding them to connect the expression of personal views in texts to the linguistic choices authors make.

Myside Bias and Systemic Functional Linguistics

In my study, dialogical practices drawing on SFL-inspired literacy pedagogies were designed and framed around the construct of myside bias to support students in identifying and analysing authors' linguistic choices to uncover and discuss the expression of opinion based primarily on their own beliefs (Stanovich & West, 2007). In these practices, the grammatics of myside bias, or the ways in which specific linguistic resources relate to the expression of one's own opinion, are foregrounded, providing a powerful set of guidelines for developing a critical awareness of language (Macken-Horarik, 2008). Although this study has largely been influenced by research exploring the use of SFL's metalanguage as a pedagogical tool (Achugar & Colombi, 2009; Gebhard & Graham, 2018; Moore & Schleppegrell, 2014; Moore et al., 2018), the focus was not, as already mentioned, on developing students' understanding of the characteristics of a specific genre or their ability to write in different genres; the development targeted in this study instead focused on cultivating critical literacy through an understanding of how language may function to promote personal or biased opinions in media texts. Therefore, I used SFL to engage students with language through similar stages of language identification, deconstruction, and critical discussion as in the teaching and learning cycle (Martin & Rose, 2012), to analyse and discuss the connections between specific linguistic resources and ways of thinking related to the expression of myside bias. The focus on myside bias thus allowed me to identify and develop both specific practices and the linguistic resources that enabled these connections.

The Contribution of SFL: Development of Language

I looked into the ways myside bias or the expression of personal opinion not based on evidence is realised through choices of specific linguistic resources in the media, to develop students' understanding of language. Drawing from work on ideology in SFL, I analysed media texts to foreground and discuss these connections in the classroom. In this process, I used grammar as the main resource (Halliday, 2003b). I drew on SFL-based work that takes a critical perspective on media literacy, and language in the media in general, to develop students' understanding of language. Specifically, I looked to raise their awareness of the ways language can function to "normalise" point of view or to construe ideology (Bartlett, 2014; Bednarek & Caple, 2012; Billig, 2008; Lukin, 2019; Simpson, 2003).

I used nominalisation, the passive voice, reported speech, and modality because of the relation they have to the concept of myside bias, which allowed me to frame discussions on how the resources function to promote the expression of personal opinion and/or bias in the media. The passive, as included in instructional activities and practices, served to develop students' understanding of how a specific view or angle of an event may be promoted in a text. This can be done for instance, when the participant affected by an action, is brought to the focal subject position to de-emphasise the cause or agent of the action and to offer an alternative representation of the event (Durant & Lambrou, 2009; Simpson, 2003).

In a similar manner, I foregrounded the function of nominalisation in deflecting the reader from specific information in a sentence by making reference to a person or event without clear or explicit report (Billig, 2008; Lukin, 2019; Sušinskienė, 2010). Such instances can be related to biased presentation of information and served to develop students' understanding of how

nominalisation functions to contrive implicit or explicit transfers of responsibility in support of an author's point of view.

Finally, reported speech and modality were examined for their potential in directly or indirectly expressing evaluation depending on the reader's and writer's position (Bednarek & Caple, 2012). Reported speech and reporting expressions were analysed and explained in relation to how an author expresses personal opinion without giving equal attention to opposing views or evidence. This created a purpose for analysis and a way to explain authors' choices in direct or indirect speech, and raised learners' awareness of the potential of language to provide possibilities in meaning (Coulmas, 2011; Holt, 1996). Meanwhile, students' understanding of modality was developed by foregrounding its functions in encoding possibility or obligation in the media (Bednarek, 2015; Lukin, 2019).

Findings from the study demonstrated the effectiveness of the concept of myside bias framing students' engagement with language. Specifically, the findings showed that SFL provided ways of paying attention to the ways the four grammatical resources function to construe opinion and helped develop students' understanding of the language both a system and as a process (Halliday, 1999).

The Contribution of SFL: Development of Practices and Resources

As the theory supporting students' understanding of language, SFL provided a metalanguage that became an important component of the design. SFL metalanguage was built into the activities and guidelines of this study so as to assist students as well as the instructor in engaging with the links between form and meaning (Halliday & Matthiessen, 2004). In particular, SFL metalanguage provided ways of systematically discussing the relationship between each of the four linguistic resources targeted by the design and their functions in expressing myside bias. In critical analysis

practices in the classroom, the students and the instructor shared a metalanguage that included the terms *participant* and *process* to help identify and analyse the expression of personal opinion by authors of media texts.

Using the metalanguage enabled me to de-emphasise the grammatical rules that govern the use of the linguistic resources and to foreground the intent of the language user. For example: Whose opinion is expressed? What reason does the author have to support this view? Who is the participant in this sentence? Why is this grammatical form selected over the other? Which function does it serve? In the design, this line of questioning was repeated and *subject*, *actor*, *object*, and *verb* were gradually replaced by the term *participant* as a functional concept referring to the entity that either performs or undergoes a *process*. This shift in grammatical concepts helped to develop students' understanding of the possibilities linguistic resources provide, depending on whose or what opinion or views are being promoted. As with other studies, explicit focus on language through the use of SFL, with the purpose of addressing these or similar questions rather than mere identification and discussion of grammatical forms, was shown to be very effective (August et al., 2009; Gersten et al., 2007).

Data from this study shows that including SFL metalanguage in these questions or the line of questioning, which gradually developed into a resource (Appendix J), supported students in meaningful engagement with the targeted resources and developed both their language and their critical thinking. Building on studies that have emphasised the importance of dialogic interaction and mediating resources in developing new knowledge (Moore & Schleppegrell, 2014; Wells, 1999, 2000), the discussions in this study were also supported by guidelines on language functions (Appendix F), which provided the language for talking about the relationship between targeted linguistic resources and the expression of personal opinion.

The findings demonstrated that combining functional concepts with traditional grammar in the resources, supported meaning-making relations and enabled students, especially less competent ones to perform in the activities. Students were facilitated in using the texts as well as their personal experiences to clearly articulate their thoughts, thus meeting the expectations of critical analysis practices. Data analysis showed that the gradual inclusion of grammatical metalanguage, which was selected to foreground discussion of the expression of personal opinion in the instructional practices, positioned students to participate in collaborative dialogues in richer and more constructive ways.

This progressively greater inclusion of SFL metalanguage in the curriculum to support the transition from text analysis to more writing-focused activities also developed students' ability to use language more independently. Specifically, students demonstrated both increased engagement with language and appreciation of its potential. These outcomes are largely connected by analysis to the practices and resources students learned how to use, and which allowed them to become more confident and indeed eager to participate.

Finally, the dynamic created through the repetitive use of the resources and dialogic practices, which supported students' critical understanding of language and its meaning-making potential, transformed students' perspective of language (Moore & Schleppegrell, 2014). This finding aligns with views of CT as a willingness to explore others' viewpoints (Facione, 2000). The critical orientation of myside bias as the framework, created meaningful ways of engaging with language to uncover, discuss, and address the expression of opinion and/or bias in media texts. Students' began to view language as a tool to gain a better understanding of how it functions in construing meaning. This was done in a structured way through the selection of topics by the instructor initially and then more independently by students who selected topics related to their own interests (Moore, 2017). Close and iterative attention to the connections between language and

opinion/bias supported through the design and guidelines developed, served to change the study of language from a passive, repetitive, and often pedantic process to a meaningful and engaging experience. It also effectively addressed an important concern in this study: students' aversion towards studying English and their feelings of inadequacy and insecurity.

The Contribution of SFL: Understanding the Meaning-making Potential of Language

The pedagogy I developed in this study aimed to employ the metalanguage necessary for establishing thinking patterns in the service of connecting the expression of myside bias to related language forms. Metalanguage was not taught in isolation or for the purpose of replacing traditional understandings of grammar, as this would not serve curricular goals. Instead, SFL concepts were gradually incorporated into the design to facilitate the development of specific language and thinking skills central to the discipline. Students were not instructed on how to label or use metalanguage in decontextualised activities because the objectives of the design did not require them to understand the writing conventions of a specific genre, for example narrative, description. Rather, and based on the needs of the media ESP context, the focus was on foregrounding the functional potential of specific linguistic resources in expressing opinion in a genre relevant to the media. The SFL constructs of *participant* and *process* were used to explain how authors' attempts to encode personal opinion or biased views in their texts can be realised through the use of specific linguistic forms. As mentioned above, *participant* served to clarify the possibilities available through linguistic resources, for example the passive voice was used to illustrate how positioning information in the subject or object position of a sentence could promote a specific view. Similarly, students were introduced to *process* for the purpose of revealing possibilities, for example, through the use of various reporting or modal verbs and how these can be meaningful in relation to the position communicated by an author. SFL is therefore translated into useful constructs that

pedagogically inform and complement traditional grammar in support of students' awareness of how language relates to meaning (Derewianka & Jones, 2010; Myhill, 2003).

Findings in this study also demonstrate that SFL metalanguage holds great potential in helping teachers develop knowledge about language in general, so that they can in turn design practices in support of subject-specific language development. Specifically, my findings align with research that highlights benefits from developing students' and teachers' understanding of SFL's meaning-based functional grammar as an analytical tool in support of students' disciplinary learning and language development (Accurso & Gebhard, 2021; Gebhard et al., 2007; Schleppegrell & de Oliveira, 2006). Building on this body of research, albeit with a different focus (myside bias), I conclude that the inclusion of metalanguage into the instructional design developed my own critical and semiotic awareness, pedagogical knowledge, and confidence in literacy teaching. I was able to improve my knowledge about language and deploy it in developing the pedagogy and resources that can address issues that generally constrain learners' development in the classroom.

The Challenges of Using SFL in the Study Design

Despite these promising findings, including SFL in the instructional and pedagogic design of a study can nevertheless present certain challenges (Accurso & Gebhard, 2021; Derewianka & Jones, 2010). Recent research has indicated that teachers engage with knowledge about language in accordance with their personal background/experiences and their own teaching context (Matruglio, 2021). The main challenges faced in this study related to both these factors. On the one hand, my limited knowledge and experience in implementing SFL theory and pedagogy often caused me to be insecure about how and to what degree SFL should be incorporated in the instruction. In addition, I was not certain, especially at the beginning of the study, whether the time and effort investment in including SFL in my instructional practices was wise or relevant to the objectives of the ESP course

I was teaching. The use of DBR (Anderson & Shattuck, 2012; McKenney & Reeves, 2012), which offers a systematic way of operationalising instructional theories such as SFL (Schleppegrell & Palincsar, 2018), enabled me to gradually implement and evaluate the role of SFL in the designed activities. It further allowed me to develop a more informed perspective of its potential.

Using Design-based Research: Development of Principles

In the study, repetition and refinement of the designed practices, as advocated by DBR, led to the development of critical thinking and language analysis patterns that were informed by my decisions about why and how specific instructional practices are effective. These decisions were based on students' performance in the activities and were informed by evaluation of the design and review of the theoretical framework of the study. This process determined choices in language, design of activities, and material, as well as ways of re- designing these components in relation to the objectives of the intervention. The DBR process supported me in making data-driven, principled decisions, which were largely informed by evaluating the implementation of theory and practice, identifying challenges, and revising instructional and pedagogical considerations (Anderson & Shattuck, 2012). This process enabled me as the instructor and researcher to critically reflect on my knowledge and identify possibilities for development both for my own practice and for teaching language in an ESP media context.

The focus was the design of a pedagogic intervention that targets linguistic development through instructed critical thinking practices foregrounding the connections between language and myside bias. In this development, the linguistic and critical thinking demands and requirements placed on learners in the specific academic context were important, both in creating the design and in determining its objectives. Drawing on DBR methodology however, the study's design was oriented towards generating principles that not only addressed a local issue, but could also

contribute to a body of knowledge outside the research setting (Anderson & Shattuck, 2012; McKenney & Reeves, 2013). The principles generated in this study will be discussed in chapter 7.

Pedagogy in Support of Teaching Language and Critical Thinking

As in other similar studies, the design therefore offers a framework that other practitioners can modify according to their personal background and the requirements of their teaching context (Moore & Schleppegrell, 2014; Schleppegrell & Palincsar, 2018; Schleppegrell, 2013). Depending on the needs of the learners and /or curricular goals, different critical thinking constructs may serve to develop the language and pedagogy. In Applied Sciences for instance, constructs related to problem solving (e.g., evaluating and synthesising textual and visual information to propose a solution to a technical issue) could be used to frame instructional language learning practices. Similarly, in Health Sciences, a framework based on critical thinking could be used to develop students' understanding of the thinking patterns one engages in and the language necessary for asking questions for medical purposes (e.g., to create or complete patient records, or to collect medical information for a diagnosis). The pedagogy developed in this study, framed by a cognitive psychology construct and supported by SFL could therefore be adapted to address the requirements of other contexts in support of language development. Analysis of the critical literacy needs required specifically for the ESP context was very important both in identifying the most useful language and thinking skills for students and in designing practices in support of foregrounding and developing the language and thinking necessary to perform these skills. At the same time, it could offer ways of addressing concerns with regards the teaching of critical thinking in language education, and education in general, as these were discussed in the introduction of this thesis (Amua-Sekyi, 2015; Buskist & Irons, 2008; Halpern, 2002; Huitt, 1998). Some of these challenges are related to educators' own understanding of what the term critical thinking (CT) entails, as well

as their ability to transfer this understanding into their teaching (Che, 2002; Cotter & Tally, 2009). The pedagogical design developed in this study could be modified, as already discussed, to provide educators across academic expertise, as well as instructors/designers of different types of language courses, specifically in an ESP or English for academic purposes (EAP) context, with systematic processes for developing language through critical thinking, as well as critical thinking through language.

Drawing on definitions that view CT as a willingness to explore others' viewpoints, a desire to be well informed, or an understanding of the various principles that govern good thinking in specific domains (Bailin et al., 1999; Ennis, 1985; Facione, 2000; Paul, 1992), the pedagogy in this study engages students in critical reflection practices that support the co-development of language and critical thinking. The theoretical framework and practices developed here may be adapted to offer detailed and systematic ways of including CT in the design of ESP curricula (Dooey, 2010; Moore, 2017). Such protocols, as I have already suggested, could be based on an assessment of the needs of students in the particular discipline; a CT construct can then be used to narrow down the broad term into an understanding of CT as thinking in a particular way (e.g., myside bias), which can then inform the critical practices most relevant and appropriate for that area. This, as I have repeatedly asserted in this study, can create a critical orientation in a language curriculum by providing answers to questions such as:

1. What kind of information do students need to notice in discourse, be it oral or written?
2. What kind of thinking is expressed in discourse?
3. How does thinking (e.g., judgements, opinions) relate to the entities or the events behind it?
4. How does language contribute/relate to this kind of thinking?

5. What kind of questioning/metalinguage could help foreground the connections between language and thinking?
6. What critical practices/resources may be developed to facilitate these connections?
7. What kind of material would enable these practices?
8. How can critical thinking and language practices be transferred into students' oral and written work? What kind of resources would facilitate such a transfer?

Answering questions like these as part of a critical take on curriculum development could be useful in making explicit to educators the nature of the language and CT skills (literacies) they are targeting in their courses, as well as the ways in which these could be effectively developed.

Closing this discussion, I suggest that such an orientation could also be adapted to include CT instruction into any EAP or general English language teaching programme with no clearly delineated disciplinary content. In such a case, where the teaching of CT cannot be directly related to learners' specific academic and/or professional needs, critical practices of language study framed by different CT notions (e.g., opinion/bias, judgement, etc.) may draw on content and material that connects to students' lives in general (Benesch, 1999; Luke, 2004; Morgan, 2009). It seems therefore that the pedagogy-critical questions outlined above, as well as the critical analysis practices and resources presented in this study could offer a framework for developing different types of language programmes. Specifically, evaluation of the design developed in this study as will be discussed in the next chapter, provides answers to the research questions with principles with mostly pedagogic implications. These principles could be modified to facilitate educators' understanding and appropriation of the term critical thinking and consequently its use in developing critical practices in support of both language and critical thinking.

Chapter 7: Answers to the Research Questions and Conclusions

In this final chapter, I summarise considerations deriving from the discussion of findings in relation to the literature to provide answers to the research questions (RQs). Following the requirements of DBR, answers to the research questions then lead to the generation of design principles that I consider and discuss as theoretical, methodological, and pedagogical outcomes and implications from the intervention (Anderson & Shattuck, 2012; Barab & Squire, 2004).

Answers to Research Questions - Design Principles

RQ1: “How can critical thinking practices be integrated into pedagogic designs in explicit support of ESP learners’ linguistic development?”

Data analysis from all three cycles showed that using the construct of myside bias to create a framework, foregrounding the expression of opinion, helped students develop a better understanding of how language offers possibilities in communicating point of view. The framework which informed the design of critical thinking practices in support of this development drew on the definition of myside bias, emphasising the need for an environment that supports criticality through practices and instructions guiding individuals to decouple from personal views and consider counter evidence before forming an opinion or making a decision (Sá et al., 2005; Stanovich & West, 2007, 2008a; Toplak & Stanovich, 2003). Based on this concept and the critical literacy requirements of the immediate context, the practices developed engaged students in identifying, reconstructing, and discussing language in relation to expressing opinion/bias. Through these practices, I foregrounded the functions of specific linguistic resources to draw students’ attention to the ways authors of media texts communicate a position. Under the demands of the framework, students re-examined their knowledge of grammatical items and the reasoning behind their use, developing an understanding of their functional possibilities in expressing opinion and bias. Having a framework

was not only useful in designing the practices, it also helped in identifying and targeting important linguistic resources for their functional potential in expressing opinion.

The effectiveness of the framework supporting the design was particularly important considering that it did not substantially change the existing curriculum. Taking into consideration that major changes to a curriculum can be time-consuming and very difficult or impossible for educators, it is important for the framework in this study to be integrated within the existing curriculum with very modest modifications. Ultimately, it effectively supported the existing curriculum and offered consistency across lessons in developing students' understanding of language possibilities in support of both thinking and language.

My decision not to integrate the concept of myside bias in teaching in a more explicit manner did, however, have an impact on this development and this is something I would reconsider in the future. While the concept was used to frame the design, as well as my thinking as designer and researcher, it was not integrated into students' thinking through instructional practices. In my framework, students were instructed to discuss thinking processes related to myside bias, such as expressing opinion, and not the actual concept, which I had oversimplified thinking that this would facilitate their participation in the practices.

Frameworks based on constructs from cognitive psychology can be effectively integrated in the pedagogic and instructional design to foreground the functions of language that relate to these constructs. In response to the first question, I propose the following principle:

Design Principle 1. Using a framework based on the concept of myside bias to design critical thinking practices foregrounding the connections between language and opinion/bias will develop students' understanding of the possibilities offered by language in communicating a position.

RQ2: How might foregrounding the relationship between myside bias and targeted linguistic resources contribute to students' understanding of how language functions to convey opinion?

Drawing on theories of language as a system of meaning potential (Halliday, 1996; Halliday & Hasan, 1989), this study used myside bias, or the expression of personal opinion regardless of the evidence against that opinion, to foreground the mediating role of language both as a system and as a process in presenting possibilities in meaning. Analysis showed that involving students in practices where they had to identify, reconstruct, and critically discuss possibilities in language use relating to the opinions expressed in media texts, helped in developing students' understanding of language. Specifically, within the framework provided by myside bias, repetition of these practices which aimed at foregrounding and discussing the functional possibilities of specific linguistic resources in expressing opinion, developed students' understanding of these possibilities.

The use of functional metalanguage to support students in discussing these possibilities was very important, both in designing and in scaffolding instructional practices. Data analysis indicated a development in students' understanding of the functions of targeted resources when I introduced the terms *participant* and *process*. In fact, it was evident when students were provided with functional metalanguage that the traditional syntactic units were not as effective in developing this understanding. What became even more clear through repetition of the designed practices was that providing students with a functional metalanguage was not as important as teaching them to use it in their critical analysis. The framework created by the concept of myside bias provided a purpose for this use that required more than identification of language. Use of the functional metalanguage required developing ways of thinking about and working with language to uncover the functions of these resources in expressing opinion. Analysis showed that, as students became more familiar with using metalanguage, their understanding of grammatical choices deepened. Analysis also indicated

that guidelines on critical analysis and functions of targeted resources – developed as part of the design to support learners – provided new, more effective ways of thinking and talking about language for the learners and the instructor alike. Data specifically shows that the design provided meaningful and manageable ways of engaging with small units of language (grammatical items) for students who had been studying the language for years.

However, the use of metalanguage could have had an even bigger impact on the effectiveness of the design developed in my study. As already discussed, I had limited experience in teaching functional linguistics and that affected my decisions on how learners were trained to use metalanguage. If I had been more confident in integrating SFL concepts into teaching, the benefits from its use would have been more substantial. For example, I consider my decision not to replace textbook language with functional metalanguage, even in later stages of the intervention when I could see the benefits, to be a limitation. However, acknowledging the challenges created by using different types of language – mainly because of choices I made in instructional material i.e., student textbooks – deepened my own knowledge as I progressed through this study. I was able therefore to affirm findings from earlier studies suggesting that the inclusion of such theories into instructional designs can make teachers and curriculum designers more cognisant of the ways that language builds knowledge in their own specific areas of study.

The following principles are suggested in response to the second research question:

Design Principle 2. Using SFL concepts such as *participant* and *process* in critical analysis and discussion of the possibilities offered by linguistic resources related to the construct of myside bias will develop students' understanding of how language functions to convey opinion.

Design Principle 3. Having a purpose for using functional metalanguage that goes beyond identification to reconstruction and critical discussion of language in relation to the ways opinion/bias is expressed, will advance learners' thinking and language.

RQ3: “How can the pedagogical design, supporting the iteration of dialogic processes of language identification, analysis, and reconstruction in texts facilitate the development of a critical mindset in support of learners’ language and thinking?”

Drawing on critical pedagogy, the design in this study used critical discussions of media texts where instances of the targeted linguistic resources were foregrounded through dialogic questioning for their contribution in expressing opinion. I used the framework provided by the concept of myside bias to structure critical questioning to reflect the critical thinking practices developed through the design. This meant it was designed to guide students in identifying the resources and then questioning and discussing their functions in expressing opinion following reconstruction of the texts. I supported students in this engagement with the use of functional metalanguage both in the discussions and through the guidelines provided.

Repeated participation in the discussions indicated something beyond grammatical development. Assessment of the design across the cycles pointed to a development in students' awareness of the importance of functional language in uncovering opinion, as well as an acknowledgement of their ability to critically question, understand linguistic choices and communicate opinion following a pattern of engagement with language.

In the last cycle of implementation, the design involved students in repeating the same practices but in a more independent manner through topics and texts selected by themselves. Analysis highlighted that developing critical ways of approaching media texts allowed learners to understand language better and to use the linguistic resources based on their functional role in

expressing opinion more effectively, regardless of the context or the language provided in the texts, by appropriating thinking and language practices. In their comments and reflections, many learners highlighted the positive impact of the design in making their engagement with language more personal and purposeful.

Even though analysis of data from multiple sources, such as students' reflections and entries in the researcher's journal and instructional logs, showed the effectiveness of critical discussions in the development described above, my decision not to audio-record discussions as data does not allow me to make further claims. In response to the third question, I propose the following principle:

Design Principle 4. Involving learners in discussions built on language reconstruction and critical analysis practices, as well as guidelines foregrounding the connections between specific linguistic resources and myside bias will develop learners' ability to appropriate language and thinking practices in different contexts of language use.

Implications of the Study

Iteration of the design in DBR aims to refine initial theoretical considerations and generate design principles providing answers to the research questions to improve both theory and practice (The Design-Based Research Collective, 2003; McKenney & Reeves, 2013). In this study, the design, exploring the use of critical thinking as a linguistic practice, provided four principles in response to the research questions as discussed in the previous section, and gave rise to a number of implications with regards the theory, pedagogy, and finally, the methodology researched.

Theoretical Implications

The design targeted the co-development of language and critical thinking through instructional critical thinking practices informed by the concept of myside bias. Within the framework created by this concept, practices were designed on the assumption that an individual's

ability to avoid myside bias by evaluating and generating evidence against their own opinion can be influenced by their understanding of how language functions to reflect thoughts and opinions and vice versa. This ability, as explained in Chapter 2, relates to an individual's attainment of thinking dispositions such as the capability for advanced or higher-level thinking in situations where more intellectually advanced processing or analysis is required in the absence of instructions (Stanovich, 2011; Stanovich & West, 2000, 2008a, 2008b). Findings from this study indicate that using the concept of myside bias as a framework to engage learners in practices of critical analysis foregrounding the functional role of language in providing choices in meaning, can play a decisive role in developing both language and critical thought (Design Principle 1). The use of a cognitive psychology construct to create a framework in support of this development could have larger implications. These kinds of concepts can serve as guidelines which, similar to this study, may be integrated within a curriculum to create purposeful ways of thinking about and through language. Especially in language learning contexts in which students have been learning the language over many years, such constructs could present more meaningful and interesting ways of engaging with language. Moreover, as already discussed, cognitive constructs could be used as an alternative to genre in developing language programmes. In learning contexts such as the one explored in this study, looking at different genres or even examples from the same genre may not be relevant or important for developing language. As an alternative to that, this study has shown that using a cognitive construct to analyse and discuss the functions of language in relation to that construct has the potential to develop learners' understanding of the connections between specific linguistic resources and meaning through examples from media texts, a genre relevant to their discipline.

The integration of functional metalanguage in the instructional design to make the connections between language and opinion/bias more explicit, by foregrounding the functions of

specific linguistic resources in relation to myside bias, also presented great potential in developing learners' understanding of language (Design Principle 2). In this development, the design involving learners in practices of language reconstruction and analysis with the purpose of uncovering and discussing the contribution of language in expressing opinion furthered learners' ability to think through language in support of both language and critical thinking (Design Principle 3).

As learners' engagement with language was framed by the ESP media context and the critical thinking concept of myside bias, this study focused on language resources related to the expression of opinion and bias. SFL metalanguage can be used in other contexts of study, framed by different critical thinking and language requirements. Text types relevant to these areas of study have their own features, as authors select from the range of options available in English grammar (Achugar et al., 2007; O'Hallaron et al., 2015). Analysis of other text components (e.g., thematic development, rhetorical structure, etc.) can expand understanding of the distinctive features of different registers and the challenges those features present to students. Data analysis in this study shows that instruction using SFL metalanguage – rather than language from textbooks – facilitated both my own and my students' understanding of language. Findings thus suggest that whatever the context or students' needs, language can be a powerful tool in deconstructing meaning.

Furthermore, empowerment can be achieved if teachers themselves take advantage of this power and use it in deconstructing, understanding, and transmitting knowledge.

Pedagogical Implications

The pedagogical design developed in this study has highlighted the effectiveness of engaging learners in classroom practices with a “critical orientation to literacy” (Veel & Coffin, 1996). To achieve this, the design involved learners in critical thinking practices that aimed at developing ways of considering and talking about language and its functional role in expressing

opinion and bias. Data analysis showed that repetition of such practices through learners' critical engagement with texts can create patterns that connect language and thought, gradually developing learners' understanding of language. Critical discussions of media texts supported students' engagement as an important part of these practices. Furthermore, the critical analysis guidelines used in the discussions to foreground the expression of opinion and bias developed into general guidelines, which students were able to appropriate and use independently in their critical analysis and writing (Design Principle 4).

Developing pedagogies that theorise critical thinking as a linguistic practice has larger implications. Critical practices informed by cognitive constructs to involve learners in discussion and analysis of texts in relation to these constructs have the potential to provide more meaningful engagement with language, with a number of important advantages.

Among these, the benefit of critical discussion fostering collaboration through the creation of a space for critical dialogue. This study has showed that joint participation in discussions of texts engaging students in critical analysis of different topics created a purpose, enhancing learners' willingness to engage, as well as their motivation to perform better in support of the community. Contributing to a dialogic community of shared interests, in which participation and not accuracy was the measurement of achievement, made the learning experience easier, and more pleasant and motivating for participants (Swan & Shea, 2005; Vygotsky, 1978; Wenger, 1998). In his theory of human development, Vygotsky emphasises not only individual learners, but also the social and material environment with which they interact in the course of their development. In a community created to support critical discussions, learners can be encouraged to build on their knowledge through practices of critical thinking and language analysis to which they feel they can contribute based on their level of linguistic and/or critical thinking competence.

Additionally, developing a pedagogic design that used metalanguage to foreground the functional role of language in expressing opinion led to the creation of guidelines in support of critical analysis and discussion of content and language. The guidelines used as scaffolds through the design facilitated learners in critical thinking practices by providing ways of discussing language/opinion connections. Repeated use of these guidelines through the design developed students' ability to appropriate and use them as pedagogic resources in their work. Such pedagogical resources and guidelines, foregrounding the connections between language and meaning, could be developed and integrated in language curricula, depending on the objectives, to support learners in engaging with critical analysis and discussion of language in more independent ways.

The pedagogical design I developed in this study – which included instructional practices and guidelines – had an impact on learners' awareness of the possibilities offered by language in expressing opinion as well as their ability to think through language. Yet it only required modest modifications to the curriculum. Considering the demands often placed on educators for revising or creating curricula, I argue that cognitive constructs can be used to develop frameworks that can be effectively and easily integrated as guides within the pedagogic design of existing curricula in support of critical thinking and language development.

Methodological Implications

The development in learners' understanding of choices offered by language, as well as in their ability to think through language, was closely associated by data analysis to the repetition of critical practices engaging learners and myself in untangling the connections between language and opinion/bias. Iterations of the intervention as one of the main characteristics of the methodology chosen, enabled me, as the instructor and researcher/designer, to review and refine practices and

objectives based on my observations of students' performance in designed activities and analysis of their work.

Having a double role in this study allowed me to use and test at the same time, my professional knowledge as an educator. As part of this role, I had the opportunity to put this knowledge into practice, make mistakes, and so develop a deeper understanding of the issues. For example, I am confident that I wouldn't be able to understand the value of integrating functional metalanguage in my teaching as much as I do now, if I was assisted or guided in using it. I learned a lot from working through an understanding of SFL, as well as from making decisions and mistakes in integrating it in my design. Understanding possibilities and making choices was thus as important to me as it was to my students in this study and that was one of the driving forces of the design.

As the teacher, I could also identify and acknowledge the benefits of the pedagogic design in developing students' thinking and language and make decisions with practical value for the immediate context with which I was familiar. At the same time, the repetitive nature of the methodology allowed me to decouple from my role as a teacher, especially between cycles, and gain research insights into how the design succeeded or failed to support students in the targeted development. I believe that being able to explain the successes or failures of the design to accomplish intended goals as expected in iterative approaches like DBR from the position of teacher and researcher can offer a much more insightful account, contributing to innovation and improvement. Such accounts could go beyond research-driven designs that educators are expected to implement with integrity to the designer's intent, to research paradigms with practical and theoretical applications in real educational contexts. Based on these considerations, I believe that assuming the roles of researcher/designer apart from instructor in DBR provides opportunities for

language educators to develop both as professionals and as researchers, by conducting research with implications beyond their individual practice or area of expertise.

Research Limitations and Directions for Future Research

As already mentioned, one measure of success for DBR interventions is the generation of principles that can potentially inform practice and research in other educational contexts (Anderson & Shattuck, 2012). Discussion of the design principles developed in this study and their larger implications to theory and practice highlighted a number of limitations for consideration in future research.

The first limitation relates to the fact that this study was conducted in a single classroom. Consequently, iteration of the design in cycles, unlike in most DBR studies, was within that classroom and not across different ones. While a single classroom is always an exemplar offering valuable insights, one should not make the mistake of overgeneralising findings and that was a consideration that informed my conclusions and design principles. Repeating the intervention in more than one classroom may have allowed me to make broader assumptions on the design. Nevertheless, it was important for the practices developed in my study to be repeated in the same context and with the same students in order to assess the effectiveness of the design in developing thinking and language.

Secondly, while I acknowledge the benefits of assuming a double role in this study, I also recognise that my decision not to follow one of the common requirements in DBR relating to the formation of a partnership may have been the cause of some rather conservative choices in the design. On reflection, making sure that my role as the researcher overrode that of the teacher in making theoretical and methodological considerations was a constant challenge, especially when data analysis was bound by time limitations. In much the same way, without abnegating the

importance of my role as researcher, I would perhaps have had more opportunities to engage with teaching and pedagogy issues if I had had the support of other researchers. Such support may have impacted decisions on replacing textbook language or using SFL more extensively in my teaching. I also acknowledge that while I identified weaknesses and made multiple refinements to the design as required by iterative approaches (O'Neill, 2016), my confidence as a teacher at times overrode my curiosity as a researcher.

A final limitation in my methodology was that I had chosen not to audio-record dialogue as data. Considering learners' initial concerns (feelings of anxiety and/or difficulties in using the language for communication), I thought that this might have interfered with their willingness to participate, and consequently their performance in classroom practices. Although a thorough account of the research was eventually created through the use of different types of data sources, in retrospect, it would have been preferable if I had secured recordings of the designed activities. I believe that these would have provided even richer insights into the development, guidance, and support of future research.

Conclusion

The design in this study was built on the assumption that developing critical thinking and developing language are one and the same. Based on this, critical thinking was used to develop language and language was targeted to further critical thinking. In this co-development, instructional critical thinking practices informed by the concept of myside bias and supported by SFL metalanguage and critical pedagogy, were iterated in cycles of implementation, evaluation, and refinement, as required by DBR methodologies. Analysis of data collected throughout the intervention showed that the design was effective in developing learners' understanding of the

functional possibilities offered by language in expressing opinion, as well as their ability to critically approach language based on that understanding.

Consideration of the findings led to the generation of principles describing important components of the design's effectiveness with larger implications for theory and practice. Highlighted in these principles is the importance of using the construct of myside bias to create a framework of critical engagement to develop students' understanding of the possibilities offered by language in communicating opinion/bias. Moreover, one of the principles points to the significance of the framework in creating a purpose for engaging with language through critical practices of identification, reconstruction, and discussion, where the use of functional metalanguage facilitates students' understanding of the potential of language in conveying opinion. Finally, this study has shown that using such frameworks to support learners in discussions of the functions of specific linguistic resources in expressing opinion has the potential to develop their ability to engage in critical thinking patterns developed through the design by appropriating and using language and thinking practices more independently.

The design that has effectively targeted the development in learners' language and critical thinking in this study could have theoretical and pedagogical applications in future research. I strongly believe it would be worth attempting to understand, modify, or build upon the enactment of the design principles that have evolved; evidence has shown that using critical thinking as a linguistic practice to engage learners in paying greater attention to the functional role of language can be an effective, meaningful way of developing both thinking and language. The benefits from the development achieved in this study were as important to learners as to myself as the instructor and researcher. It is also quite significant that these principles and design could be adapted to

integrate critical thinking approaches and frameworks in support of this development in other language learning contexts with relatively modest changes in the curriculum.

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Appendix A – Students’ Needs Analysis Questionnaire¹

Dear Respondent,

By completing this questionnaire you are giving your consent to participate in this research study.

PART I: DEMOGRAPHICS

1. Age: years old

2. Type of high school you graduated from:

State Private

3. How many years have you been learning English?

4. Do you have any formal qualifications in *English*? Tick as appropriate

Qualifications	Grade	Year
IGCSE (Core)		
IGCSE (Extended)		
GCE		
IELTS		
TOEFL		
Proficiency		
Other, please specify:		

PART II : NEEDS ANALYSIS

Each of the tables that follow corresponds to competencies and skills in one of the four skills (writing, reading, speaking listening).

Answer questions in part II by reading the tasks in the first column of each table and then circling the relevant answer in the second (frequency) and third (effectiveness) columns.

WRITING

	<p>How often are you required to accomplish the following tasks in English in your departmental courses? 1=never; 2=rarely;3=sometimes; 4=often; 5=very often</p>	<p>How often do you think you are effective in accomplishing the following? 1=not at all; 2=rarely; 3=sometimes; 4=often 5=very often</p>
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¹ Note: The original Greek version of this questionnaire is available from the author upon request.

1. Use correct, coherent and accurate language in assignments or tasks	1	2	3	4	5	1	2	3	4	5
2. Use appropriate format, style and register.	1	2	3	4	5	1	2	3	4	5
3. Answer questions during an examination	1	2	3	4	5	1	2	3	4	5
4. Summarize and paraphrase a text	1	2	3	4	5	1	2	3	4	5
5. Quote, cite sources and create bibliographical references in assignments	1	2	3	4	5	1	2	3	4	5
6. Combine language with multimedia components (images, links) to communicate an idea.	1	2	3	4	5	1	2	3	4	5
7. Collect and evaluate information from various sources before using it to support an argument.	1	2	3	4	5	1	2	3	4	5
8. Maintain a neutral and objective stance when expressing opinion.	1	2	3	4	5	1	2	3	4	5
9. Use appropriate language to control personal bias when dealing with sensitive issues.	1	2	3	4	5	1	2	3	4	5
10. Exercise decision-making skills when presented with a task for which explicit instructions are not sent.	1	2	3	4	5	1	2	3	4	5

Other (Please specify) _____

READING

	How often are you required to accomplish the following tasks in English in your departmental courses? 1=never; 2= rarely 3=sometimes; 4=often; 5=very often					How often do you think you are effective in accomplishing the following? 1=not at all; 2=rarely ; 3=sometimes; 4=often 5= very often				
1. Go through material quickly to decide whether the information it contains is useful for you or not	1	2	3	4	5	1	2	3	4	5
2. Summarize a text orally or in written form to fulfill an assignment	1	2	3	4	5	1	2	3	4	5
3. Skim and scan an article /text to find specific information.	1	2	3	4	5	1	2	3	4	5
4. Answer comprehension/ discussion questions related to a text during an examination, during class work, or for an assignment.	1	2	3	4	5	1	2	3	4	5
5. Guess the meanings of unfamiliar words from the context.	1	2	3	4	5	1	2	3	4	5
6. Read a text and take notes.	1	2	3	4	5	1	2	3	4	5
7. Read a text and express the author's ideas using your own words.	1	2	3	4	5	1	2	3	4	5
8. Interpret data in various forms (graphs, charts, etc.)	1	2	3	4	5	1	2	3	4	5
9. Read material from various sources on a	1	2	3	4	5	1	2	3	4	5

particular issue to form and express your own opinion about it										
10. Read a text and critique the author's ideas.	1	2	3	4	5	1	2	3	4	5
11. Recognize bias and/or lack of objectivity in The language used in various types of text.	1	2	3	4	5	1	2	3	4	5
12. Maintain a critical stance when making inferences (educated guesses) from a text.	1	2	3	4	5	1	2	3	4	5
13. Exercise decision-making skills when presented with a task for which explicit instructions are not sent.	1	2	3	4	5	1	2	3	4	5
14. Recognize bias, intent or perspective in oral communication	1	2	3	4	5	1	2	3	4	5

Other (Please specify) _____

SPEAKING

	How often are you required to accomplish the following tasks in English in your departmental courses? 1=never; 2=rarely 3=sometimes; 3=often; 4=very often					How often do you think you are effective in accomplishing the following? 1=not at all; 2=rarely; 3=sometimes 4=often 5=very often				
1. Express your opinion in class debates/discussion.	1	2	3	4	5	1	2	3	4	5
2. Engage in informal conversations.	1	2	3	4	5	1	2	3	4	5
3. Participate in pair or group work in order to complete an activity.	1	2	3	4	5	1	2	3	4	5
4. Make presentations on a variety of topics.										

	1	2	3	4	5	1	2	3	4	5
5. Ask and answer questions in lectures.	1	2	3	4	5	1	2	3	4	5
6. Collect and evaluate information from various sources before using it to support an argument.	1	2	3	4	5	1	2	3	4	5
7. Maintain a critical stance when making inferences (educated guesses) in formal and informal oral communication.	1	2	3	4	5	1	2	3	4	5
8. Control personal bias by using appropriate language when dealing with sensitive issues.	1	2	3	4	5	1	2	3	4	5
9. Exercise decision-making skills when presented with a task for which explicit instructions are not sent.	1	2	3	4	5	1	2	3	4	5

Other (Please specify) _____

LISTENING

	How often are you required to accomplish the following tasks in English in your departmental courses? 1=never; 2=rarely; 3=sometimes; 4=often; 5=very often					How often do you think you are effective in accomplishing the following? 1=not at all; 2=rarely; 3=sometimes; 4=often; 5=very often				
1. Attend a lecture and take notes.	1	2	3	4	5	1	2	3	4	5
2. Summarize a lecture from the notes taken in class.	1	2	3	4	5	1	2	3	4	5
3. Follow the instructions of the lecturer.	1	2	3	4	5	1	2	3	4	5

4. Communicate with classmates (initiate and /or maintain communication).	1	2	3	4	5	1	2	3	4	5
5. Listen to a recording or watch a video and complete a related task.	1	2	3	4	5	1	2	3	4	5
6. Evaluate evidence from various sources in terms of validity before drawing conclusions.	1	2	3	4	5	1	2	3	4	5
7. Recognize bias, intent or perspective in oral communication.	1	2	3	4	5	1	2	3	4	5
8. Exercise decision-making skills when presented with a task for which explicit instructions are not sent.	1	2	3	4	5	1	2	3	4	5

Other (Please specify) _____

PART II: Please answer the following questions:

Where do you imagine using English in your future?

1. Where do you imagine using English in your future as a professional in the areas of Communication and the Media?

2. Would you like to change your English language course in any way? (please delete as appropriate)

YES\ NO

If YES please specify how:

Thank you very much for your participation.

Appendix B – Students’ Implementation Questionnaire

Dear Respondent,

This survey is part of a larger research study of critical thinking as a linguistic practice and will contribute to my doctoral studies at Lancaster University in Lancaster, Great Britain. Your participation is entirely voluntary, and your decision on whether or not to participate will not affect how you are treated in the classroom or your marks. All responses are anonymous and cannot be traced to you. By completing this questionnaire you are consenting to participate in this research study as described.

PART I: Demographics

1. How many years have you been learning English?

1-5 6-10 more than 10

2. Where did you graduate from high school?

Cyprus Abroad

3. Type of High school you graduated from:

State Private Other.....

PART II: Experience with English language learning

4. Did you go directly from high school to university?

Yes No

If not, what were you involved in during the gap between your high school and university studies? (e.g. military training, work etc.)

.....

5. Have you taken English language lessons in a private institute?

Yes No

If yes for how many years?

1-5 6-10 more than 10

6. Have you studied with an instructor whose native language was English?

Yes No

7. Do you have any formal qualifications in *English*?

Qualifications	Result	Year
IGCSE (Core)		
IGCSE (Extended)		
GCE		
IELTS		
TOEFL		
Other (please specify)		

8. Have you been involved in any extra- curricular activities requiring the use of the English language (Erasmus programs, work experience, travel abroad etc.)?

Yes No

If yes how has it influenced your performance in the English language?

.....
.....

9. From your experience, what type of class activities can help in developing your competence in using the English language?

a. In class activities

.....

b. Out of class activities

.....

10. How does your everyday use of technology and the internet for various purposes (social, academic,professional) affect the way you use the English language?

.....
.....

PART III: Competence in the English Language

Read the description of English language use in the first column of each table. Then circle the answer in the second (frequency) and third (effectiveness) columns that best describes you.

	How often have you been required to carry out the following in your English language courses up until now? 1=never;2=rarely; 3=sometimes; 4=often; 5=very often					How often do you think you have been able to effectively carry out the following? 1=never;2=rarely; 3=sometimes;4=often 5=very often				
1. Use English to communicate in a variety of authentic situations	1	2	3	4	5	1	2	3	4	5
2. Use appropriate format and style to perform in tasks and activities related to your areas of interest	1	2	3	4	5	1	2	3	4	5
3. Maintain an objective stance when reading and critically analyzing material from various media	1	2	3	4	5	1	2	3	4	5
4. Critically select, evaluate and synthesize material from a variety of sources to support an argument	1	2	3	4	5	1	2	3	4	5
5. Read and critically analyze authentic material across a range of media or other sources carrying perspective.	1	2	3	4	5	1	2	3	4	5
6. Recognize and critique intent, perspective and/or lack of objectivity in multimedia components (images, links) used to accompany texts.	1	2	3	4	5	1	2	3	4	5
7. Use language and other multimedia resources to describe events in a news story.	1	2	3	4	5	1	2	3	4	5
8. Use language and other multimedia resources to	1	2	3	4	5	1	2	3	4	5

support an opinion or argument.										
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Other (Please specify) _____

Thank you so much for your participation

Appendix C – Student Interview Protocol for Implementation Phase¹

**FOCUS GROUP WITH STUDENTS FROM THE
DEPARTMENT OF COMMUNICATION AND
INTERNET STUDIES**

INTERVIEW GUIDE

Focus Group Questions:

The following are the provisional questions for the focus group.

Department of Communication and Internet Studies- Students present:

Language Center:

Date:

Place and time of the interview:

INTRODUCTION:

1. What are the demands placed on you as students in the areas of Communication and the Media as regards the use of the English Language?

2. Could you explain if/how any of the following components of your course has helped you deal with these demands or has, in any way, impacted your use of the English language?

Material (*authentic*)

Content (*discipline related*)

Teaching methods (*learner-centered, autonomy, constructivist approaches*)

Notes: it has improved technical aspects of my language e.g. grammar, vocabulary), it has given me a better understanding of how language is formed socially, I have realised the power of language through the emphasis placed on authentic language used in the media

¹ Note: The original Greek version of this interview guide is available from the author upon request.

3. We've talked a lot about critical thinking so in what ways do you think the assignments in the course have facilitated the use of critical thinking?

4. Can you describe how the structure and instructions followed for the dialogic activities in the course enabled you to critically engage with language in order to analyze and negotiate information and opinions?

5. How has the use of critical thinking to complete the tasks/activities/assignments in this course helped in acquiring and using the language required to effectively communicate or negotiate meaning for specific purposes?(example)

Notes: Do you think for example that they:

- *related with the type of tasks you will be required to perform in the future as professionals in the field? (e.g. news broadcasting, article writing, website development)*
- *improved your competence in any way?*
- *helped develop new or poor skills?*

6. How does critically identifying and manipulating language for specific purposes (e.g. controlling bias in writing an article, news report) contribute to linguistic growth?

7

a.) In what ways do you think the use of technology has enabled critical thinking in the activities you have completed in this course? *Notes: Research and find material for an assignment (critical evaluation), Express an opinion (defend or reject an idea based on facts while considering evidence), Comment on issues (maintaining a neutral unbiased stance)*

b) How has this contributed to language learning?

8. In your experience how does sharing and co-constructing multimedia content in an online community (an aspect incorporated into the various tasks in this course) contribute to linguistic development?

9. Can you explain how activation of critical thinking processes such as controlling myside bias has had an impact in your ability to use the English Language?

10. Which areas or skills related to language learning do you think were developed through practices of controlling bias in this course? *Notes: Technical aspects of language (correct grammar, syntax, sentence structure etc), appropriate register (linguistic choices, style), use of language to communicate meaning, research skills, argumentation etc*

11. Overall do you think using critical thinking as a linguistic practice in a digital environment has benefitted you as a learner of English for Specific Purposes at University level?

Appendix D – Sample Page from Researcher’s Journal

RESEARCHER’S DIARY

Date:

Time:

Location:

Session number:

DESCRIPTION	REFLECTION
Summary	Reflection notes

Appendix E - Instructional Log Sample

Cycle 1
Activity Ag

Date 22 Feb 2016

Objective	Activity type	Instruction	Material /tools	Student reaction (engagement, responses, proficiency etc)	Teacher Reflection	Modification required
<p>Objective 1. Identify & discuss non-indicative and passive functions in relation to inside bias</p>	<p>1. Pair work 2. Student share answers in whole group discussion</p>	<p>- Share what you know about the story presented by headlines - In pairs identify non-indicative & passive voice resources - Discuss how resources function to convey a specific view on the story - Share your responses</p>	<p>1. Headlines on function</p>	<p>- Most students engaged - Overall quite good at identifying resources - Discussion of function good but sometimes not indicative of SS understanding - Student responses</p> <p>Headlines 1/3 Israelis are the subject and Palestinians the victim Use of the article to emphasize the action and blame Israelis</p>	<p>The scaffold facilitated discussion and language exp for SS who could identify opinion but good not discuss it - Use of different term to refer to subject/verbs may be carry on for</p>	<p>- Review language used to refer to clause constituents (subject / actor)</p>

Objective	Activity type	Instruction	Material/ tools	Student reaction (engagement, responses, proficiency etc)	Teacher/researcher Reflection	Modification required
		Pair work		<p><u>Student responses</u></p> <p>Headline 2: Use of nominalization because here Propositions are the subject. This is done to avoid mention of who was behind the shooting. Instead not mentioned at all.</p> <p><u>Students' comments in discussion</u></p> <p>Exon subject jia overs ra Defa. Taisis fopis stis G8isus var auq zivar n Ngin fopar nu suvidranu ori or nre-epis knopu va nopsisiferau hawfidi</p>	<p>- Not sure if weaker student understand the function key are using in their answers.</p> <p>Student shows understanding of how information may be one-sided. - Develops in thinking & in writing</p>	<p>- Make resource functions clearer in discussion and in the scaffold</p>

Objective	Activity type	Instruction	Material/tools	Student reaction (engagement, responses, proficiency etc)	Teacher/researcher Reflection	Modification required
		Discussion		<p>Student comment in the discussion "I don't know a lot about this topic but I can see that this media is supporting <u>Realists</u>"</p> <p>Some of the weaker students seem to be challenged by the activity/ material - They can identify resources but not discuss Realism</p>	<p>- Student (low ability) identified the expression of opinion</p> <p>The activity seems to be more challenging for weaker students. This impacted to involve everyone so I allowed students to use Green K if they felt it was necessary</p>	<p>Consider ways of engaging SS with more familiar / interesting topics.</p>

Appendix F – Language Function Guidelines

(1) Nominalisation and Passive Voice

Below are examples of functional language commonly encountered in the media, and related to the direct or indirect expression of personal views, attitudes, and interpretations of events based on personal beliefs and bias.

Function	Nominalisation	Passive voice
To avoid expressing judgement or assigning responsibility	<u>Failure</u> to communicate... <u>Crossing</u> the boundaries... An <u>agreement</u> was signed...	A computer <u>was broken</u> ...
To emphasise or de-emphasise an agent or event by placing it in specific positions in a sentence to shift focus of attention	Culture influences <u>communication</u>	The ways people communicate verbally or non-verbally <u>are influenced</u> by their culture
To avoid giving specific information allowing for multiple interpretations of an event	<u>Isolation</u> of Muslim women in...	A Muslim woman <u>was kicked out</u> of a corporate meeting in...
To categorise or represent groups in order to create stereotypes and promote attitudes	<u>Trolling</u> <u>Mixed/Gay marriages</u> ... <u>Hacking</u> ... <u>Turkish-Cypriots</u> ...	

(2) Modality and Reported Speech

Below are examples of functional language commonly encountered in the media, and related to the direct or indirect expression of personal views, attitudes, and interpretations of events based on personal beliefs and bias.

Function	Modality	Reported speech
To encode attitude by supporting, emphasising, questioning, criticising, or characterising events, agents, or opinions as (im)possible, (un)necessary or (un)desirable through the use of specific words	The accident <u>could</u> have been prevented... The driver <u>must</u> have been drunk...	The driver was <u>allegedly</u> drunk... An eyewitness <u>implied</u> that the accident...
To express an event as a generally accepted possibility, rather than just a point of view	Teenagers <u>must</u> not be allowed to drive before the age of 18	The play was a huge success <u>according to</u> viewers asked after the end of the performance.
To attribute potential or added value to an event or agent	Donald Trump <u>could</u> be the next US president.	Mr Trump <u>maintained a solid argumentation</u> in the presidential debate by saying that...
To express uncertainty due to lack of evidence	The attack <u>might</u> have been organised by members of ISIS	ISIS were <u>presumably</u> reported to have been behind the organisation of the attack
To suggest that the source of information is untrustworthy or biased and thus question or devalue evidence	The victim's mother <u>could not</u> have seen the killer leaving the scene of the crime as...	Neighbours of the victim – a couple of 84 and 89 years old – who <u>allegedly</u> heard shouting, were questioned by the police.
To present an opinion as a fact and vice versa	Senior citizens <u>must</u> be provided with opportunities for lifelong learning	<u>According to</u> research conducted the majority of Greek-Cypriot people would not mind living with Turkish-Cypriots in a united island provided the economic crisis was over.

Appendix G – Coding Protocol: Analysis of Data in NVivo

Themes	Subthemes (codes)	Data extracts
Development from repetition of critical practices. The development in students' understanding of language in relation to opinion from repeatedly engaging in identification, reconstruction, and discussion practices.	- <i>Linguistic development</i> : Understanding of language through critical analysis and discussion of the connections between language and expressing opinion.	“I think the practices we have used in this course have brought us in close contact with language because they allowed us to extensively and more thoroughly practice the language, much more than we ever did in the past.”
	- <i>Collaboration</i> : improved performance and motivation for joint participation in practices	“I think we all are capable of critically thinking to some degree so working together to discuss language really made a difference to our language learning.”
	- <i>Material</i> : Increased familiarity with discipline-related material.	“Doing the same things (critical analysis practices) with different material made analysis of articles easier.”
	- <i>Steps in activities</i> : Inclusion of steps (identification, reconstruction, discussion) facilitated engagement with language for students of different competence levels.	“... for example, identifying bias and talking about language and how it relates helped me a lot in writing a headline. The steps we took to understand language were important before I had to write.”
	- <i>Emerging forms of scaffolding (practices)</i> : Creation of patterns and guidelines for thinking about and discussing language in relation to expressing opinion.	“Repeating the steps with you (the instructor) before we did it by ourselves was... I think... very important... You showed us how to think and then how to use language in that thinking.”
		(Extracts from student reflections and focus groups, April 2016)

Themes	Subthemes (codes)	Data extracts
<p>Co-development of language and thinking. The use of critical analysis practices enabled the connections between meaning and choices in language.</p>	<p>- <i>Linguistic development</i>: Understanding of language through critical analysis and discussion of the connections between language and expressing opinion.</p>	<p>“Especially in the activities where we changed parts of a text to uncover bias, and then manipulated them to see how we could improve them in that respect, I feel that our CT was facilitated and developed to a great extent.”</p>
	<p>- <i>Critical mindset</i>: Development of practices into ways of thinking.</p>	<p>“It was harder at the beginning... now whenever I read something I think about where or who it comes from and what is the evidence.”</p>
	<p>- <i>Material</i>: Increased motivation and confidence in engaging with disciplinary material.</p>	<p>“I am much more interested in reading news reports and articles now... I know how to look for the reasons behind what an author says.”</p>
	<p>-<i>New measurements of achievement</i>: Based on collaborative thinking and not just language performance.</p>	<p>“We were discussing people’s views and attitude... and language was in many cases the means and not the purpose perhaps this has made the difference. Language was not taught in the traditional way it derived from the discussions.”</p>
	<p>-<i>Multimodality</i>: Critical analysis of image/text combinations engage students and develop thinking/ language connections in communicating opinion.</p>	<p>“Unlike in any other course, we used images to understand something better, get more perspective on issues, exercise critical thinking and identify and evaluate attitude.”</p>
		<p>(Extracts from student reflections and focus groups, April 2016)</p>

Themes	Subthemes (codes)	Data extracts
<p>Shift in students' thinking. Students' acknowledgement of the contribution of their English language course to the development of both language and thinking.</p>	<p><i>-Lesson value:</i> Acknowledgement of the importance of thinking through language for personal and professional development.</p> <p><i>-Different ways of engagement:</i> Motivation and improved performance from engaging with language in new, more interesting ways (expressing opinion).</p> <p><i>-Using language as a tool:</i> Development in understanding of the potential of language as a thinking tool.</p> <p><i>-Linguistic development:</i> Focusing on meaning–language connections.</p> <p><i>-Collaboration:</i> Support form dialogic community in developing thinking and language.</p>	<p>“After studying how language can expose attitudes and views I see now that even channels as prestigious as this one do support specific views, perhaps not to the extent this happens in other media but still...”</p> <p>“We had something else to do and in order to do that we had to learn the language... it came with the task and this is was made it more engaging for me.”</p> <p>“I was taught grammatical phenomena like passive voice and reported speech in the past but I was never made aware of the ways these are used in real life and real ‘speech’. It was very interesting and helpful for us to learn how grammar can help us understand intentions and thoughts in the ways we have seen in class.”</p> <p>“I hadn’t realized how powerful grammar or language was in promoting ideas.”</p> <p>“I guess it’s the same with the discussions in class... in a group people try harder... especially when opinions are discussed.”</p>

Themes	Subthemes (codes)	Data extracts
	<p>- <i>Steps in activities</i>: Inclusion and repetition of steps (identification, reconstruction, discussion) facilitated engagement with language for students of different competence levels.</p> <p>- <i>New measurements of achievement</i>: Participation is highlighted as the main objective, and not accuracy in using language.</p> <p>- <i>Multimodality</i>: Critical analysis of image/text combinations engage students and develop thinking/ language connections in communicating opinion.</p>	<p>“By the time we started working on our project I knew how to approach the text and which were the important points to consider thanks to the repetition of the same patterns of thinking and discussions in class.”</p> <p>“To be honest I had a dictionary open constantly in front of me in class and I was looking up words as we were discussing texts because I didn’t want to miss anything... or fall behind in the analysis that was taking place.”</p> <p>“Looking at images and language together was useful... I understood how these can combine to help an author.”</p> <p>(Extracts from student reflections and focus groups, April 2016)</p>
<p>Shift in teachers’ thinking. Instructor’s acknowledgement of the contribution of critical thinking practices in the development targeted by the design.</p>	<p>- <i>Emerging forms of scaffolding (practices)</i>: Realizing the contribution of critical discussions (critical pedagogy) in developing understanding of language.</p>	<p>“This will help us became aware of the relationships that exist between forms and meaning something that I am positive they haven’t been instructed to do before.”</p>

Themes	Subthemes (codes)	Data extracts
	<p>- <i>The potential of SFL in teaching language:</i> Repositioning/acknowledging the potential of functional grammar in developing language.</p>	<p>“SFL will help me transform students’ engagement with the language as it will allow me to talk to them about choices and patterns in language use and their impact on meaning.”</p>
	<p>-<i>Collaboration:</i> Support from dialogic community in developing thinking and language.</p>	<p>“There is already quite a difference between the level of participation of students as opposed to the first lessons. Some of them seem annoyed and reluctant to participate although they seem to engage better through collaboration. I am thinking that perhaps making them feel comfortable is not the way to go! students need to be pushed out of their ‘comfort zone’.”</p>
	<p>-<i>New measurements of achievement:</i> Students of various achievement levels engage in activities because of the focus on participation rather than accuracy.</p>	<p>“Using really easy resources that would interest and engage students (on topics they would like). I need to consider what would make them want to understand. Also I need to be thinking about what they can do with their existing level.”</p>
		<p>(Extracts from instructional logs and researcher’s journal)</p>

Themes	Subthemes (codes)	Data extracts
Design evolution. The effectiveness of repeating critical thinking practices led to emerging forms of scaffolding.	<p><i>-Emerging forms of scaffolding (practices and guidelines):</i> Repeated design leads to refinement of critical analysis practices and guidelines supporting language and thinking development.</p>	<p>“The shift in teaching practices has also created a need to support students with the thinking and language resources they need to perform in these activities as well as with a set of instructions on how to optimize performance.”</p>
	<p><i>-The potential of SFL in teaching language:</i> Repositioning/acknowledging the potential of functional grammar in developing language.</p>	<p>“Grammatical forms may be introduced through discussions of examples from which students can be abstracting language forms, connecting them to functions, recognizing that they can make choices on how to avoid bias and that different choices are appropriate for different purposes.”</p>
	<p><i>-Collaboration:</i> Support from dialogic community in developing thinking and language.</p>	<p>“There is a responsibility... because your work is visible to others –not just the instructor – and also because your work will reflect on others’ work you tend to care more... and usually this is when you really try your best... when it matters to you to be appreciated.”</p>
	<p><i>- Steps in activities:</i> Inclusion of steps (identification, reconstruction, discussion) facilitated engagement with language for students of different competence levels.</p>	<p>“Activities will be conducted in pairs and groups before students are asked to perform individually. The activities need to be broken down into steps which will gradually engage students with more demanding tasks and material.”</p>

Themes	Subthemes (codes)	Data extracts
	<p>- <i>Critical mindset</i>: Development of practices into ways of thinking.</p> <p>- <i>Material</i>: Increased motivation from engaging with material related to students' interests.</p>	<p>“It should be something that will gradually develop beyond a set of instructions into practices of thinking! A resource used to continually expand their knowledge by showing them how language links to the kind of questions one asks when critically analysing a text.”</p> <p>“Introducing a grammatical phenomenon through authentic-like texts in order to reflect on the functionality of grammatical choices in meaningful contexts seems to help students.”</p> <p>(Extracts from instructional logs and researcher's journal)</p>

Appendix H – Coding Protocol: Faculty Focus Group Needs Analysis

Themes	Subthemes (codes)	Data extracts
Students' use of English in the department of Media.	Students are sometimes required to use English for reading bibliography. They never do any assignments in English for their departmental courses.	"I assign students with English bibliography but do not require them to write or present anything using English."
Faculty members' use of English in the department of Media.	Faculty members use English to publish/present their research and communicate with colleagues/students from abroad.	<p>"In the academic sense I use English for reading bibliography and also for writing and publishing papers or chapters in Journals or books."</p> <p>"I take part in academic conferences in English all the time."</p> <p>"I have used English for communication purposes in the exchange of emails or other forms of correspondence with colleagues and students from other countries."</p>
	English is a requirement in job descriptions in the media	"I taught at a private university where the medium of instruction was English for 10 years and so I was using it all the time."
Causes for students' average to low proficiency in English.	Poor training and development in using language for meaningful communication – emphasis on grammar and vocabulary to raise test scores.	"Most of them know the grammar and have advanced vocabulary however they cannot use the language critically or to communicate or perform specific and more advanced tasks."

Themes	Subthemes (codes)	Data extracts
	Lack of pedagogical training in teaching methodology for teachers in earlier stages of education.	“The new teaching methodologies that include the interactive more communicative approaches to learning and team or pair work have only been implemented in Cyprus lately by some educators so I think teaching methodology is responsible for some of the language issues of students.”
	Not enough exposure to literary texts of high linguistic value (e.g., poetry, literature).	“Nobody can write correctly if they haven’t read... our teachers asked us to read about a hundred pages of literary or philosophical texts every week and I found that this helped me to learn.”
	Use of a local dialect enhanced by students’ need to maintain their Greek-Cypriot identity.	“... so when there is a language that is not written and is only spoken, then expression is bound to be more restricted... especially in more abstract forms of thinking... of course there’s the ideological issue of learning and speaking a different language which is a contradiction and makes it even harder.”
	Students do not see the need to learn English. They are indifferent and passive towards learning in general.	<p>“It’s a matter of having to face the consequences of being placed in a situation where someone needs to socialize... and they don’t have this requirement in our context.”</p> <p>“It’s a lack of interest in learning or doing something correctly.”</p>

Themes	Subthemes (codes)	Data extracts
	Lack of training in critical thinking that affects the development of language.	“As regards to critical thinking students in my opinion come to university without having developed their critical thinking skills in any way... problems in language very often start from that.”
Suggestions for improving English language proficiency.	Engage students in activities simulating academic/professional situations.	“Our students need more practice in real-life tasks... they need to be forced to communicate for authentic reasons.”
	Promote collaboration as a way of improving proficiency and cultivating meaningful interaction.	“I find that whenever I ask them to work together, everyone gains... weak students learn more by asking and strong students learn more by answering.”
		“Working together for a common assignment or project can force communication and interaction in English.”
	Teach students how to think critically through language and skills related to the discipline.	“It’s not just a matter of grammar... They should be taught how to think critically... evaluate evidence, express opinion through the English language.”
	Identify and develop specific language enabling students’ critical thought.	“We are not evaluating peoples’ grammatical ability. We are evaluating their ability to explain and/or express a complex argument... We need them to be able to use the language in specific ways... perhaps this is the language we should be targeting.”

Appendix I – Cycle 1 Materials

Critical Analysis of Article 1

“When the media misrepresents black men, the effects are felt in the real world”

Leigh Donaldson



“When is the last time you have seen a black male college professor, doctor, lawyer or scientist selling a product?” Photograph: Eyebyte / Alamy/Alamy

1. The lives of black men in the US have long been adversely affected by negative public perceptions. We are often turned away from jobs because we are not the “right fit”. While on the streets, we are regularly treated by police as dangerous suspects.

Questions for paragraph 1

a) What is the participant in the first sentence?

b) Who does “we” represent in the next two sentences?

c) Which voice is used in all three sentences? Change the passive voice into the active. What is the subject of the sentence now?

d) How would you characterize this subject in terms of specific (concrete) vs general (abstract)?

e) Whose **negative public perceptions** is the author referring to?

f) Who has helped in creating these perceptions?

g) Does the author avoid giving specific information here? Why?

h) Is the information in this paragraph based on facts or opinions?

j) Which function of the passive voice is the author using here?

2. Officer Darren Wilson, who shot and killed the unarmed black teenager Michael Brown in Ferguson, Missouri, described their alleged fight by testifying: “when I grabbed him, the only way I can describe it is I felt like a five-year-old holding onto Hulk Hogan,” even though the two men had the same height.

Questions for paragraph 2

a) Who is officer Darren Wilson? Is he a black man?

b) Which voice is used in the rest of paragraph 1? Why?

c) What is the intention of the author here?

d) Is the information presented in this paragraph fact or opinion?

3. In a 2011 study, *Media Representations & Impact on the Lives of Black Men and Boys*, conducted by The Opportunity Agenda, **negative mass media portrayals were strongly linked with lower life expectations among black men.** These portrayals, constantly reinforced in print media, on television, the internet, fiction shows, print advertising and video games, shape public views

of and attitudes toward men of color. They not only help create barriers to advancement within our society, but also “make these positions seem natural and inevitable”.

Questions for paragraph 3

a) What is the participant in the phrase " **negative mass media portrayals were strongly linked with lower life expectations among black men**? What does it refer to?

b) Is this a nominalization? Which verb could be used instead of the noun “portrayals”? Rewrite the sentence unpacking the nominalization:

c) What is the new participant?

d) What has changed now in terms of meaning?

e) **Portrayals** is the subject of the next two sentences. What do, according to the author negative portrayals of black men do?

f) What has the author achieved by using the nominalized form **portrayals** and not another more specific noun as subject in these sentences?

g) In this paragraph the author presents evidence from a study conducted whereas in the previous paragraph he refers to the example of the officer to support the same argument. What is the argument?

h) Why do you think the author uses evidence from various sources? (Description of the officer case, study)?

Paragraph 4 -Conclusion

4. More careful and considerate selections of words, images and news angles should be made that give a fuller, more nuanced impression of African-American men, as well as black history, culture and life in America, as a whole. People of color are individuals, not types.

Questions for paragraph 4

- a) Re-write the sentence “More careful and considerate selections of words, images and news angles should be made that give a fuller, more nuanced impression of African-American men...”and comment on the difference in meaning/ attitude expressed
- b) What is the conclusion of the text?

Article source:

<http://www.theguardian.com/commentisfree/2015/aug/12/media-misrepresents-black-men-effects-felt-real-world>

A12 Handout

Nominalisation/Passive in the Media

(A) These headlines were taken from various media sources and in many of them readers can identify direct or indirect expression of a point of view.

- a. Highlight the nominalisations /passive voice (words or phrases) in these news extracts
- b. Re-write them by de-nominalising or putting the highlighted expressions in the active voice.
- c. Do you think these expressions serve a specific purpose in these headlines? Look at the table provided which shows the different functions served by nominalisations/passive voice.

1. “Failure to effectively communicate at University level has been causing students to loose precious time”

2. “Civil partnership recognition was first promised in 2013. However, argumentation and disagreement over the bill’s content delayed the final plenary vote from its original summer date until 26 November.”

3. “Same-sex couples and their families deserve to be protected just as their heterosexual friends and neighbors.”

4. *“Inadequate provision of appropriate shelter to refugees arriving in Italy has put people in danger”*

A37 Handout

Identify, unpack and discuss nominalisations in the following sentences:

1. Underline the **participant** (subject/actor or the person, thing that performs the action) and **make the process (es) (verbs/actions) bold** in the following sentences.
 - a. The policeman (Officer John Smith) used violence to force the suspect to drop his gun.
 - b. Arresting suspects sometimes requires forcing them to raise their hands so as to make sure there is no gun.
 - c. Disarming suspects sometimes requires violence
 - d. Media affects people’s lives by shaping their opinions, attitudes and beliefs.
 - e. Mass media play an important role in a modern world by broadcasting information in fast pace and giving entertainment to vast audiences.
 - f. Gender stereotyping may help advertising by creating consumer needs.
2. Which sentences have a nominalised expression as a subject?
3. Rewrite (paraphrase if necessary) these sentences by unpacking (de-nominalising) the nominalised expressions include **a participant** where necessary.
4. What can you notice about the subjects of the new sentences? If you compare them to the original sentences (b, c, f, g in 1) what functions from the table your instructor has provided you, do you think the nominalised expressions are serving?

Now follow the same steps for the sentences below:

1. Underline the **participant** (subject/actor or the person, thing that performs the action) and object in the following sentences. **Make the process (es) (verbs/actions) bold.**
 - a. Officer Jennifer Wide shot the suspect because he was armed.
 - b. The suspect was shot because he was armed.
 - c. People’s attitudes can be manipulated through the use of gender stereotypes in advertisements.
 - d. The hegemony of males is being promoted in many ways nowadays.
 - e. Generalizations or misrepresentations of specific groups create false images of the reality

2. Which sentences have a solid/concrete subject/participant (e.g. a person)? Which sentences have a general /abstract subject/participant (e.g. idea, concept)?
3. What do you think is the function of the passive voice in sentence b? (select a function from the table provided) (Language functions handout)
4. Rewrite the sentences c, d and e de-nominalising or using the active voice where necessary. Add a participant.
5. If you compare the new sentences to the original ones in 1) c, d, e what can you conclude about their functions? Why was passive voice/ nominalisation used? (Look at the language functions handout.)

Appendix J – Critical Analysis Handout 1

Critical Questioning toolbox



1. What is this text/talk about?

Where is this text/talk from (book, website, encyclopedia, academic speech, political debate) , Who is the author/speaker? Does he/she have an agenda? What is the writer/speaker really suggesting/implying?

Consider: Which language resources(grammatical phenomena) are used to express views? Looking at the language functions handout, how are these grammatical structures used in these sentences?

2.What are the main arguments in this text/talk?

Where are they based (fact or opinion)? Is the source of these arguments reliable? how do i really feel about these? (agree/disagree) Are there counter arguments(facts against these arguments)?

Consider: Which language resources(grammatical phenomena) are used to express views? Looking at the language functions handout, how are these grammatical structures used in these sentences?

3. What evidence is provided in the text/talk in support of these arguments?

Is the evidence valid? what form is it in?(example, fact etc.) Where does the evidence come from? is the source reliable?

Consider: Which language resources(grammatical phenomena) are used to express views? Looking at the language functions handout, how are these grammatical structures used in these sentences?

4. What are the main conclusions in this text/talk?

Are they related to the main arguments? are they in line with the evidence provided?

Consider: Which language resources(grammatical phenomena) are used to express views? Looking at the language functions handout, how are these grammatical structures used in these sentences?

5. If a text or talk is accompanied by other multimedia components such as images, captions, headings (subheadings) then you should think about the following:

- a. What is the role of the image/ title/ caption in the text/talk?
- b. How does it relate to the content of the text/talk?
- c. Does it enhance or contradict the main arguments? How?

Appendix K – Cycle 2 Materials

A10, A11, A14 Handout

Teenage job hopes ruined by negative media stereotypes

Persistent negative stereotypes in the media about teenagers are harming their prospects of getting a job, according to research published today.... Jonathan Birdwell, head of the citizenship programme at Demos and author of the report, said: “People think of teenagers as apathetic, lazy and self-centred, with a sense of entitlement; that’s the dominant negative stereotype. But our research shows the reality is that more young people are volunteering in the community, and the most common words used by teachers to describe them in our survey were ‘caring’, ‘hard-working’ and ‘enthusiastic’. Experts believe that reality television shows depicting teenagers going wild on holiday, such as the BBC’s *Sun, Sex and Suspicious Parents* and Channel 4’s *What Happens in Kavos*, give the impression that this is an irresponsible generation obsessed with binge drinking. Yet the latest evidence suggests teenagers are drinking less and doing fewer drugs. Susana Giner, director of the Youth Media Agency, which helps 16- to 25-year-olds with media projects, said: “There’s a lack of balance. The fly-on-the-wall stuff in Ayia Napa and places like that is not typical of teenagers, it’s typical of our voyeuristic circus-freak-show television.”

Ms Giner said she felt the most damaging stereotypes came from news reporting: “Young people face news stereotypes which are always around gangs and knife crime. That’s a real problem.”

The most recent report in the UK from the UN Committee on the Rights of the Child found that Britain’s “climate of intolerance and negative public attitudes towards children, especially adolescents” might be infringing their rights. It said the media was fuelling these attitudes”

From <http://www.independent.co.uk/news/business/news/teenage-job-hopes-ruined-by-negative-media-stereotypes-9137147.html>

With symbolic handshake at Davos, Cyprus leaders ask elite to back peace

With a symbolic handshake at the World Economic Forum, the leaders of Cyprus pledged their commitment to reach a settlement to reunite their divided Mediterranean island this year and appealed for international financial support.

Cypriot President Nikos Anastasiades and Turkish Cypriot leader Mustafa Akinci made an unprecedented joint appearance before global business and political leaders in Davos to proclaim their aim to build a peace bridge between Europe and the Middle East.

"At a time when Europe is enduring a deep crisis, primarily linked to the tragic events unfolding in Cyprus' immediate neighborhood, myself and Mustafa are working tirelessly to reunify our country," Anastasiades said.

He called for a substantial financial contribution from the international community to finance a solution for Cyprus.

Both leaders stressed that they had not yet concluded a deal and that difficult issues remained over territory, property and compensation, but both said they were working for an agreement in 2016.

WEF president Klaus Schwab called Cyprus "a ray of hope just where the Middle East meets Europe".

Cyprus has been split since Turkish forces invaded the north of the island in 1974 in response to a short-lived Greek Cypriot coup backed by Greece's then military rulers.

The last attempt to broker a settlement foundered in 2004 when Greek Cypriots rejected a U.N. peace plan accepted by the Turkish Cypriots, and Cyprus joined the European Union as a divided island, leaving the Turkish Cypriots isolated.

Akinci said he and Anastasiades were of the same generation and represented the last chance to reunite the island. The generation born after them knew only division.

Energy cooperation based on recent offshore gas discoveries off Cyprus could provide a crucial incentive to reach a deal, he said.

"With this solution, newly found hydrocarbon resources in the Eastern Mediterranean should act as a source of peace and cooperation rather than conflict and tension," Akinci said.

In a concerted international drive to support the peace process, U.N. Secretary-General Ban Ki-moon hosted a lunch with the two leaders and U.S. Vice President Joe Biden also met them to offer his backing.

A diplomatic source in New York said the U.N. special envoy for Cyprus, former Norwegian Foreign Minister Espen Barth Eide, had told the Security Council in a closed session last week that 90 percent of a Cyprus deal was done but the last 10 percent remaining was the most difficult.

In an interview with Reuters at Davos, Anastasiades said a settlement would require billions of euros in international aid to help resolve property issues and that he hoped Britain would return some of the land it has on Cyprus that houses sovereign military bases.

From http://www.reuters.com/article/us-cyprus-talks-davos-idUSKCN0UZ1ZN?utm_source=Facebook

Exercises

1. When you identify the different types of reported speech and modality in the extracts above, comment on how they function to promote personal opinion in the articles.
2. The following are direct quotations from the article “**Teenage job hopes ruined by negative media stereotypes**”. Which reporting verb from the box below would you use to turn these into indirect speech?

Claim,	worry,	accuse,	affirm
--------	--------	---------	--------

- a. Jonathan Birdwell, head of the citizenship program at Demos and author of the report, said: “People think of teenagers as apathetic, lazy and self-centered, with a sense of entitlement; that’s the dominant negative stereotype. But our research shows the reality is that more young people are volunteering in the community, and the most common words used by teachers to describe them in our survey were ‘caring’, ‘hard-working’ and ‘enthusiastic’”
- b. Ms Giner said she felt the most damaging stereotypes came from news reporting: “Young people face news stereotypes which are always around gangs and knife crime. That’s a real problem.”
- c. The most recent report in the UK from the UN Committee on the Rights of the Child found that Britain’s “climate of intolerance and negative public attitudes towards children, especially adolescents” might be infringing their rights. It said the media was fuelling these attitudes”

A27, A28 Handout

Sainsbury's shoplifting incident

1. Watch the video taken from a CCTV camera in Sainsbury's.
<https://www.youtube.com/watch?v=4QsWCFLi6aY&list=PL68D28EBAE3AEAC9A&index=80>. It reveals the treatment of a teenage shoplifter **Armine Ahnini** and is accompanied by a commentary by a reporter covering the incident.
2. Write the newspaper article (100-150 words) by using at least two direct quotations and some indirect speech (or paraphrases) from the three people quoted below.



ARMINE AHNINI

"I felt like I was dying. I couldn't breathe. If I didn't bite him I think I would be in a cemetery somewhere. I stole the sandwich because I was very starving. He held his hands around my neck and I couldn't breathe. I bit him. I had to.

He asked me, 'why did you take the food?' I said to him I don't have money. I don't have anything. What can I do? Again and again I said to him 'please take me to a private room.' I said if you don't want to keep me here let me go, and he slapped me to the floor. You can see [the security guards] hands on my neck. [The police] didn't do anything. They just left him and take me away like I am the animal and he is the person. It make me feel very very stressed for me. It's like I'm nothing in this world, just living.

Even seven months later sometimes I'm dreaming and it's so bad I wake up and I can't sleep again. I just need justice and my name to be cleared. And go study again. And forget about what happened in the past. Because if I am thinking about what happened in the past never am I going to build something on my life. It's going to be very hard for me. "

SPOKESPERSON FOR SAINSBURYS

"Where there are reasonable grounds to suspect that someone has taken goods without paying, in-store security have a statutory right to stop that person. In this case the offender was prosecuted and found guilty of assault and theft. All the security officers working in our stores are trained and licensed in line with the industry authority standards."



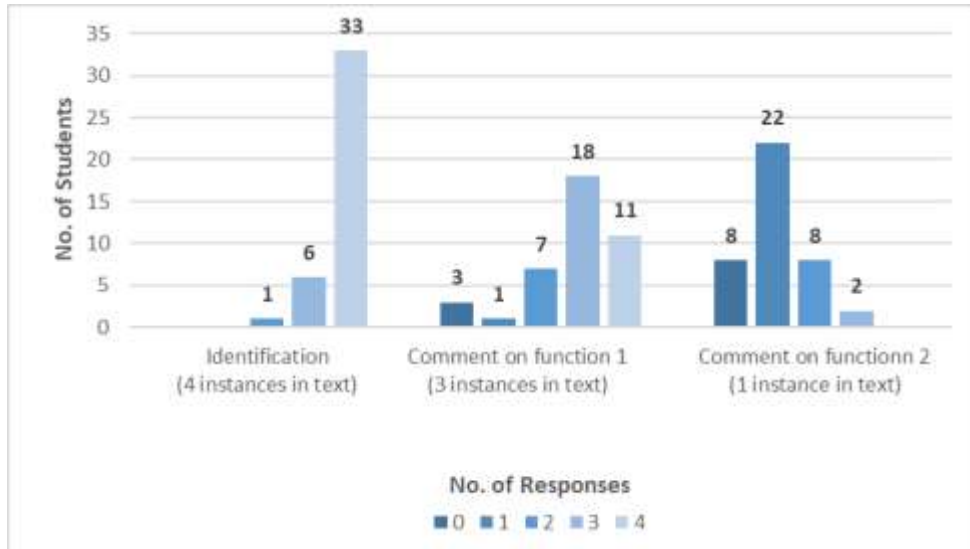
CEO Praxis Charity for Vulnerable Migrants

"Obviously if people have no right to work and have insufficient income then they will not have enough money to pay for food. There is a real danger that people are put into a very simple box, a box marked delinquent. The state ought to be able, through the criminal justice act, to provide the sensitivity that is needed to somebody in such a circumstance. Increasingly, the state is actually bypassing that duty and that responsibility. "

Appendix L - Analysis of Results from A11

Figure L1

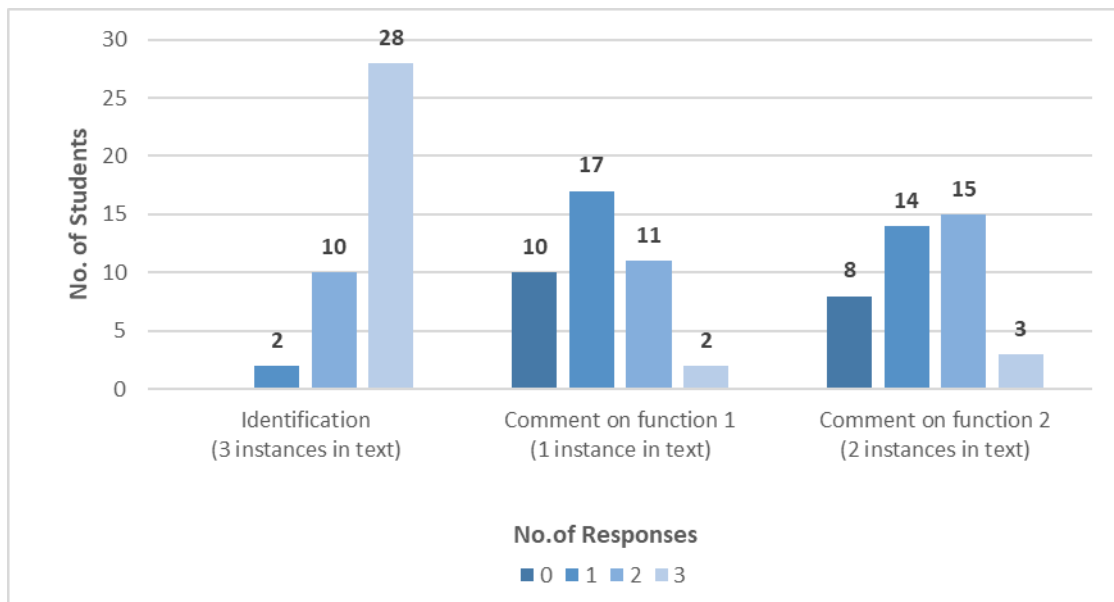
Results for Direct Speech in A11, Text 1



Note. Function 1: to give authority to a statement, Function 2: to distance the author from a statement.

Figure L2

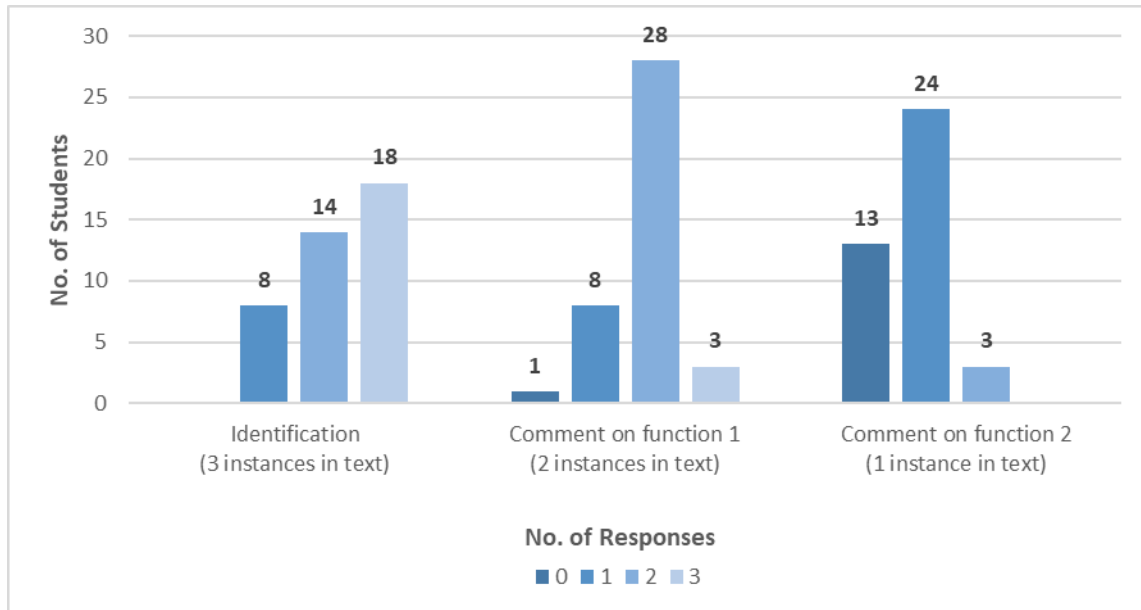
Results for Direct Speech in A11, Text 2



Note. Function 1: to give authority to a statement, Function 2: to distance the author from a statement.

Figure L3

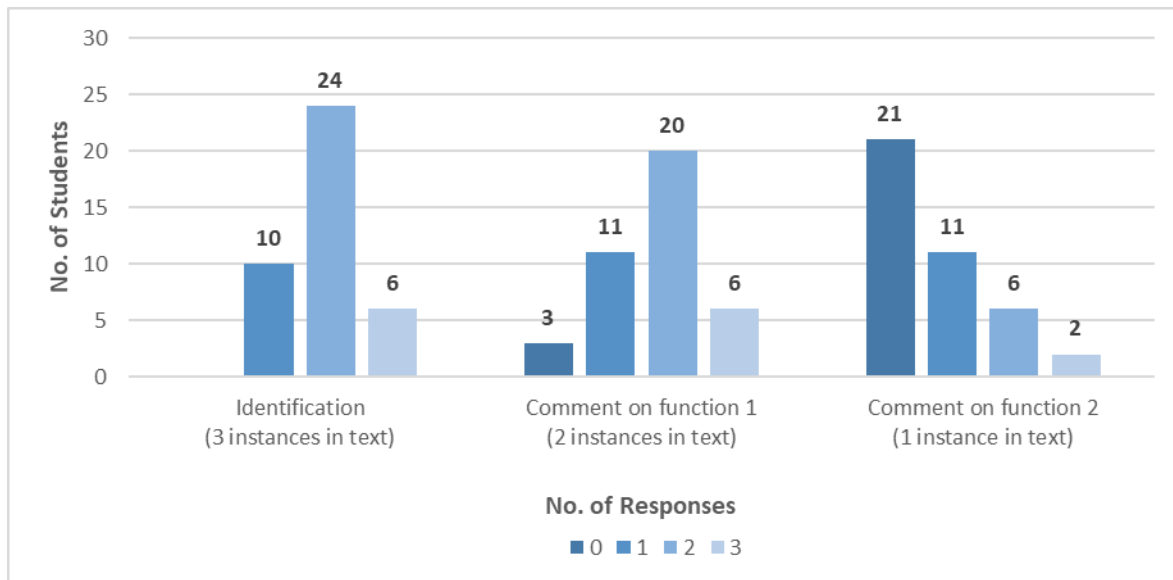
Results for Reporting Expressions in A11, Text 1



Note. Function 1: to support/endorse a statement, Function 2: to question/criticise a statement.

Figure L4

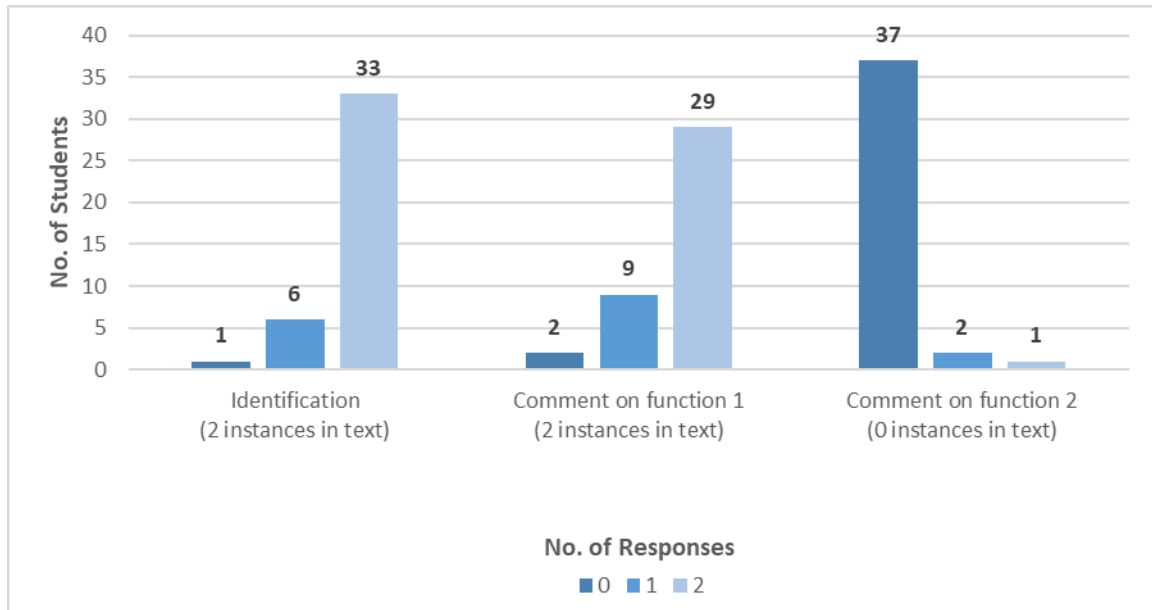
Results for Reporting Expressions in A11, Text 2



Note. Function 1: to support/endorse a statement, Function 2: to question/criticise a statement.

Figure L5

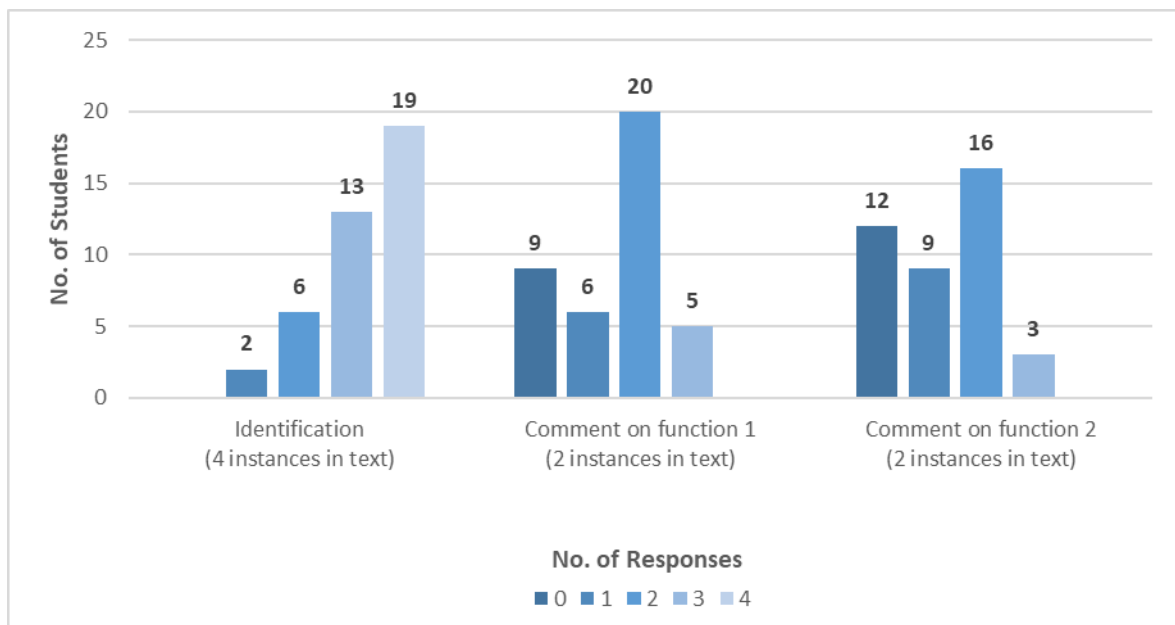
Results for Modality in A11, Text 1



Note. Function 1: to present an event/statement as a possibility, Function 2: to introduce an element of obligation.

Figure L6

Results for Modality in A11, Text 2



Note. Function 1: to present an event/statement as a possibility, Function 2: to introduce an element of obligation.

Appendix M – Samples of Transitivity Analysis for A28

Student 2

1. III *Armine* was portrayed [relational] *as a dangerous man* [Attribute] II *who tried to steal* [material] *a sandwich* II *to deal with* [relational] *his hunger* III
2. III Security guard grabbed [material] him I by the neck I III

Student 17

3. III *He resisted* [behavioral] *the authorities* II *and was forced to bite* [material] *the security guard* I *for a sandwich* I III
4. III The guards slapped [material] him I on the floor I and held [material] him down I like an animal III

Student 22

5. III *Sometimes I people (like Armine) are* [relational] *so desperate and hungry* II *they see* [mental] *no other way than* II *to steal* [material] *some food* III
6. III They beat [material] him I violently I II even when they saw [mental] II he was [relational] a young boy III

Student 38

7. III *He had* [relational] *no other option* II *but to take* [material] *a sandwich* III

Student 5

8. III The officer put [material] his arms around the boy's neck I so tight I II that he could not breathe [behavioral] II and so he was [relational] forced to bite [material] III

Student 25

9. III A teenage boy received [relational] hateful treatment I by the security guards of the Sainsbury's supermarket I for hunger I III

Student 2

10. III *Armine Ahmini decided to steal* [material] *a sandwich* II *because of the hard conditions that existed* [relational] *in his life.* III
11. II the security guard pushed [material] him down and hitted [material] him I endlessly III

Appendix N – Critical Analysis Handout 2

Critical Analysis of Articles

When you critically analyse texts (articles, passages, speeches etc) you need to think about:

1. The arguments raised (what are they? Whose arguments are represented?)
2. The evidence provided (does it relate to the arguments?)
3. The source of the evidence (where does it come from? Research, facts, opinions)

Looking at the **language choices** made in specific parts of an article (introduction, main development, and conclusion) will help you identify “hidden” attitudes and biases.

Language to focus on:

<u>Participants (subjects)</u>	»	<u>Processes (verbs)</u>
Specific vs general (abstract)		Active vs Passive voice
People vs ideas (concepts)		Nominalizations
		Modality (modal verbs)
		Reported speech

The following general questions may help:

Introduction

- Where is the article from? Who is the author? Does he/she have a personal interest in promoting a specific viewpoint?

What is the main argument /line of reasoning in the text?

Main development: For each paragraph look at the following linguistic components/phenomena and think about their functions.

- The participants (who is the subject, is it specific or general)
- The position of the participants (are they the subject (Active voice) or the object of a sentence (passive voice, nominalization)
- The words of people contributing to the main arguments (direct or indirect speech)
- The use of specific words (reporting expressions, modal verbs)

These will help you critically evaluate and decide

- Whether information in the text is fact or opinion (e.g. is the information directly or indirectly expressed)
- Whose opinion(s) are represented and why (e.g. who is being quoted, why, what type of reported speech is used, direct or indirect)
- Whether evidence provided is reliable and objectively contributes to the arguments made (e.g. are different viewpoints equally supported)

Conclusion

- What is /are the conclusion(s) in the text? Are they related to the main arguments? Are they supported by the evidence?
- What is your opinion? Do you agree with the arguments presented?
- Were you convinced by the evidence and the way it was presented?

Design

Think about the following questions to critically evaluate any multimedia components such as the title, images, videos, captions, heading (subheadings) accompanying the text:

- What do you think of the use of each of these in the text? How do they relate to the content? (enhance, contradict, complement etc)

Appendix R – Group Project Description

Broad topics for your group project could relate to general interests on any area such as health, fashion, culture, religion, technology, sports etc. Make sure you identify aspects of these topics which you feel are under or mis- represented in the Media (e.g. Gender inequality in Media). In your groups (up to four people) you need to:

1. Decide on a topic of interest
2. Research the topic and see how it has been portrayed in various Media. Gather and share bibliography/references on the topic.(at least 2 sources each group member)
3. Scan the bibliography or other material selected and decide on the final aspect of the topic you will be researching (e.g. Women in advertisements →portrayed as the weaker, more vulnerable gender). In your groups share- examples of language choices relating to bias from the material you analyse- in a common document in Gdrive.
4. Select the most appropriate articles in a group discussion with instructor. Each student in the group is assigned one article/piece to critically analyse.
5. In class workshop: Members of each group report on the progress made for their project to the other groups and instructor(topic, main attitudes in the sources researched, highlights of article analysis, conclusions on how the topic could be further researched) and receive feedback.
6. Final Presentation: topic, review of the bibliographic references, research question and research instruments to the rest of the class for assessment
7. Write and submit the article and bibliography.

All the articles will be shared in our group in Facebook. The best three articles will be published on “Between cut” website.

Appendix S – Cycle 3 Materials



COMPLETE FACIAL TRANSPLANTS POSSIBLE IN NEAR FUTURE

A dramatic new type of transplant- which would see a donor’s face grafted onto a recipient- received a cautious welcome yesterday as a surgeon revealed that such an operation could be medically possible shortly.

1 The procedure was applauded by experts in medical ethics and a potential recipient as a means of significantly improving the quality of life of patients in need of a face transplant.

Disfigurement was one of the main reasons for its design.

6 But a psychologist warned that the Brave New World technology –itself the subject of the Hollywood film “Face off” – could be misappropriated for aesthetic and cosmetic reasons, and opens up ‘uncharted territory’ where the consequences are unknown.

12 The possibility of the first full-face transplants was raised by Peter Butler, a leading plastic surgeon at the Royal Free Hospital in North London, at a conference of the British Association of Plastic surgeons yesterday. **He stressed it was essential that** a moral and ethical debate took place before anyone underwent the operation. “The technical part is complex but I don’t think that’s the think that’s going to be the great difficulty. It’s the ethical and moral debate that’s going to have to take place before the transplants go ahead” he said.

24 “A facial transplant is like any other organ transplant because you can actually do it and achieve it with modern immuno-suppression drugs. But it is different because our faces are part

36 This method- creating a so-called skin envelope- would see the patient gaining the skin tone and texture, eyebrow colour and eyelids of their donor, but retaining his or her own bone structure and still looking more like themselves than their donor.

41 The surgeon **predicted** that the techniques could be in place in the near future and said there are likely to be just 10-15 severely disfigured people in Britain who could benefit.

The procedure could greatly improve the quality of life of people born with facial abnormalities or those disfigured in accidents.

48 However, a Department of Health spokeswoman **stressed** that, before this could occur, **the procedure would have to be examined by an advisory committee** of the National Institute for Clinical Excellence. After this, the Department of Health might launch a consultation process, which was welcomed by the British Medical Association.

56 Dr. Vivienne Nathanson, chairwoman of its ethics committee, said “There are obviously issues concerning the family of the dead person: how will they feel, knowing someone has the facial characteristics of their loved one? And how will the recipient feel? How we look is very much part of our identity”

of our expression. “The face has an emotional function”he told a BBC news program.

30The microsurgical procedure –already used to transplant skin from one hand to another- would involve the patient’s face, facial muscles, skin and subcutaneous fat being removed and being replaced by those of someone who had recently died.

63Dr. Aric Sigman, a psychologist who has conducted research into facial recognition, predicted that the development would come about **because it would ultimately be seen as a way of helping those in great need, but warned it could be abused.** “Inevitably, there will always be people who want to use new medical technology for aesthetic reasons-just to look more attractive, for example.

72But that shouldn’t stop us going ahead with the procedures”. He added that it was difficult to assess the psychological impact. “This really is uncharted, unexplored territory. It’s about a profound identity change”

Appendix Q – Student Questionnaire Results: Frequency & Effectiveness

Table Q1

Student Responses on Frequency of Skills Use Prior to the Intervention

How often have you been required to carry out the following in your English language courses up until now?	How often (prior to intervention)									
	never		rarely		sometimes		often		very often	
	n	%	n	%	n	%	n	%	n	%
1. Use English to communicate in a variety of authentic situations.	0	0%	6	15%	21	53%	10	25%	3	8%
2. Use appropriate format and style to perform in tasks and activities related to your areas of interest.	0	0%	4	10%	14	35%	19	48%	3	8%
3. Maintain an objective stance when reading and critically analysing material from various media.	0	0%	6	15%	14	35%	15	38%	5	13%
4. Critically select, evaluate, and synthesise material from a variety of sources to support an argument.	6	15%	10	25%	5	13%	13	33%	6	15%
5. Read and critically analyse authentic material across a range of media or other sources carrying perspective.	4	10%	8	20%	10	25%	13	33%	5	13%
6. Recognise and critique intent, perspective, and/or lack of objectivity in multimedia components (images, links) accompanying texts.	1	3%	5	13%	11	28%	17	43%	6	15%
7. Use language and other multimedia resources to describe events in a news story.	2	5%	10	25%	10	25%	11	28%	7	18%
8. Use language and other multimedia resources to support an opinion or argument.	2	5%	10	25%	9	23%	13	33%	6	15%

Table Q2*Student Responses on Frequency of Skills Use Following the Intervention*

How often (following intervention)										
How often have you been required to carry out the following in your English language courses up until now?	never		rarely		sometimes		often		very often	
	n	%	n	%	n	%	n	%	n	%
1. Use English to communicate in a variety of authentic situations.	0	0%	7	18%	11	28%	15	38%	7	18%
2. Use appropriate format and style to perform in tasks and activities related to your areas of interest.	0	0%	2	5%	13	33%	11	28%	14	35%
3. Maintain an objective stance when reading and critically analysing material from various media.	0	0%	3	8%	11	28%	16	40%	10	25%
4. Critically select, evaluate, and synthesise material from a variety of sources to support an argument.	0	0%	1	3%	10	25%	16	40%	13	33%
5. Read and critically analyse authentic material across a range of media or other sources carrying perspective.	0	0%	2	5%	13	33%	17	43%	8	20%
6. Recognise and critique intent, perspective, and/or lack of objectivity in multimedia components (images, links) accompanying texts.	0	0%	4	10%	11	28%	12	30%	13	33%
7. Use language and other multimedia resources to describe events in a news story.	1	3%	4	10%	12	30%	14	35%	9	23%
8. Use language and other multimedia resources to support an opinion or argument.	0	0%	6	15%	9	23%	10	25%	15	38%

Table Q3*Student Responses for Effectiveness Prior to the Intervention*

How often do you think you have been able to effectively carry out the following?	How effective (prior to intervention)									
	never		rarely		sometimes		often		very often	
	n	%	n	%	n	%	n	%	n	%
1. Use English to communicate in a variety of authentic situations.	1	3%	8	20%	17	43%	7	18%	7	18%
2. Use appropriate format and style to perform in tasks and activities related to your areas of interest.	0	0%	10	25%	16	40%	10	25%	4	10%
3. Maintain an objective stance when reading and critically analysing material from various media.	1	3%	9	23%	17	43%	10	25%	3	8%
4. Critically select, evaluate, and synthesise material from a variety of sources to support an argument.	5	13%	10	25%	10	25%	12	30%	3	8%
5. Read and critically analyse authentic material across a range of media or other sources carrying perspective.	0	0%	10	25%	11	28%	14	35%	5	13%
6. Recognise and critique intent, perspective and/or lack of objectivity in multimedia components (images, links) accompanying texts.	0	0%	11	28%	11	28%	17	43%	1	3%
7. Use language and other multimedia resources to describe events in a news story.	2	5%	9	23%	15	38%	7	18%	7	18%
8. Use language and other multimedia resources to support an opinion or argument.	1	3%	17	43%	10	25%	8	20%	4	10%

Table Q4*Student Responses for Effectiveness Following the Intervention*

How often do you think you have been able to effectively carry out the following?	How effective (following intervention)									
	never		rarely		sometimes		often		very often	
	n	%	n	%	n	%	n	%	n	%
1. Use English to communicate in a variety of authentic situations.	1	3%	4	10%	16	40%	12	30%	7	18%
2. Use appropriate format and style to perform in tasks and activities related to your areas of interest.	0	0%	4	10%	20	50%	12	30%	4	10%
3. Maintain an objective stance when reading and critically analysing material from various media.	0	0%	2	5%	13	33%	13	33%	12	30%
4. Critically select, evaluate, and synthesise material from a variety of sources to support an argument.	0	0%	0	0%	15	38%	14	35%	11	28%
5. Read and critically analyse authentic material across a range of media or other sources carrying perspective.	1	3%	1	3%	12	30%	14	35%	12	30%
6. Recognise and critique intent, perspective and/or lack of objectivity in multimedia components (images, links) accompanying texts.	2	5%	3	8%	13	33%	14	35%	8	20%
7. Use language and other multimedia resources to describe events in a news story.	0	0%	6	15%	11	28%	21	53%	2	5%
8. Use language and other multimedia resources to support an opinion or argument.	0	0%	0	0%	15	38%	13	33%	12	30%