ELICOS Online: Co-creating Flexible Learning Environments

by

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Abstract

This thesis reports on an educational design research (EDR) study situated in a high-stakes second language (L2) test preparation program at an Australian language centre specialising in transition education. Classroom interventions, addressing specific needs/problems regarding L2 learning were embedded in two courses through a purpose-built website. The EDR site was designed to engage students, extend learning outside classroom hours, improve the organisation of course content, and support L2 teaching. The site was an avenue for authentic L2 activity, and provided opportunities for broadening critical thinking ability through participation in communicative tasks online.

The first stage of the study was concerned with analysing and exploring the research context via reference to relevant literature and by interviewing members of staff. Stage 2 focussed on intervening in educational practice so as to improve it. EDR interventions were refined through two design research cycles, lasting ten weeks and five weeks respectively. The twin aims of this process were to progressively refine an instructional design, and to generate theory.

In addition to answering whether these interventions were successful in addressing the educational problems identified, this study was more broadly located in a large for-profit English language college. Therefore, the neoliberal social discourse and the conflicting L2 educational ideologies of the research context were an important focus. Both students and staff were invited to participate; staff members were recruited partly to define what these broader aspects of the research context were, and partly to clarify the needs/problems that the EDR interventions were later designed to fix.

The thesis concludes that the EDR interventions positively impacted L2 teaching and learning in the immediate context, being the test-preparation courses that I taught and researched. The EDR principles extracted as a result of this work address some key considerations for creating media rich L2 classrooms, and more generally, the type of conditions necessary for expertise to flourish in the context of L2 teaching with educational technology.

Declaration

This is to certify that the thesis entitled:

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This research has received ethics approval from the Monash University Human Research Ethics Committee (MUHREC)

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Glossary of Terms

CALL	computer assisted language learning
CLT	communicative language teaching
CBLT	competency-based language teaching (also: competency-based adult education [CBAE])
CELTA	Certificate in English Language Teaching to Adults
CRICOS	Commonwealth Register of Institutions and Courses for Overseas Students
EDR	educational design research / design research (also: design-based research [DBR])
edu-tech	educational technology operationalised online
ELICOS	English Language Intensive Courses for Overseas Students (used interchangeably with TESOL)
ESL	English as a Second Language
ICL2E	Internet-mediated intercultural second language education
ICTs	Internet communication technologies
IELTS	International English Language Testing System
ILC	independent learning centre
L1	first language
L2	second language
macroskills	reading, writing, listening, and speaking skills
MUHREC	Monash University Human Research Ethics Committee
Web 2.0	the communicative user-generated Internet (e.g. social networking sites, forums, blogs, wikis etc.)
SLA	second language acquisition
target-language	language that is central to a lesson and that students should use/learn
TESOL	Teaching English to Speakers of Other Languages (used interchangeably with ELICOS)
ZPD	zone of proximal development

1.0 ELICOS Online: Co-creating Flexible Learning Environments

Chapter 1 introduces the study, notes some of the potential benefits of the research, and provides an outline of the thesis. The chapter begins with an overview of the study, and presents the three research questions that have guided this inquiry. Reasons explaining why this study is worthwhile are provided next, and the chapter concludes with an outline of the thesis.

1.1   Overview of the Study

This is a qualitative study that uses an educational design research (EDR) methodology. Design research actively intervenes in educational settings to improve learning outcomes, and so EDR is grounded in real classrooms rather than removed from them. This kind of research methodology calls for the identification of educational needs/problems, the creation and progressive refinement of interventions that address those needs/problems, and it calls for the creation of theory from these processes; preferably, the kind of theory that may be generalised.

The immediate research context was a second language (L2) test-preparation program. The two courses that served as research-sites prepared students for International English Language Testing System (IELTS) examinations. IELTS is a high-stakes L2 test, used by Australian universities to determine whether non-English speaking students have enough L2 ability to participate in academic life. As this test is enormously significant for students, many learners are narrowly focussed on increasing their grades at the expense of generally developing their language skills, and their critical thinking abilities. However, improvement in these areas was considered extremely important if students were to succeed in gaining entry into their degree programs.

Even though this study was context-bound and specific in its focus on IELTS students enrolled at a particular centre, the college itself was comparable to other providers, as IELTS courses are readily available in Australia. A January 2015 search for 'IELTS preparation' on the Commonwealth Register of Institutions and Courses for Overseas Students (CRICOS) resulted in 97 providers of these programs (www.cricos.deewr.gov.au). The combined capacity of these institutions Australia-wide was a little over $110,000$ students, and the fees charged for tuition were in most cases in the same range – approximately \$400 per week – as those charged by the college where this study was undertaken. These circumstances, namely the high cost of tuition, a student body under pressure to pass an exam for university entry or

to meet visa regulations, and the obligations under which CRICOS accreditation is awarded, result in programs that arguably share some general characteristics. At the very least, the legislative context within which these intensive courses exist is the same.

To illustrate, in order to gain CRICOS accreditation, providers must meet certain obligations. Of interest are the requirement that accredited institutions provide "a minimum of 20 scheduled course contact hours per week" (Department of Education and Training [DET], 2014a, "ESOS Framework CRICOS Registration", Section 7.3), and that these centres provide evidence of suitably qualified teachers, adequate educational resources and satisfactory premises. Although educational technologies are not mandated, for autonomy is given to all institutions to make their own judgement with regard to how they resource their own courses, the use of new media is suggested. One way in which a higher education provider can show that it has *adequate resources* is by auditing the number of computers available, and by providing evidence of materials designed for online delivery (DET, 2014b) – a regulation, which in effect, tacitly encourages higher education providers to invest in educational technologies.

Therefore, though this study is localised, the regulatory framework under which the school operates is the same for all CRICOS approved institutions, and many of these providers invest in technology, if only to remain competitive. In this regard, the findings discussed here may have relevance for other colleges working in similar educational contexts; especially those that are attempting to integrate educational technology into their programs.

That being said, the EDR principles articulated in this thesis are purposefully broad. These principles are concerned with developing an educational culture where expertise with new media can be nurtured rather than concerned with frameworks for instructional design. They are thus potentially generalisable, thereby making them useful for teachers and organisations in fields other than L2 test-preparation. This seems timely. As Norton and Cherastidtham (2014) note, in higher education "there is a real trend towards off-campus [online] enrolment, and the distinctions between on- and off-campus study are blurred" (p. 27). This kind of blended environment is precisely the kind of context within which this study was conducted. The EDR interventions were designed to solve particular and specific educational problems, but the theory that has been articulated as a result of this process is – I believe – relevant to a wider audience. However the question of whether such claims are valid is an area for further research, as noted in the concluding chapter.

On a micro-level, this project was concerned with the learning ecologies that grew around a blended, flexible learning environment designed to accommodate medium-sized classes of L2 learners (*n = 18 max*). Some of my research asks how fully students engaged with each other, with the course-content, with the EDR website (www.english-earth.com), and with me (their teacher). It explores whether the introduction of new media increased engagement, participation and interest, and whether it improved L2 learning and teaching.

The central element of this EDR study was the use of a custom-made website, that served as a platform for the co-creation of flexible learning environments. A key motive for using new media in this manner was to extend learning beyond the four hours of face-to-face tuition that students already received at the school. These interventions were designed to inspire broader critical thinking, and to further develop language skills by extending immersion in English. That is to say, the major reasons for using new media were to encourage deeper explorations of topics introduced in class, to provide opportunities for more L2 practice, to create space for students to express and defend views as well as to critically engage with course content, and support L2 teaching. These foci were chosen because they addressed student weaknesses, and they targeted shortcomings identified in the IELTS-Preparation program. The EDR website was closely linked to class content, and student involvement with the site was partially accommodated during class time, but it was mostly in the hands of students outside of classroom hours.

In addition to investigating how students engaged with, affected and participated in co-creating a flexible learning environment, the study was more broadly situated in a large English Language Intensive Courses for Overseas Students (ELICOS) centre. This centre was part of an even larger L2 college attached to an Australian university. At the time of this study, this department employed approximately fifty ELICOS teachers although the number of teachers fluctuated in relation to student demand. As EDR is a grounded methodology, the social discourse within which this study was bound and the L2 educational traditions of the school were also areas of inquiry. ELICOS teachers were invited to participate in this project to comment on these areas of interest. Teachers and managers were also invited to clarify the problems and circumstances that intervention research could possibly fix.

Data collection began in August 2013 with staff at the college, and concluded in March 2014 after both EDR cycles were completed. The study was conducted in two stages. Stage 1 focussed on analysing and exploring the context through a review of the relevant literature, and by interviewing members of staff. Stage 2 consisted of two classroom

interventions that I implemented, with two IELTS-Preparation classes that I taught. The design of the EDR website, which anchored these interventions, was refined through two design research cycles (lasting ten weeks and five weeks respectively) in an iterative process in which the preceding cycle informed the design of the following research cycle.

The study had two outputs. One was the progressive refinement of an educational product – the EDR website. The other was the generation of local theory through the articulation of a number of EDR principles. These principles were articulated after critically reflecting upon the research-context, and from critically reflecting upon the many challenges I faced as a result of running these interventions over a period of approximately five months. It is hoped that researchers, organisations and/or practitioners working in similar educational contexts find these principles useful.

1.2   Research Questions and Contentions

As a result of my professional teaching practice, I was aware of student-needs in IELTS-Preparation courses that were not being addressed well. In order to move this personal view from mere opinion, to an evidence-based claim, data was sought from students and staff at the centre to help clarify, and either support or discredit, this personal assertion. Furthermore, these needs/problems could not be divorced from the site of the study, the educational context, because they were a product of it, so much of this research was concerned with describing what the school was like. I was working in a complex, multifaceted environment, and throughout this thesis, I have attempted to distil the defining features of the college in a way that is meaningful for others. The first two research questions investigate the research context, and they are closely linked:

Research Question 1.   How do ELICOS practitioners regard the culture of the college?

Research Question 2.   What are the exact educational needs/problems of students in the IELTS program that might benefit from interventions with new media?

The central contention of this study – that L2 learning improves when new media is integrated into an L2 program – has been implicitly incorporated into the second research question. In other words, it is assumed that the creative use of edu-tech will result in better learning outcomes for students. This belief in the benefits of using new media in education has also been tested in this study through the collection of data concerning the efficacy of these interventions.

The research was conducted in real classrooms, the interventions were embedded in a particular educational setting, and as these interventions were progressively refined, they were responsive to and affected by the broader context within which they were situated. There were many challenges, from both students and the organisation, during all phases of research, and critically reflecting upon these was one of my major tasks. This process is reflected most clearly in the final research question, which is concerned with developing theoretical understanding.

Research Question 3. What can be learnt from the context (the college), and from implementing these EDR interventions there?

This question was asked with a view towards generalisability, and its goal was to extract EDR principles from the process of conducting this study that may benefit others.

1.3 Justifications for the Research

This project positively impacted L2 teaching practice by addressing challenges with the IELTS program generally, and by targeting problems IELTS students experienced specifically. The IELTS course was poorly organised, and by systematically ordering course content online, the program became better organised, resulting in better support for L2 teaching/learning. Also, many IELTS students tend to be test-focussed, and they needed to be nudged towards critically thinking about, writing on and engaging more deeply with course content. The EDR website included collaborative components that allowed students to interact asynchronously online, and it was used to foster deeper and more critical engagement. Overall, the EDR interventions were designed to deal with all of these shortcomings, and to varying degrees every need/problem that was identified was addressed.

I acknowledge that educational technology is not value-neutral, and rather than being a solution to educational problems as such, it cannot be separated from the social discourses that underpin its use(s). This was evident in how new media was unsatisfactorily employed at the college; many ELICOS teachers avoided using it or were tokenistic towards it. Nevertheless, there is much positive literature that lauds new media and argues that educational technology can supplement classroom work, improve educational programs, and create better learning environments for students. This study operationalised some of these promises of edu-tech, whilst simultaneously being grounded in and cognisant of the socio-political dimensions of any attempt to create media rich L2 classrooms.

The two outputs of this study may also be of interest to others. The EDR website could well serve as a model for the successful design of short-course flexible learning environments for English language students. The EDR principles define general criteria for creating media rich classrooms in L2 teaching contexts, and they describe the type of organisational culture necessary for expertise to be nurtured within the context of teaching and learning with educational technology.

Finally, the research is unique in that it is located in an L2 short course test-preparation context, which is in some respects an odd choice for exploring the efficacy of L2 teaching practices with new media. The EDR cycles were comparatively short, and the study was located in a context that is difficult to access. Most ELICOS teachers are employed on causal short-term contracts, and a project of similar scope to this, with a single researcher-practitioner, requires much investment in terms of time. This is a luxury that ELICOS teachers, who commonly reapply for work every five or ten weeks, can ill-afford.

1.4 Outline of the Thesis

The next chapter, the literature review, frames the college through a neoliberal social discourse and discusses two conflicting L2 teaching traditions that exist at the school. The perceived affordances[1] of new media are contrasted against the less positive realities of practice, and the gaps that this study fills in design research are identified.

Chapter 3 presents the EDR methodology that I employed, and defines a methodological framework for this project. My own role in the research, my alignment with a particular conceptualisation of EDR, and relevant ethical issues are also discussed in this chapter.

Data collected during Stage 1 – investigating the context – is discussed in Chapter 4. Teachers, coordinators and managers were interviewed to clarify what the needs of IELTS students were, and to discuss problems pertaining to the IELTS-Preparation program more broadly. These participants were also asked to comment on the nature and purpose of the

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[1] In terms of language learning, Van Lier (2000) describes affordance(s) as the opportunities for learning that the social environment affords an engaged and active learner. From this ecological perspective, affordances are such things as requests, demands, invitations, rejections and so forth. According to Van Lier, affordances "refer to the relationship between properties of the environment [in this case, the linguistic environment] and the active learner" (p. 257). Interestingly, Norman (2013) stresses the relative rather than fixed nature of relationships between people and their environments through the concept of perceived affordances. He explains, as "affordances are the possible interactions between people and the environment, some affordances are perceivable; others are not" (p. 19). Therefore the possibilities that any individual perceives from opportunities that present themselves are not fixed, but vary from person to person. Whilst I am aware of the relative and complex nature of the concept, when referring to the 'affordances of new media', the term simply refers to the possibilities and opportunities afforded via educational technology - perceived or otherwise. Both terms are used interchangeably in the thesis.

college, and for their views on the educational uses of new media. The EDR website, in embryonic form, is introduced, and the five core elements of the site are explained. As this study was essentially concerned with a blended learning environment, a description of how communicative language teaching (CLT) influences my teaching practice during face-to-face classes is also provided.

Chapter 5 reports on data collected during Stage 2 of this project – investigating the intervention. Issues related to EDR Cycle 1 are considered, and data collected from participating students who had experienced this intervention is discussed. The first cycle was evaluated and insights from these critical reflections, and from student feedback, informed the next design research cycle. EDR Cycle 2 ran in early 2014. The evolution of the site, and student experiences of engaging with it are discussed in detail.

The final chapter discusses the data presented in the thesis. Links are made between the conceptual framework of the study and data collected from both ELICOS practitioners and IELTS students at the centre, as well as data sourced from learning artefacts online. Research claims are evaluated, and the research questions are answered in turn. Nine EDR principles are extracted from the study, some limitations are presented, and future directions for research are proposed.

2.0 The Literature Review

In this chapter, the dominant social discourse of the college, which is the wider research context, as well as the second language (L2) educational traditions that exist therein are identified. The educational and theoretical orientations that influence my teaching, and underpin the design research interventions are described. I present these as facets of the conceptual framework foregrounding the study. This chapter also identifies research-gaps in previous educational design research (EDR) and explains how this project adds to the field.

The literature review begins by defining neoliberalism and its consequences for education at the college specifically. Two major approaches to modern L2 teaching are then explored, with reference to their ideological orientations and their realisations in practice. These are competency-based language teaching (CBLT), and communicative language teaching (CLT). A number of key concepts in CLT and their theoretical foundations are explored in some detail.

The uses of new media in education are discussed. Previous studies and projects with constructivist and cultural-historical learning orientations are also discussed, before the promise of and the problems with educational technology are noted. Chapter 2 concludes with a review of some recent EDR studies, and explains how this project attempts to fill gaps in this genre of social research.

2.1   The Influence of Neoliberal Thought on the College

The study was situated in a college best described as a for-profit provider of English language instruction and academic pathways into university. The strategic direction of the school/company, and many of its policies tend to commodify L2 learning and teaching. This is most clearly reflected in moves towards standardisation of course content and delivery – mainly to better manage casual teaching staff. The college reflects not only the privatisation of schooling, but also its marketisation. The activities of this organisation exemplify, in a small way, Australian neoliberal thought in L2 practice.

Neoliberalism, as a social discourse, holds that market-driven solutions are the best way to ensure high levels of social and personal welfare. As Mudge (2008) describes it, the ideological core of neoliberalism is "the elevation of the market – understood as a non-political, non-cultural, machine-like entity – over all other modes of organisation" (p. 705). This discourse is characterised by a political and economic theory that "proposes that human well-being can best be advanced by liberating individual entrepreneurial freedoms and skills

within an institutional framework characterised by strong private property rights, free markets, and free trade" (Harvey, 2005, p. 2). The role of the state, in its relationship to capital, is to provide these rights, and ensure that there is enough stability to encourage the creation of new markets. Governments are discouraged from pursuing control of economic and social matters, and new markets are encouraged everywhere, even by "introducing market (or market-like) competition in previously 'sacred' institutional spaces (a prime example is education)" (Mudge, 2008 p. 718).

Whilst the notion of *liberating individual entrepreneurial freedoms* is noble, one criticism of neoliberal capitalism is that it does not empower people enough to be capable of fulfilling such potential. As far as the effect of neoliberalism upon schooling is concerned, education serves to set a "future 'use-value' in production. The importance of this is that there is no other standard to which to aspire, other than that defined by capital, for the purposes of capital" (Hill, Greaves & Maisura, 2009, p. 108). Hill, Greaves and Maisura (2009) add that one result of this type of schooling is merely teaching or training people to a standard necessary for employment; in other words, schooling lowers expectations. According to Hill and Kumar (2009), the two major aims that private enterprise has for education are 1) creating pro-capitalist, compliant, efficient employees, and 2) profiting from it.

Harvey (2005) points out that neoliberalism is hegemonic since "it has pervasive effects on ways of thought to the point where it has become incorporated into the common-sense way many of us interpret, live in and understand the world" (p. 3). The theory has defined how global capital operates, and how most advanced capitalist societies are now attempting to organise human relations. Mudge (2008) highlights that conceptualising neoliberal thought has been marked by confusion, and that particularly in the realm of politics, neoliberalism does not have a conscious nor logically organised *face*. She explains:

> These expressions [of neoliberalism] are not coherent in the sense of producing identical political languages and policies, but they are anchored by the same common sense: the autonomous force of the market, the superiority of market and market-like competition over bureaucracies as a mechanism for the allocation of resources. This does not mean that all political elites have fully accepted these positions; it means, simply, that they have difficulty articulating alternatives and still retaining mainstream political legitimacy. (Mudge, 2008, p. 724)

Market-like solutions for education result in learning and teaching becoming something that can be predicted, packaged, and parcelled off. Yet the dynamics between students and their teachers are far too nuanced, complex and dynamic to lend themselves

easily to such reductionism. These contradictions/tensions exist at the college, and have resulted in frustration and disengagement from some quarters, but also resistance from others. This study is situated in a classroom embedded in a broader context with these characteristics.

2.2   Two Dominant Approaches to L2 Teaching

Currently in Australia, there seem to be two dominant educational approaches toward L2 education in the Teaching English to Speakers of Other Languages (TESOL) sector. One approach promotes teaching within a CLT tradition, and the second educational philosophy – CBLT – is more deterministic and outcomes oriented. I now provide a brief explanation of these approaches before focussing on CLT in detail.

2.2.1   Competency-based language teaching (CBLT)

CBLT began as an outcomes-based philosophy toward education generally that was later applied to L2 teaching. It had its origins in America in the 1970s, and is an educational ideology that defines educational aims as precise measurable definitions of the understanding, ability and behaviour that students ought to display once they complete their studies (Richards & Rodgers, 2001). By the 1980s, CBLT was "widely accepted as the state-of-the-art approach to adult ESL"(Auerbach, 1986, p. 411) despite some criticism. More importantly, in the 2000s it appeared to be returning in Australia "as a major approach to the planning of language programs"(Richards & Rodgers, 2001, p. 141). Richards and Rodgers' claim has been more recently supported by Murray (2009) who argues against Australian L2 teacher training courses being accredited through a competency-based framework and notes that competency-based teaching has been increasingly influencing course design in other sectors of TESOL, rather than being limited to teacher training only.

CBLT is characterised by the deconstruction of complex social practice to identifiable and deliverable competencies, and by the promotion of accountable and transparent teaching practices. As Auerbach (1986) stated, competency-based teaching "involves research-based identification of skills, standardisation of curriculum options, packaging and delivery of curriculum content, and systematic assessment with a view toward accountability" (p. 425). From a certain perspective, CBLT can clearly demarcate L2 skills. Therefore, some teachers and some students find this approach useful because learning goals are clearly delineated, so students can easily evaluate progress. Auerbach's (1986) interviews yielded data that noted these positive aspects, and the teachers she spoke with said "it encourages students to focus

less on grammar, enhances confidence when students can point to specific areas of progress, and encourages teachers to focus more clearly on lesson objectives" (p. 425). However, Auerbach's (1986) research also yielded data that was critical:

> The question that we face is which aspect of CBAE [Competency-based Adult Education] has become dominant in practice: Is it the concern with accountability, management, quantification, and the production of outcomes, or is it the concern with empowering students to determine and meet their own goals? Results from the Boston survey suggest that CBAE practitioners are torn between the pulls of these two tendencies and that increasingly, the constraints imposed by the systems aspect of CBAE (the needs of administrators and funders) are undermining its humanistic aspect. When teaching to competencies becomes an end in itself, students and teachers become the *objects* [my emphasis] rather than the subjects of the educational process. (p. 425)

Even though the research is dated, these questions remain relevant. Since the reductionism and determinism of CBLT resonates with neoliberal thought, the teaching ideology appears to have found expression at the college. This approach to L2 instruction can be used to standardise course content and methods of delivery, and it seems ideally tailored for organisations that are reliant upon a flexible workforce. Nonetheless, more communicative and student-centred practices are also present at the school.

I believe that CBLT and CLT are fundamentally incompatible. Creativity, responsiveness, professional agency and expertise are all prerequisites for the type of teaching articulated in CLT, and CBLT is simply not designed to foster these qualities.

2.2.2   Communicative language teaching (CLT)

CLT became the mainstream approach, rather than a method, of L2 teaching in the 1990s. Certainly, when I completed my Certificate in English Language Teaching to Adults (CELTA) in 2005, this was the tradition that I was initiated into. CLT evolved as a rejection of much earlier transmission-oriented methods, namely audiolingualism and situational language teaching (Richards & Rodgers, 2001), which positioned L2 students as passive receivers of the target language (Richards, 2001). These older methods were underpinned by behaviourist learning theory and drew from structural linguistics for an understanding of English. In contrast, CLT understood English relationally – as a social activity (Joyce, 1992). A communicative view of language understands it to be purposeful. Language "is a system for making meanings"(Halliday, 1994, p. xvii), whose basic function is to foster communication and interaction, and whose structural or grammatical characteristics are linked to its functional and communicative potential (Richards & Rodgers, 2001), and not divorced from it. What motivates and shapes language use is the social context (Butt, Fahey, Feez, Spinks & Yallop, 2006). In short, learning a language involves much more than a

quantitative increase in grammar and vocabulary, it "involves learning to use the language in a way that makes sense to other people... it is about making meaning with that language" (Butt *et al*., 2006, p. 15).

Drills and habit-forming routines – the memorisation of structures – could no longer be justified in light of these fuller accounts of how language is used. Once it became apparent that English is used functionally, socially and contextually (Halliday, 1994), and that "second language learning is an immensely complex phenomenon" (Mitchell & Myles, 2004, p. 6), a disruptive effect was had on L2 teaching practices. The 1970s and the 1980s witnessed a range of alternative teaching methods of varying degrees of quality and varying levels of acceptance before CLT emerged as the wisest mainstream approach for L2 education. The next section describes communicative L2 classrooms and presents some defining CLT concepts.

2.2.3   Communicative classroom practices

In the context of L2 teaching, Harmer (2001) asks, "if you were to walk into a classroom, where would you expect to see the teacher – standing at the front controlling affairs, or moving around the classroom quietly helping students only when needed?" (p. 56). The question captures the essential difference between L2 teaching methods characterised by a static transmission of knowledge, and the learner-centredness that defines CLT. L2 teachers schooled in CLT would answer that they did a little bit of both, but more of the latter. After all, minimising teacher-talking time and maximising student-talking time is an essential aspect of CLT, for it is L2 students who need practice in English, and not the teacher (Harmer, 2001). In communicative classrooms, the teacher does not occupy the centre of the stage. They may set-up a language context, elicit vocabulary, explain a grammatical or lexical item, and provide feedback on activities, but more often than not, CLT educators manage classroom dynamics. Their job entails setting up groups and tasks, correcting errors, encouraging participation, monitoring student output and interactions, and assisting with the fulfilment of activities. This description is in line with Scrivener (2005), who points out:

> Much of modern language teaching involves this "classroom management" as much or more than it involves the upfront explanations and testing that many people imagine as the core of a teacher's job. This is partly to do with the peculiar subject matter we work with, i.e. the language we are using to teach with is also the thing we are teaching. Although there is a body of "content" in language teaching, the main thing we want our students to do is use the language themselves – and therefore there are many reasons why we mainly want our students to do more and therefore for us to do (and talk) less. (p. 14)

Collaborative student-centred teaching and learning is the most obvious feature of CLT and it is practiced because a lot of "second language acquisition (SLA) research suggests acquisition is facilitated when opportunities for learners to interact are maximised" (Nunan, 1999, p. 14). The emphasis on rapport and on an unthreatening classroom atmosphere where language is used meaningfully to communicate is partly due to a social and functional understanding of language. CLT has a dynamic, functional, socially situated and relationally complex understanding of English, and learning it is seen as a complex task. As Nunan (2001) observes:

> [SLA] researchers have begun to realise that there are social and interpersonal as well as psychological dimensions to acquisition, that input and output are both important, that form and meaning are ultimately inseparable, and that acquisition is an organic rather than linear process. (p. 91)

Due to these complexities, CLT does not advocate a method of L2 teaching. Instead, it proposes an approach, and it invites adaptation and professional ownership, rather than adherence. Nevertheless, some defining, guiding principles have been articulated, which I now describe.

2.3   Key Concepts in CLT and their Theoretical Underpinnings

CLT lessons are student-centred and collaborative; authentic materials are often exploited so as to replicate the real language-context(s) of use, and English is employed functionally to satisfy needs; to meaningfully communicate with other students in class. Collaborative practice is central to CLT as "there is now considerable evidence that the interactions that take place during group work facilitate language acquisition" (Ellis, 2008, p. 818). The aim of CLT is not perfect reproduction, but for learners to achieve communicative competence, which is to say, "the kind of proficiency in the language that native speakers have" (Thornbury, 1997, p. xiii). With regard to the IELTS program at the college, the aim is for students to achieve some academic competence as well.

In terms of how theory informs CLT, I tend to agree with Joyce (1992), who holds that "movements in language teaching methodology have always reflected the ideas and movements in the wider contexts of society and education" (p. 23). The field of linguistics, and in particular the shift from understanding language as a system of rules and structures, to appreciating its functional and communicative potential, has been significant in the emergence of CLT. Other major influences came from changes in developmental psychology, where learning came to be seen in constructivist/developmental terms (Piaget,

1926/1997), and by the late 1970s, in socio-constructivist (also known as: cultural-historical) terms (Vygotsky, 1930/1978), and not from behaviourist perspectives (Skinner, 1957; Watson, 1930). The effects of these developments are evident in current L2 theory and practice. As far as a theory of learning is concerned, certain elements of a theory can be distinguished in communicative practices. For instance, 'learning is promoted when language is used for real communication', and 'learning is promoted when language and tasks are meaningful for the learner' (Richards & Rodgers, 2001). However, L2 learning theories are marked by great diversity (Mitchell & Myles, 2004), as are CLT practices.

That being said, student-centredness is a central concept in all CLT, and it is premised on the notion that learners have agency, that students construct their own knowledge, and that the outside world is sifted through personal schemas. As Cook (1997) explains, "schema theory suggests that people understand new experiences by activating relevant schemas... they then assume, unless there is evidence to the contrary, that the new experience conforms to their schematic representation" (p. 86). These concepts grew out of Piaget's (1926/1997) constructivism. Piaget defined processes of schematic transformation as acts of *assimilation and accommodation*. Assimilation is a response based on previous experience in the sense that "people construct knowledge that makes sense to them" (Eggen & Kauchak, 2010, p. 272), and adaptation, the central epistemological claim of cognitive constructivism, holds that learning occurs as a result of personal activity; as a result of schematic change. Thus the role of a teacher is not to transmit information, but to create conditions that challenge learners so that they can experiment with, validate or abandon schemes (Eggen & Kauchak, 2010).

This understanding has resulted in practices that emphasise the importance of student agency, of personalising language content because "language that is meaningful to the learner supports the learning process" (Richards & Rodgers, 2001, p. 161), and of understanding learner needs and capabilities. As a result, analysing student needs is a central element of CLT. I concur with Feez (1998) who stated that "the ultimate goal of all needs analysis activities is to prepare a set of course objectives which are customised to the specific needs of the particular group of learners in the class" (p. 40). Analysing learner needs is an attempt to understand the linguistic capabilities of each individual student, and to design a program that builds on what L2 students bring to class. I believe that this process ought to be responsive, iterative, and as individually focussed as possible. Widdowson (2003) supports this perspective:

> Teaching should not proactively direct the learning process but should reactively respond to it. In this view, it is not now teacher authority but learner autonomy that is the essential determining factor in deciding what should go on in [L2] classrooms. (p. 143-144)

How fully learner needs are accommodated is another matter, and it is often dependent on external variables. For instance, the drive to align programs at the college with a CBLT philosophy is a prime example of how personalised, individually tailored teaching practices are stifled. In CLT, perspectives that honour the personalisation of content and recognise student agency are influential. What is more, "the importance of schematic knowledge is now widely acknowledged in language teaching theory" (Cook, 1997, p. 86), as is the recognition of L2 students as active learners since L2 "learning is today seen from a constructivist perspective" (Richards, 2001, p. 214).

In a similar vein, Krashen and Terrell's (1992) theoretical model of L2 acquisition also remains influential. It is based on five propositions:

1. There is a difference between L2 learning and L2 acquisition.

2. People monitor their output.

3. L2 input must be comprehensible.

4. L2 learning must occur in a low-anxiety environment to keep the affective filter low.

5. There is a predictable, natural order in which English is learnt.

Parallels between constructivism and Krashen and Terrell's (1992) model can be drawn. For example, the idea of L2 learners actively monitoring their L2 output, and the concept of comprehensible input clearly suggest that students are constructing their knowledge of English. Comprehensible input is a particularly attractive and commonsensical proposition. According to this theory, the main purpose of formal L2 instruction is to supply L2 input for acquisition; however, *intake* was the process through which a language was acquired, "intake is first of all input that is *understood*" (Krashen, 1981, p. 102). Intake is distinguished from input. Intake is language that is absorbed by the learner and input is language presented in class, and in order for language to be absorbed, it has to be comprehensible. This is why the Input hypothesis claims that,

> an acquirer can "move" from a stage *i* (where *i* is the acquirer's level of competence) to a stage *i + 1* (where *i + 1* is the stage immediately following *i* along some natural order) by understanding language containing *i + 1*. (Krashen & Terrell, 1992, p. 32)

This theoretical model has also been criticised elsewhere:

> Krashen's Input hypothesis has been frequently criticised for being vague and imprecise: how do we determine level *i*, and level *i + 1*? Nowhere is this vital point made clear. Moreover, Krashen's claim is somewhat circular: acquisition takes place if the learner receives comprehensible input, and comprehensible input (it is claimed) has been provided if acquisition takes place. The theory becomes impossible to verify, as no independently testable definitions are given of what comprehensible input actually consists of, and therefore of how it might relate to acquisition. (Mitchell & Myles, 2004, p. 48)

Nevertheless, Krashen and Terrell's (1992) contributions to L2 education continue to influence practice, perhaps mainly due to their proposals' sense of practicality and intuitive validity.

More significantly, Vygotsky's (1930/1978) cultural-historical theory can most clearly be seen in CLT in the practice of scaffolding language and learning (Gibbons, 2002). Cultural-historical theory stresses the role of social, cultural and historical factors in learning, in the development of identity, and in the formation of individual consciousness. As Palinscar (1998) explains, "the mental functioning of the individual is not simply derived from social interaction; rather, the specific structures and processes revealed by individuals can be traced back to their interactions with others" (p. 351). In other words, consciousness and complex mental functions exist in the social plane before they are internalised and start to exist on an individual plane (Wertsch & Tulviste, 1992; Wertsch, 1979). One of Vygotsky's (1930/1978) most famous ideas is the zone of proximal development (ZPD), through which he proposed that a truer measure of intelligence tested what children could do with assistance rather than alone. The ZPD divides psychological maturation into *actual* and *potential* levels of development. Actual development designates the things that children can do without assistance, independently, whereas potential development refers to what children are able to accomplish with assistance from more knowledgeable others. During CLT lessons, L2 teachers scaffold content and tasks so that learners have this assistance, and are able "to move toward new skills, concepts, or levels of understanding" (Gibbons, 2002, p. 10). Moreover, I consider there to be synergies between the socially bound nature of language, as described by functional grammar (Halliday, 1994), and the socially situated nature of cultural-historical theory (Vygotsky, 1930/1978).

Constructivist and cultural-historical perspectives have resulted in classroom practices that value student agency, and stress the importance of group interaction in authentic context(s) with authentic texts. Authentic materials are often an invaluable resource for developing L2 communicative competence. Nunan (1999) defines these texts as "those that have been produced in the course of genuine communication, not specially written for the purposes of language teaching" (p. 79). Furthermore, I support Nunan's recommendation

that learners should have opportunities to engage with authentic texts. In good communicative classrooms, collaborative, authentic activities with real texts are commonplace, and this practice can be justified via reference to cultural-historical theory. As far as the need for collaborative learning is concerned, Mitchell and Myles (2004) note that "Vygotsky's original formulation of the ZPD was concerned with interactions between 'novice' and 'expert', [whereas] current socio-cultural theorists have expanded the concept to include other forms of collaborative activity, including pair and group work among peers" (p. 214).

Finally, CLT, as an approach to L2 teaching, "has been moulded into quite diverse teaching practices"(Richards & Rodgers, 2001, p. 151). As far as my own teaching is concerned, text-based and task-based L2 practices have been influential as they resonate with constructivist and cultural-historical conceptualisations of learning. I base my understanding of *text* on Joyce and Feez's (2012) definition as "a piece of language which forms a unified whole through internal relations within the text and its relationship to its social and cultural context of use" (p. 170). Texts can be spoken or written language, and can vary in length, but *texts must do* something; they must have a purpose. Authentic texts and authentic tasks are central to my practice. In task-based learning,

> there is a primary focus on meaning (as opposed to form); there is some kind of gap (information, opinion, or reasoning), which needs to be filled through performance of the task; learners need to use their own linguistic resources to perform the task; and there is a clearly defined communicative outcome other then the display of "correct" language. (Ellis, 2008, p. 818-819)

These features are part of my everyday teaching practice, in so far as it is possible to realise them within the constraints of a test-preparation program. The CLT philosophy described thus far, which is by no means comprehensive, highlights some of the key characteristics of the approach, and identifies the major elements of my practice, and of the thinking that undergirds the flexible learning environments that were developed for this study. Furthermore, there is an affinity between these major characteristics of CLT and the affordances of new media. This affinity inspired the creation of the EDR website (www.english-earth.com), a core component of my research.

2.4   New Media in Education: Practice, Theory and Second Language Acquisition

On a less idealistic note, some international comparative studies of computer technology in higher education have lead Collis and Moonen (2005) to conclude that new

media is most often used to support administrative processes. They explain that these tools are mostly employed to archive course materials, to provide information via notice boards, to allow for the electronic submission and management of assignments, and less frequently in administering exams. These findings are in line with Selwyn (2014), who has recently characterised learner management systems such as Blackboard or Moodle as simply used to "replicate the main functions of educational institutions in digital form" (p. 51), which he then continues to describe as the supply of course content and submission of assignments, in addition to the monitoring of progress, and communication between students, teachers and administrators. Furthermore, as Collis and Moonen (2005) point out, "the widespread use of Web-based systems does not necessarily mean new pedagogical practices" (p. 76), nor does it automatically lead to improved pedagogical practices for that matter.

Nevertheless, there is faith in the potential of educational media to enhance teaching and learning. For example, as a result of numerous joint research projects from 1987 onwards at the University of Twente, Collis and Moonen (2005) seem convinced of the value of new media in education, but only as long as computer technology is used to assist students to network and to contribute to shared understanding(s). They contend, that in "the global age" (O'Byrne & Hensby, 2011, p. 17), where people encounter complex and constant flows of information, individuals need to develop the ability to identify and apply knowledge that is relevant to their personal and professional circumstances. In order to do so, Collis and Moonen (2005) argue that acceptance of the need for life-long learning is desirable, so that people are equipped with the skills to "evolve with new work and personal situations, and with new forms of mobility that call for regular redefining of one's skills and one's ways of looking at the world" (p. 14). Their research stresses the centrality of student agency, which they refer to as *the contributing-student*, and they consider computers as tools for learning rather than as solutions per se, a concept they call *the learning workbench*:

> For us, the contributing-student approach is the core of a new pedagogy relevant in the context of a rapidly evolving technology within the emerging knowledge society. The electronic learning workbench, for us, is the vehicle to make the new pedagogy practical and scalable. (Collis & Moonen, 2005, p. 42)

Similarly, Herrington, Reeves and Oliver (2010) describe higher education as often abstracted and divorced from the context(s) within which knowledge is applied. They highlight the importance of authentic learning in the sense that meaningful learning only occurs if it is grounded and embedded in real-world contexts of use; furthermore, they claim "authentic learning is best executed with powerful computer-based, participatory tools" (p.

14). In line with the concept of the contributing-student, Herrington, Reeves and Oliver (2010) propose online activities that place more responsibility for learning on the learners themselves. In such *ideal programs*, students are invited to collaboratively complete complex and challenging tasks with real-world relevance. To illustrate, in related research conducted by Herrington and Parker (2013), students were free to choose from available online technologies to create genuine pedagogical resources that supported with their interests and educational needs. Self-regulated learning was an important aspect of their project, and some participants found such an approach confronting. These learners would have preferred for teachers to be more hands-on, i.e. to direct the course more prescriptively. However, "those students who did make the leap [towards self-reliance]… learned a great deal more than we could ever have taught them" (Herrington & Parker, 2013, p. 613).

I share a similar point of view. In contrast to merely purchasing new media for simplifying administrative processes or for enhancing the appearance of teaching materials/practices, I believe educational technologies should "be used as cognitive tools for learning rather than as simply alternative delivery platforms" (Herrington, Reeves & Oliver, 2010, p. 3), which as mentioned already, seems often to be the case in higher education. It appears that new media is used to digitalise traditional practices, rather than transform practice or attune more conventional practices to a qualitatively different environment. Yet from a learner-centred standpoint, transformative practices are possible with the aid of computer technologies; namely, collaborative, social practices that resonate with communicative approaches to teaching, particularly in second language education.

There is some support for this stance, for many researchers stress the socio-constructivist potential of an education that takes advantage of the possibilities provided via current developments online, such as wikis, blogs, social media and forums which all allow users to connect with each other, to collaborate, and to share ideas. There is a view that such affordances allow for deeper learning. For instance, Salmon (2013) concurs that knowledge is constructed via social interaction, and then speculates that these processes might happen even more effectively online. Moreover, constructivist and cultural-historical theories have found expression in studies related to the educational uses of new media generally, as well as in studies into new media in L2 education more specifically.

A particularly interesting example of how constructivism underpins modern educational practices with new media is presented in an overview of research into how

Mindtools[2] enrich and deepen learner understanding by allowing students to externalise complex concepts. Jonassen and Cho (2008) discuss studies into how externalised mental models can deepen different types of knowledge, such as structural knowledge, or procedural knowledge. The authors explain that mental models are internal representations of worldly phenomena, that there is a reciprocal relationship between internal mental models and external models, and that the internal representations are refined when they are externalised. Jonassen and Cho (2008) promote educational technology, and propose the use of *Mindtools* for externalising mental models, as studies suggest that learning improves through engagement with mind-mapping software.

From a cultural-historical perspective, Atkinson, Churchill, Okada and Nishino (2007) conducted a study into L2 acquisition by video recording and deconstructing an L2 tutoring session between one student and her tutor. The researchers describe L2 acquisition as fleeting yet continual syntheses of social, physical, and cognitive features of learning, and define these processes as *alignment theory*. According to them, alignment is "the complex means by which human beings effect coordinated interaction, and maintain that interaction in dynamically adaptive ways" (p. 169). This adaptability is how learning happens. In their findings, the authors conclude that "L2 learning is a gradual, cumulative process [that involves a] guided, negotiated trajectory of experience, involving multiple repetitions in slightly varying contexts, bootstrapping, and the sociocognitive building up and negotiation of hypotheses" (p. 177). They emphasise the central role that teachers have in guiding this process. Interestingly, they also note the world is full of teachers, "basically anyone a person can align with in meaningful interaction" (Atkinson *et al.*, 2007, p. 184). In my view, the idea of *the world being full of teachers* implies that instructional designers should create classrooms that invite this world of teachers in, and the only way that this can be realised on a grander scale is by embedding new media into L2 programs.

In a related study, Uzum's (2010) research built on this concept of alignment; he was interested in whether alignment manifested itself online during Internet-mediated peer interaction. Uzum paired nine intermediate-level English learners with nine native (or advanced) L2 speakers, thus ensuring that a proficiency gap existed within each dyad. In doing so, he was drawing on the concept of the ZPD. Each pair worked together on a series of language tasks and communicated via *Yahoo Messenger*. Uzum (2010) found that learners

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[2] *Mindtools* is a generic term used to refer to many different types of computer-based modelling software used to construct visual representations of data, relationships, processes, concepts and so on.

instinctively adjusted to each other. For instance, native speakers gauged the language aptitude of their partner and appropriately aligned their own language, and both participants began using emoticons, exclamations and exaggerated spellings to compensate for non-verbal features that characterise face-to-face communication, but are absent in text-based interactions (Uzum, 2010). Learners also aligned in terms of content. Uzum's (2010) work supports conclusions by Atkinson *et al*. (2007): people have an innate tendency to adapt and to align to less familiar social contexts.

Another innovative development that draws on cultural-historical theory is Internet-mediated intercultural second language education (ICL2E) where participants who are geographically separated from one another connect and develop their L2 proficiency alongside building a multinational community of practice. Thorne and Black (2007) explain that, "at the core of most ICL2E projects is the aspiration for participants to develop meaningful relationships with one another and to use the language they are studying for this purpose" (p. 138). An example of this type of work is a web-based platform that had its origins in the French Section at the Massachusetts Institute of Technology in 1997 called *Cultura* (Furstenberg, Levet, & Waryn, n.d.). American students learning a European language were paired with European students learning English, and they shared opinions on a wide range of issues via the Internet; the language that these exchanges created was used in class to build their understanding of foreign vocabulary and grammar (Blake, 2011). *Cultura* is concerned with teaching students how to interact with people of varying cultural backgrounds and aims to build cultural understanding alongside linguistic proficiency. Learning entails an exchange of viewpoints, opinions and perspectives; thus, students on *Cultura* do not so much as experience a foreign culture, rather they co-construct a shared culture (Kern, Ware, & Warschauer, 2004). The study of an L2 is naturally a central part of the program.

Despite such enthusiasm, research into whether language acquisition is made easier or faster with educational media appears inconclusive. These findings are supported by Felix's (2008) review of studies on the efficacy of new media for language acquisition in the 1981 to 2005 period. Firstly, she concedes that the question itself is "immensely complex" (p. 142), and that by and large, little can be said about the "actual or potential effectiveness of the use of ICTs in second language learning" (p. 153). However, some of the research reviewed suggested that educational technologies might,

> engage students and create opportunities, adding value to face-to-face instruction; that
> dedicated programs (such as glossing or visual annotations for word-learning) are useful; that

the multimodal nature of current technologies appeals to different learning styles [and] the use of technologies can have a positive effect on student attitudes and participation [even though this is not necessarily] reflected in higher achievement. (Felix, 2008, p. 154)

2.5   ELICOS Online: The Promise and the Problems of Edu-tech

Disagreements around the efficacy and/or the potential benefits of e-learning exist, and I feel this debate is difficult to resolve, as good teaching in my mind is essentially a creative and intimate affair. Nonetheless, the studies and the educational products mentioned in much of the literature promote the notion that edu-tech can be used to enhance and deepen L2 learning. I believe communicative approaches to L2 teaching, which draw on constructivist and cultural-historical theories, are ideally suited to extension online through thoughtful instructional designs. CLT resonates with the affordances provided by educational technologies, and many of the principle tenets of CLT can be realised via online practices. As Collis and Moonen (2002) have pointed out, it is possible to create authentic, flexible, and immersive educational environments with these tools, and to provide learners with more individualised learning experiences. Another proponent of new media is Leask (2004) who believes that computer technology can engage people and enrich learning, and (obviously) connect L2 learners locally as well as internationally. In short, new media can be used to augment a communicative student-centred course, and to provide authentic contexts through which students meaningfully communicate and complete tasks.

A key affordance of edu-tech is that it allows the creation of flexible learning environments. Flexible learning is a move away from key educational decisions being made beforehand; it emphasises learner choices, and it can involve decisions related to time, such as when to interact with the course, or the pace of study; to content and resources, as well as instructional methods, for instance face-to-face, or online (Collis & Moonen, 2002). Collis and Moonen (2002) add that flexible learning can only work if *manageable options* are provided and if students are proactive in their learning and contribute (as noted earlier). These criteria are comparable in many respects to CLT principles stressing the need for student-centred teaching and highlighting the value of fostering learner autonomy. Ensuring that manageable options are provided in any online instructional design mirrors the cultural-historical concept of scaffolding learning.

Moreover, educational media is considered valuable because there is a need for an "*individualisation of learning experiences* [my emphasis]... mostly driven by new cohorts of students who increasingly require educational programmes and a way of experiencing those

programmes tailored to their own situations" (Collis & Moonen, 2002, p. 229). In the context of L2 education, the significance of individualising learning has long been known, and educational technology can support the realisation of this goal.

Another affordance of educational media, important in the context of L2 instruction, is the possibility to access and/or create authentic contexts for learning. The desirability of learning a language through exposure to authentic contexts is underscored by the need to engage in genuine communication and to use English purposefully. Most of these design criteria are best met through task-based teaching, which correlates to the idea of authentic activity in learning online. Authentic activities are loosely defined, relevant to the world outside of the classroom, complex and time-consuming (in a positive sense), and they provide opportunities for students to collaborate, as well as to use many different resources and to consider the task from various angles (Herrington, Reeves & Oliver, 2002, 2007, 2010). In addition, authentic activities also provide opportunities for reflection, value personal points of view, allow for diverse outcomes or solutions, are seamlessly integrated with assessment, are transferable, and finally, create polished products that have intrinsic value, rather than being stepping stones (Herrington, Reeves & Oliver, 2002, 2007, 2010).

These are some of the promises of edu-tech. They have inspired the EDR interventions described in this thesis. The EDR website was built to extend learning outside of the classroom and invite students into an immersive L2 environment. Flexible options, authentic material and activities, opportunities to engage with complex ideas and to create a polished product (for instance, by co-constructing the site or by refining written responses), and opportunities to learn through social interaction online were some of the features that characterised the learning ecology that grew around the EDR website, and in the IELTS-Preparation course.

However, it should be noted that the literature about educational technology cited thus far has depicted best-case scenarios, and is concerned with the positive potential of new media. The everyday practices and motivations of English Language Intensive Courses for Overseas Students (ELICOS) teachers are complex, and their levels of engagement or non-engagement with educational technology are varied. As Herrington, Reeves and Oliver (2010) stress, "there is a huge gap between the theoretical ideal and the practical realisation of these innovative approaches [to authentic e-learning]" (p. 172). New media in education is inseparable from the context(s) within which it is being used, and often L2 practices with computer technology *disappoint*. These realities are frequently lost amongst the enthusiasm

that surrounds new media. Thus I tend to agree with Selwyn (2014) when he appeals for "educational scholarship [to] look beyond questions of how technology *could* and *should* be used, and instead ask questions about how technology is actually being used in practice" (p. 15).

These problematic aspects of edu-tech in L2 practice have not been ignored. To clarify, the thesis sits liminally between both discourses; between those perspectives that laud the perceived affordances of educational media, and the more sobering calls for an acknowledgement of how new media is appropriated into established modes of educational and social organisation. My research exists in this space because the EDR interventions were designed to realise the potential described in the *optimistic literature*, yet they were also realised through practice, where the reality is that computer technology is bound to political and social processes that do not necessarily have excellence in student L2 learning with new media at the forefront of decision making. What is more, the messiness of everyday practice, instead of being disregarded, has prompted the development of local theory.

2.6 Educational Design Research (EDR)

EDR is the methodology employed in this study, and it is discussed in detail in Chapter 3. Some general features of EDR are highlighted here, and there is a brief discussion concerning studies and debates in the field in order to identify research gaps that my work fills.

EDR is an emergent methodology that strives to better align educational research with the requirements and realities of everyday practice, so that the complex problems of educational practice are addressed and *useable knowledge* is created (Sandoval, 2014; McKenney & Reeves, 2012; Plomp, 2007; Cobb, 2006; Kelly, 2004). The primary catalysts for EDR are widely credited as being Collins' (1992), and Brown's (1992) seminal papers calling for new approaches to the study of education.

Collins (1992) called for "a methodology for carrying out *design experiments* to study different ways of using technology in classrooms and schools, and to begin to construct a systematic science of how to design educational environments so that new technologies can be introduced successfully" (p. 15). He stressed that procedural models for such goals existed in the design sciences, such as architecture or engineering, and emphasised the desirability of drawing from these disciplines.

Brown (1992) conducted design experiments in real classrooms, as well as in controlled settings, and she explained that, "as a design scientist in my field, I attempt to engineer innovative educational environments and simultaneously conduct experimental studies of those innovations" (p. 141). She added that a "critical tension in our goals is that between contributing to a theory of learning... and contributing to practice. This is intervention research designed to inform practice" (p. 143). In this way, the defining characteristics of EDR were established. This methodology is not limited to interventions with computer technology, as interventions can be "programs, products and processes" (Nieveen, 2007, p. 89) that do not employ new media. However, all design research is recognisable by its twin aims of generating theory and of having an impact on the ground.

2.6.1 Research gaps in EDR

Currently, little attention seems to be have been given to EDR interventions in L2 contexts, and there are no EDR studies (as far as I can determine) in short term, ELICOS test-preparation contexts. Plomp and Nieveen's (2007) paper from an EDR conference in China that brought together other influential figures in the field: Van den Akker, Bannan-Ritland and Kelly, provided an overview of numerous studies that used an EDR methodology. Whilst the overview "is coloured by [their] background and bias" (Plomp & Nieveen, 2007, p. 103), it is interesting to note the kinds of teaching/learning domains that were cited. Most EDR studies were located in mathematics and science education, with some in the domain of teaching reading and writing to primary school children (Plomp & Nieveen, 2007). First language (L1) studies into reading and writing have some synergies with EDR research in the context of adult L2 education, but the two contexts are fundamentally different. Plomp and Nieveen (2007) also provided summaries of work in the areas of instructional technology and curriculum, and these fields are contextually closer to my work. I have embedded EDR interventions in an L2 program through computer technology, and the nature of design research is such that it often impacts upon curriculums.

A more recent survey of the field, "analysed the five most cited DBR [design-based research] articles from each year of this past decade" (Anderson & Shattuck, 2012, p. 16) to approximate how widely EDR has been adopted as a research methodology. McKenney and Reeves (2013) have criticised this survey for the methods employed; for instance, Anderson and Shattuck's review does not focus on the nature of the educational problems tackled nor does it examine the value of the solutions and theory generated. The survey also omits books on EDR and limits itself to information gleaned from journal article abstracts, which

"weakens the findings of the review considerably" (McKenney & Reeves, 2013, p. 98). Despite these flaws, the review does provide an insight into EDR studies that are popular simply by virtue of being cited most frequently. Notably, as far as subject areas are concerned, science (51%), mathematics (9%) and teacher training (9%) accounted for the majority of the total number of EDR studies reviewed for the decade preceding 2011. English teaching accounted for 5% of those studies, although the question of whether these programs were L2 classes or first language (L1) classes was not clarified. Therefore, my work seems to fill a neglected area of design research, as the context of my study was short course adult L2 test-preparation, which is a specific domain that appears somewhat absent in the literature.

This is not to say that EDR literature is devoid of any design research in L2 contexts. On the contrary, examples are scattered throughout the design research community. More recently, Hung (2011) conducted an EDR study of students learning English as an L2 in Taiwan. Hung investigated instructional designs that would enable "digital video technology to support reflective tasks for language learning" (p. 159), and improve L2 oral presentation skills. Some of Hung's EDR principles support key concepts in CLT, in particular the input, output and noticing principles. Iddings and Rose (2012) conducted an EDR study into teacher development and its impact upon L2 reading ability. Their work drew on the application of cultural-historical theory to L2 teaching and learning, and some of their findings highlighted the importance of situated learning, critical reflection, and personal theory building in terms of professional growth and development for L2 teachers (Iddings & Rose, 2012). They also noted that a prescribed curriculum does not lend itself to facilitating the type of meaningful professional development that they deemed desirable (Iddings & Rose, 2012). This insight expresses similar tensions to those found at the college, i.e. the strain between CLT and course standardisation.

Most recently, Porcaro (2014) conducted an EDR project from a constructivist perspective with foreign students studying the subject of educational technology in Oman. Whilst this course did not focus on L2 development as such, it was taught in English to Omani students; thus, the development of English was an incidental aspect of the program. Addressing L2 skills in a slightly tangential manner is similar to practices in one of the more influential studies that employed a systematic design process: the Seeds of Science/Roots of Reading curriculum. Seeds/Roots is a primary school immersive curriculum developed to teach children key scientific concepts whilst improving their ability to read informational texts (Lawrence Hall of Science [LHS], 2014). Whilst the content of this curriculum has been

designed for L1 classrooms, there is an L2 component to each unit, and evidence points to large gains for L2 learners in science content knowledge and vocabulary, and in general reading comprehension (LHS, 2014).

My research is comparable philosophically to the studies and projects cited above, perhaps simply as a result of being conducted in the same era. For instance, the CLT tenets supported by Hung (2011), and those already discussed in this chapter, underpin my approach to L2 teaching, research and instructional design. The importance of context, critical reflective practices and personal theory building, as well as an understanding of learning/teaching in cultural-historical terms have influenced this project, and are evident in some of the findings. Although, I came to value these perspectives independently of the work done by Iddings and Rose (2013). Porcaro's (2014) conceptualisation of learning in social-constructivist terms corresponds to my own understanding, and L2 teaching principles from the Seeds/Roots curriculum, such as providing scaffolds and opportunities to monitor language use (LHS, n.d.) correspond to CLT tenets that underpin my practices as a researcher/practitioner. Even though these broad philosophical similarities exist, my work is located in a specialised L2 field. This is an EDR project that intervenes in two high stakes L2 test-preparation short-term courses, and as mentioned previously, I have not come across any EDR studies that focus on this particular area of specialisation.

Furthermore, many EDR studies are conducted in teams and have long research trajectories. I base this contention on Kelly's (2007) view that "design research requires investment of substantial resources at many levels: school district administrators, teachers, students, and the design research team" (p. 74), and on McKenney's (2006) assertion that "a lot of design-research requires large interdisciplinary teams and long timelines" (8.35 min). I also suggest that Kelly and McKenney's comments refer to larger, well-funded projects like the Seeds/Roots curriculum. According to the LHS (2014), Seeds/Roots began in 2003 as a collaborative effort between researchers and teachers, and to date, the curriculum has been used by thousands of teachers in America, and in at least nine other countries. The regents of the University of California, Berkeley claim "Seeds/Roots serves as an exemplary model of good design to educational designers around the world" (LHS, 2014,"Barber Wins International Award", para. 5). However, other small-scale studies loosely fit Kelly and McKenney's criteria too. Akkerman, Bronkhorst and Zitter (2013) report on an EDR study of professional higher education done in collaboration with many teachers and coordinators in which the iterative cycles lasted for approximately two and a half years. Hung's (2011) work

lasted for three years, but he worked independently as a teacher-researcher like I have, and not in a team. Porcaro's (2014) research also started independently before another teacher implemented his ideas, and it was conducted over three semesters.

In contrast, timelines for this project were relatively short, the first EDR iteration lasted ten weeks, and the second EDR iteration was conducted over five weeks. Even though EDR has been done by single researcher-practitioners before, this study exemplifies design research conducted through intensive short-term cycles. The fact that I conducted this study alone is not really a point of difference.

In teams, and unavoidably alone, EDR researchers often take on multiple roles. For instance, a researcher could be a designer, a developer, an observer, and so on (McKenney, 2006). Multiple roles are indeed a feature of this project; my major roles were that of ELICOS teacher, student researcher, instructional designer, and website developer. These circumstances brought both limitations and benefits. A detailed discussion of these issues is not in the scope of the thesis; however, it is important to mention that the major limitation of being personally involved in designing, researching, implementing, and evaluating this study was a possible lack of objectivity. I do not believe that it is possible to completely eliminate bias in qualitative research, especially in research of a participatory nature. However, in order to limit bias, I have tried to be transparent about what I have brought to this study ideologically, and the effects of my personal views/opinions have been discussed many times with my supervisors. This was done to eliminate, or at the very least – greatly minimise – the intrusion of my subjectivity into the data analysis.

On the other hand, a major benefit was that I maintained complete control of the project. Teamwork requires negotiation and compromise, as Akkerman, Bronkhorst and Zitter (2013) discovered when "[Zitter] found it difficult to align her research actions with the actions of teachers and coordinators with whom she worked"(p. 425). My work was not subject to such restrictions. The EDR interventions were limited mainly by my web-coding ability and L2 teaching expertise, and by my imagination.

Finally, since EDR has only been around for approximately 20 years, there is some debate around whether it is in fact a methodology, or merely a grouping of methods. In other words, "educational researchers struggle to clarify this research method" (Bannan-Ritland, 2007, p. 53). A decade ago, Kelly (2004) argued that in order for EDR to become a mature methodology, consensus around standards and processes had to emerge; there were "methodological challenges that need to be addressed if we are to develop design studies

from a loose set of methods into a rigorous methodology" (p. 116). Amongst other shortcomings, Kelly (2004) identified the lack of an argumentative grammar, which is "the logic that guides the use of a method and that supports reasoning about its data" (p. 118) and issues with generalisibility as important methodological challenges to be met. Cobb (2006) described Kelly's contribution to the field as significant, "it was a really noble effort to push us [EDR researchers] from a friendly critic" (6:02 min).

It seems that the debate around methodological rigour appropriate for EDR continues, as does the search for consensus on clear standards and processes. As Sandoval (2014) argues in a recent paper, "there are surely a number of researchers within the learning sciences community who are conducting systematic design research, but we are not talking much about *how* [my emphasis] we do it or how not to do it" (p. 19). In an effort to correct this imbalance, Sandoval (2014) articulated "a way of conceptualizing and carrying out research on learning environments" (p. 19) by proposing conjecture mapping as "a means for assessing rigor and quality" (p. 30).

In a sister effort, McKenney and Reeves (2012) proposed a generic, customisable model of processes and methods appropriate for and/or intrinsic to EDR, and they have called for more quality design research studies to advance the field. Design research has to have quality outputs that work in practice (McKenney, 2006), and the standards by which EDR is judged may simply become a question of how well design research impacts practice, "ultimately, design research may be seen as a practical endeavour" (Kelly, 2004, p. 126).

In response to these calls, my study has been aligned with the generic model proposed by McKenney and Reeves (2012). I have customised this model because I am attempting to fill a research gap by contributing, in a humble way, to these debates about the methodological validity of EDR.

2.7   Summary of Chapter 2

The aim of the literature review was to conceptually frame the study. A conceptual framework is vital because it assists in seeing patterns and regularity in phenomena that appear messy and complicated (Cobb, 2006). Since my research intervenes in real classrooms, at a large ELICOS centre, it is situated in a complex and messy social environment. Chapter 2 has described the main conceptual and educational frames through which I analyse and make sense of the data collected.

The language centre was framed through a neoliberal social discourse, and whilst this was presented as an overarching influence on the school, the realities of practice were more complex. In terms of classroom practice, CBLT and CLT were identified as the two major expressions of L2 teaching at the college. CBLT was aligned with neoliberal thought because it is a reductionist and deterministic approach to L2 tuition. In contrast, CLT is a more flexible approach. It allows for personalised L2 learning through collaborative activity and via meaningful engagement with the target language. Since CLT is not reductionist in the way that CBLT is, the two traditions were presented as being fundamentally incompatible.

Defining CLT classroom practices were identified next, and some key concepts in CLT and their theoretical underpinnings were discussed. Since communicative approaches to L2 teaching stress the functional, socially situated and relational nature of language, there is a natural connection between this conceptualisation of English and constructivist, as well as cultural-historical theories of learning. Several studies and projects into L2 learning with new media were then mentioned. These studies drew from constructivist and cultural-historical perspectives, and understood L2 learning in social and participatory ways. They served as best-case examples of what could be done with educational technology in L2 teaching. Next, my claim that there is an affinity between CLT and learning with new media was presented and defended. Nevertheless, the realities of everyday practice with computer technology are often removed from the promise of new media expressed in some of the literature, and this more sobering view was presented as another facet to the conceptual framework.

EDR was introduced next, and research gaps that this study fills were identified. The research gaps included *location* (an intensive adult L2 test-preparation course) and *duration*: short ten-week and five-week cycles, whereas much EDR is characterised by long trajectories. EDR was described as a young and still ill-defined methodology. By aligning this thesis with McKenney and Reeves' (2012) conceptualisation of EDR, my work attempts to contribute to current methodological debates in design research.

Chapter 2 has delineated the conceptual framework of the thesis. The next chapter presents the methodological framework of the study, and introduces the stages, as well as the participants in the research.

3.0 The Methodological Framework

This chapter describes the research paradigm that underpins the study. My understanding of paradigms is based on Patton's (2002) definition as "worldviews built on implicit assumptions, accepted definitions, comfortable habits, values defended as truths, and beliefs projected as reality" (p. 572). Patton adds that paradigms are deeply embedded and normative. The aims of this chapter are to describe my own worldview and to justify the methodological choices taken.

The methodological framework begins with an explanation of my own ontological and epistemological orientations, followed by a description of the methodology, the research methods, and the sources of data used in the study. A reflexive section focussing on my agency in this inquiry follows before ethical issues are considered.

3.1   Ontological and Epistemological Claims

This is a qualitative study founded on the ontological claim that social reality is constructed. A directional model, proposed by Grix (2002) and Hay (2002), informs the articulation of the methodological framework outlined in this chapter. This model stresses a dependent directional relationship between the key concepts of ontology, epistemology and methodology in social research (Grix, 2002; Hay, 2002). Educational design research (EDR) is the methodology used in the study; the research methods are qualitative, and the sources of data are local/small-scale. Figure 3.1 overleaf is a visual depiction/summary of the methodological framework employed for this project, and each element is described in this chapter, beginning with a focus on ontology.

Constructivist Ontology

What's out there to know?

We can know about 'social realities', which are individually/collectively constructed

Interpretivist Epistemology

What and how can we know about it?

Through subjective interaction

Qualitative Methodology

How can we go about acquiring that knowledge?

Through qualitative methods, i.e. Educational Design Research (EDR), which:

- creates the immediate research context
- develops/refines interventions
- aims to improve practice
- seeks to develop theory

Research Methods

What precise procedures can we use to acquire it?

Analysis of:

- learning/teaching artefacts
- course documents
- questionnaire data

and through:

- semi-structured interviews
- critical reflective practice

Data Sources

Which data can we collect?

We can collect data from:

- students
- teachers
- online artefacts
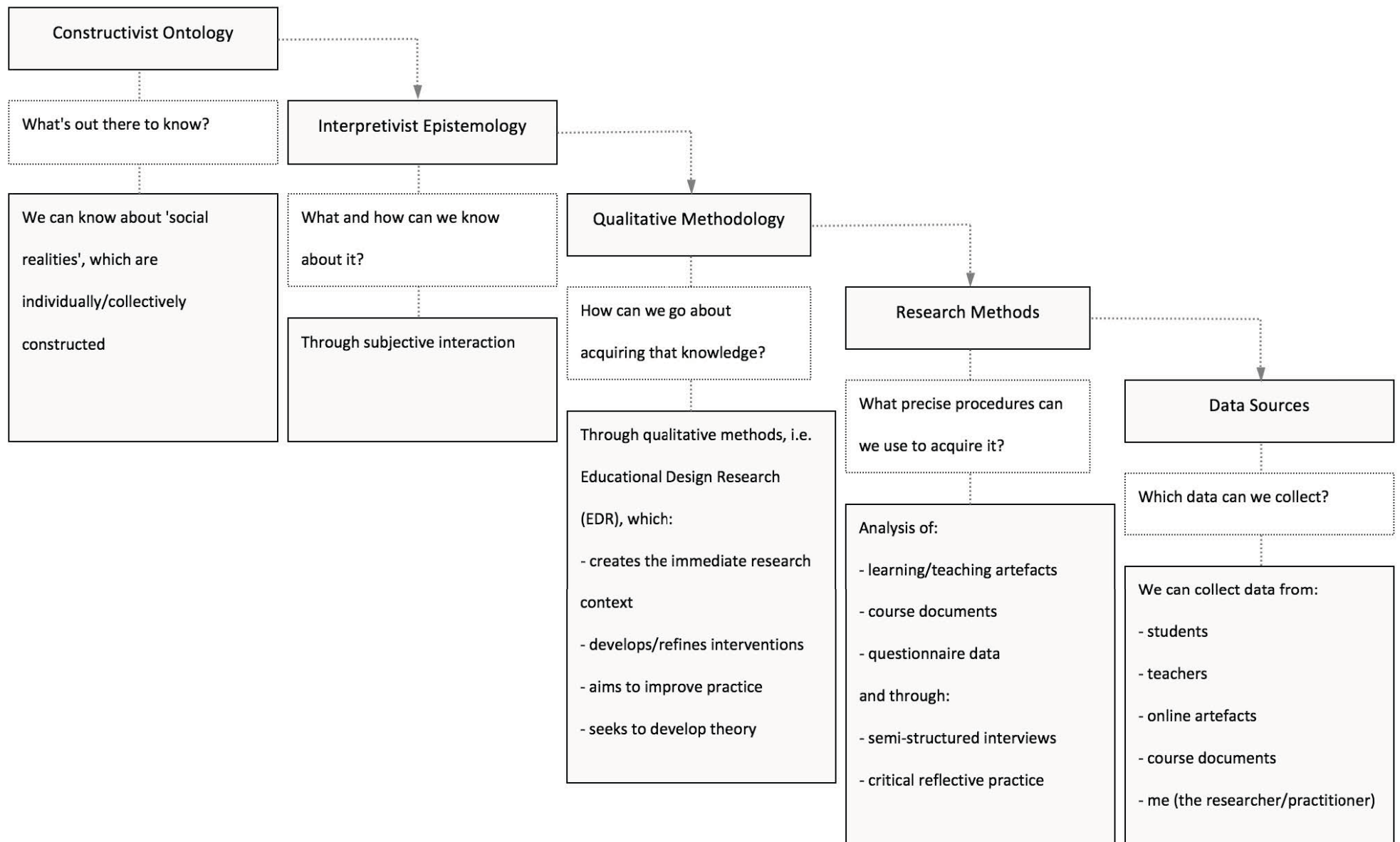- course documents
- me (the researcher/practitioner)

Figure 3.1: The methodological framework. This model is based on work done by Hay (2002, p. 64) and Grix (2002, p. 180), who developed Hay's original concept.

I work from a constructivist ontological position. This position holds a relativistic view of human behaviour and of social reality; both are understood as dynamic, changeable and socially constructed (O'Toole & Beckett, 2010). Constructivism "asserts that social phenomena and their meanings are continually being accomplished by social actors. It implies that social phenomena and categories are not only produced through social interaction but that they are in a constant state of revision" (Bryman, 2008, p. 19). I understand an external social world as mediated. People engage with each other, and in the process, construct schemas through which social realities and social interactions are understood and experienced. I agree with Patton (2002) who stated that people "interpret and construct reality – indeed they cannot do otherwise – the world of human perception is not real in an absolute sense, as the sun is real, but is 'made up' and shaped by cultural and linguistic constructs" (p. 96).

My epistemological claim therefore, is that knowledge is socially and culturally constructed, and I thus hold a subjectivist/interpretivist epistemology. I draw on Guba's (1990) ideas as far as *knowing* is concerned; he said, "if realities exist only in respondents' minds, subjective interaction seems to be the only way to access them" (p. 26). Indeed, subjective interaction is a major feature of the research due to the nature of the methodology. I maintained the dual role of practitioner and researcher during data collection for the study, and much of the data is the result of interviews and interpretative analysis of artefacts. To sum up, this study uses a qualitative research methodology (EDR), and is grounded in a critical socio-cultural conceptual framework.

3.2 Educational Design Research: The Methodology

EDR is context-bound in real classrooms. It has the twin aims of designing practical solutions to educational problems, and through reflecting on iterative intervention cycles, articulating theory. Classrooms are complicated environments, and design research has been proposed as a way of rigorously studying what is happening in these environments (Collins, 2006), as well as simultaneously improving them. EDR has been described as "theoretically oriented, interventionist, collaborative, responsively grounded, and iterative" (McKenney & Reeves, 2012, p. 13). Design research, by virtue of being interventionist, *creates* the learning/teaching context to be studied, and the theoretical understanding that is generated from these interventions inform practice, and practice in addition to context, informs theory.

EDR has been compared to action research because both methodologies are context-bound with a focus on improving both understanding and teaching. The difference is that the concepts, solutions or interventions of action research ought to be jointly discovered by both researchers and participants, whereas EDR is more direct. Researchers analyse and explore a situation to identify problems, and then design or as in this study, *co-construct with students*, solutions that they believe can improve the situation. As Wang and Hannafin (2005) have posited when comparing the two methodologies, "local improvements in participatory action research typically derive from participants' own research that is facilitated by researchers rather than interventions designed and progressively refined jointly with researchers" (p. 6). With design research, the development of theoretical understanding is emphasised, as is the focus on refining both instruction and instructional design. Wang and Hannafin (2005) define EDR "as a systematic but flexible methodology aimed to improve educational practices through iterative analysis, design, development, and implementation, based on collaboration among researchers and practitioners in real-world settings, and leading to contextually-sensitive design principles and theories" (p. 6-7). Similarly, Reeves, Herrington, and Oliver (2005) explain that EDR researchers investigate educational problems and create learning environments through which to address these problems, they then modify these environments to better address educational goals, and finally, reflect on the process. In contrast to action research, which "adopts inquiry-based learning methods without identifying generalisable design principles... there is much more potential value in design research, because it combines seeking practical solutions to classroom problems with the search for design knowledge that others may apply" (Reeves, Herrington & Oliver, 2005, p. 107).

Design research is often associated with technology since researchers and/or practitioners often find themselves working in media rich environments, and developing technological artefacts for use in classroom settings (Collins, 2006). However as mentioned previously, the methodology is broader in scope. For instance, Bradley and Reinking (2011) developed strategies for enriching teacher-child language interactions at preschool (*children <5 years*). They characterised their design research intervention as, "a coherent, integrated cluster of instructional strategies, events, or activities" (p. 366); new media was peripheral in their study (some video was used).

The fields of curriculum development and instructional design have influenced this research methodology. According to McKenney and Reeves (2012), the effect of curriculum theory is evident in EDR because the field "has a natural connection to design research, as

most design research interventions somehow touch, if not directly alter, curricula" (p. 68). The authors add that curriculum development perspectives allow EDR studies to be positioned within much larger ecosystems; they can be connected to numerous layers, such as the immediate classroom, the organisation, national education policy and so forth.

The second major influence on design research is instructional design, which can be defined as "a field concerned with systematic processes for developing instruction to reliably yield desired learning and performance results" (McKenney & Reeves, 2012, p. 61). McKenney and Reeves (2012) state that there seems to be a logical connection between instructional design and EDR because many proponents of this methodology were trained as instructional designers, and the concepts, methods and tools that were created are useful in EDR. As far as instructional design is concerned, Gagne, Wager, Golas and Keller (2005) draw a distinction between the idea of teaching and instruction. They argue that teaching is an aspect of instruction. That is to say, an instructional system can be thought of as the organisation of resources and processes in a systematic manner that includes "analysis, design, development, implementation, and evaluation, and is characterised by the overarching concept of design" (Gagne *et al.*, 2005, p. 18). Instructional systems are also called learning environments – as is the case here – the latter term implies that learners are involved in explorations and develop their potentials in a constructivist manner, in contrast to being told what to think (Gagne *et al.*, 2005).

The broader instructional design system underpinning this project is not the focus of this inquiry, and the only artefacts included in the thesis that can provide some insight into how teaching was systematically organised are screenshots of the EDR website (www.english-earth.com) depicting relationships in the choice of materials in Chapter 5, and the accompanying descriptions of it, and of my approach to L2 teaching. The focus of this study was the human ecology and the learning environment itself, or the L2 class and the EDR website. The learning environment is *flexible* simply because it exploited the affordances of online media.

3.2.1　　　EDR processes underpinning this study

A generic model proposed by McKenney and Reeves (2012) for operationalising EDR has been used to structure this project. Their conceptualisation of EDR has been influenced by principles from curriculum development and instructional design, as well as by common features distilled from numerous existing design research models and frameworks. This particular model was chosen because it is research-based, and because it helps clarify

phases in this project. The generic model is useful for reporting on a fairly complex intervention/study as it allows EDR studies to be categorised into neat, yet fluid stages.
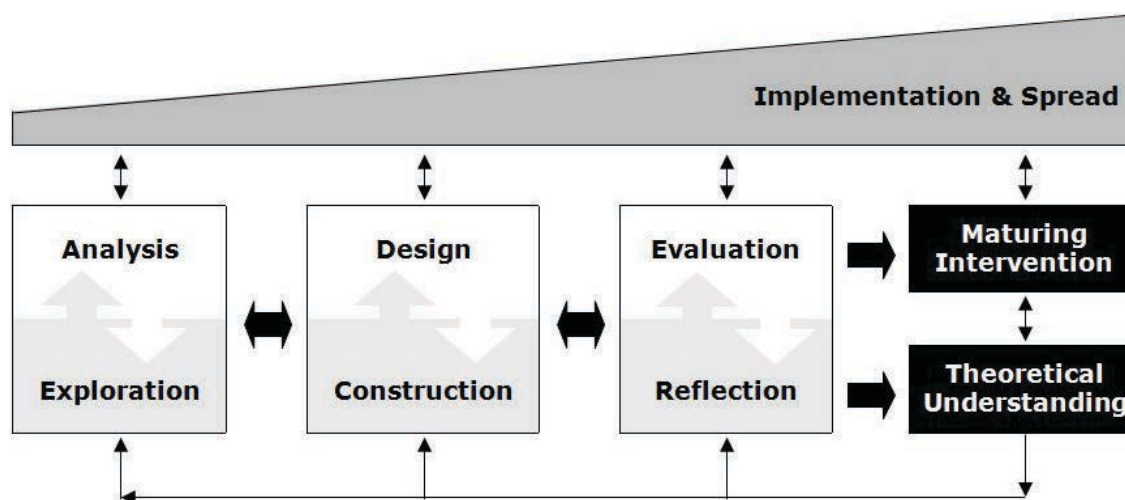

Figure 3.2: A generic model for design research in education (McKenney & Reeves, 2012, p. 77).

The generic model depicts the three core processes of design research and its two outputs. The analysis/exploration stage works towards identifying and defining problems, in addition to establishing goals and drafting design propositions; it can involve site-visits and a literature review (McKenney & Reeves, 2012). Design/construction can result in descriptions of potential designs, or the solution/intervention itself. In the third process – evaluation/reflection – evaluation refers to a cycle of empirical testing, and reflection "pertains to retrospective consideration of findings and observations" (McKenney & Reeves, 2012, p. 133). Reflection, according to Susan McKenney and Thomas C. Reeves, can be organic (unplanned, naturally occurring), or structured, where there is a more formal, retrospective evaluation of the process.

Implementation/spread illustrates the methodology's close relationship to theory and practice. McKenney and Reeves (2012) summarise key features of their model in the following manner:

> The generic model for design research... shows all three core processes (analysis and exploration; design and construction; and evaluation and reflection) interacting with practice through the (anticipation of) implementation and spread of interventions. It also suggests that the interaction generally increases as the project matures. (p. 159)

The last two boxes on the right depict the parallel aims of refining the product or design (i.e. a maturing intervention), and extracting theoretical insights from the study. Finally, the process is iterative and flexible, which is illustrated via bidirectional arrows between stages.

It is iterative because findings from one stage can repeatedly inform other stages. For example, "design and construction may take place repeatedly, and inputs for this work can come from either of its flanking phases: analysis and exploration, or evaluation and reflection, as well as interaction with practice through implementation and spread" (McKenney & Reeves, 2012, p. 109). McKenney and Reeves explain that their model is flexible because a variety of routes can be taken, although there is a general flow towards the two outputs and there is an increasing amount of interaction with practice.

Broadly speaking, the first stage (analysis/exploration) was enacted through the literature review in order to endow this study with a conceptual lens, as well as via staff interviews, so as to clarify problems requiring an intervention. These processes correspond to Chapter 2 and Chapter 4 of the thesis respectively. Design/construction was the focus of the two EDR Cycles described in Chapter 5, and evaluation/reflection is the main concern of Chapter 6. Furthermore, McKenney and Reeves (2012) called for modifications of their model for specific projects in ways that EDR researchers deemed appropriate. The manner in which this model was adapted to fit my study is explained in Chapter 6. The two outputs were the EDR site and EDR principles, also presented in Chapter 6 of the thesis.

3.3 Research Methods and Data Sources

The study used qualitative research methods. Centre staff and former students were invited to participate in semi-structured interviews. Participants from Group 2 – International English Language Testing System (IELTS) students – were asked for permission to use learning artefacts that they had created as a result of being in the course I taught, and they were given a questionnaire to complete at the end of the program. Data collection began in August 2013, and concluded in March 2014. Figure 3.3 shows data collection timelines and the major phases of the study.
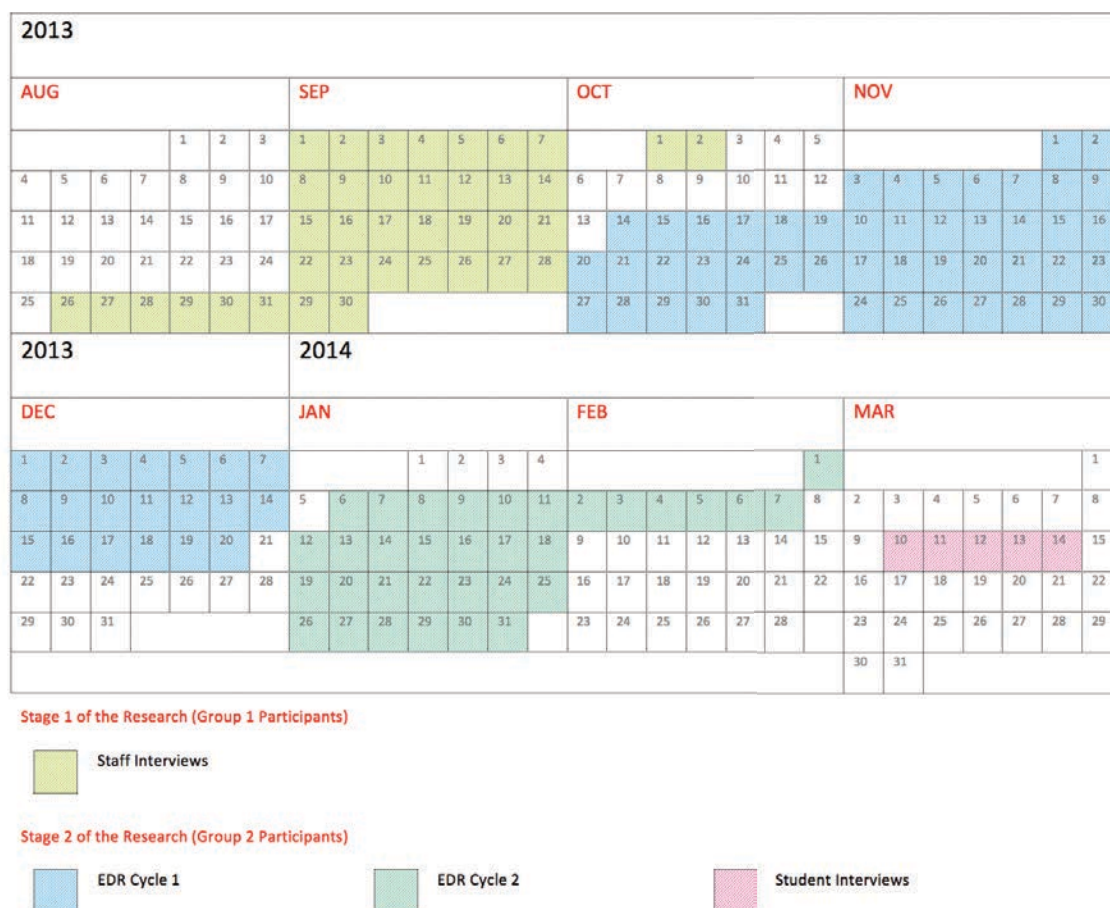
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11 12 13 14 15 16 17	15 16 17 18 19 20 21	13 14 15 16 17 18 19	10 11 12 13 14 15 16
18 19 20 21 22 23 24	22 23 24 25 26 27 28	20 21 22 23 24 25 26	17 18 19 20 21 22 23
25 26 27 28 29 30 31	29 30	27 28 29 30 31	24 25 26 27 28 29 30

2013   **2014**

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DEC			JAN			FEB			MAR		
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15 16 17 18 19 20 21	12 13 14 15 16 17 18	9 10 11 12 13 14 15	9 10 11 12 13 14 15
22 23 24 25 26 27 28	19 20 21 22 23 24 25	16 17 18 19 20 21 22	16 17 18 19 20 21 22
29 30 31	26 27 28 29 30 31	23 24 25 26 27 28	23 24 25 26 27 28 29
			30 31

Stage 1 of the Research (Group 1 Participants)

☐ Staff Interviews

Stage 2 of the Research (Group 2 Participants)

☐ EDR Cycle 1   ☐ EDR Cycle 2   ☐ Student Interviews

Figure 3.3: Stages of the research - data collection phases. Precise interview dates have been omitted as a measure to ensure confidentiality. Questionnaire-data and permission to use student-generated online content were sought at the end of EDR Cycle 1 and EDR Cycle 2.

The research participants were divided into two groups. Participants in Group 1 were sourced from teaching and managerial staff at the college. Those in Group 2 were former students who had taken part in an IELTS-Preparation course taught by me, and who had thus been part of an EDR cycle.

3.3.1   Stage 1 methods: Investigating the context (ELICOS staff)

Stage 1 Participants (*n = 6*) consisted of English Language Intensive Courses for Overseas Students (ELICOS) teachers and managers responsible for IELTS-Preparation programs, or in one case, the English/academic skills course. These volunteers were invited to a ½ hour semi-structured interview. The interviews were broadly concerned with views on the college, ELICOS teachers, and the teaching philosophy of the school. I was also interested in IELTS students and with views on how new media was being used in IELTS-Preparation courses. All of these interviews were recorded and transcribed. The transcripts were given to all participants to add any clarifications or corrections, and to provide signed approval. Themes were then extracted. Four major categories emerged from the raw

interview data: the college itself, teaching at the college, the educational use of new media, and the IELTS-Preparation course. The purpose of these interviews was to establish and delineate a rich context for the EDR intervention. This data will be explored in detail in Chapter 4.

3.3.2   Stage 2 methods: Investigating the interventions (IELTS students)

Stage 2 participants (*n = 16 approx*.) were sourced from two different IELTS classes during two intakes. The first invitations to take part in the study were given at the conclusion of the first EDR cycle in December 2013, and the next information session was held at the end of the second EDR cycle in February 2014. The research methods involved the collection and analysis of student artefacts, semi-structured interviews, and responses to questionnaires.

All students enrolled in the IELTS course during my research were introduced to and invited to use the EDR website that I had built for this study[3]. They were informed that this site was part of my Master's research, and that they would be asked for permission to use any data generated by them once the course had concluded. Using Web 2.0 tools such as wikis or forums, posting comments or creating personal profiles, and online activities of a similar nature, were all elements of teaching practices at the centre as part of normal everyday teaching. Whether this actually occurred with every teacher and/or with all students is another issue; however, the use of new media was encouraged at the school, and often expected. Therefore these students, regardless of whether I was conducting a research project, would have generated online data. By collecting student artefacts, I was simply documenting this process. However, students could not be – and were not – deceived into participating in the study, so permission was sought to use any material created by them as a result of their studies with me. Data created by students who did not consent to being part of the study has been ignored. These ethical issues are discussed in detail in Section 3.5.

At the conclusion of both programs, in addition to being asked for permission to use artefacts posted online, former students were invited to an interview with me, and given the opportunity to complete a questionnaire about the course. The next section discusses my role in the study and concludes the discussion of the methodological framework illustrated in Figure 3.1.

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[3] It should be noted that student participation or non-participation online was not part of any assessment in these programs.

3.4   Reflexivity in Qualitative Research

Reflexivity refers to an important aspect of qualitative inquiry where researchers reflect upon how they make and work with data in order to extract credible accounts and theories. I agree with Richards (2011) who states, "qualitative data are not collected, but made collaboratively by the researcher and the researched" (p. 49). Therefore, I consider my role in making, collecting and interpreting the data, a component of the study. In order to provide a multilayered, credible and trustworthy account, it is important to outline what my values/motivations were, as these have had an effect on what this study is.

I cannot separate myself from the selection and construction of the research context or from the creation of the data sets, but I can outline how I believe my agency has influenced this work. It is important, in qualitative research to consider how I am part of the study (Richards, 2011); after all, I designed the language courses/interventions, I was a creator of (and central in) the immediate research context, and I formulated all data-collection methods. Being reflexive emphasises self-awareness, the ownership of one's voice, and attention to how socio-cultural factors have affected one's perspective (Patton, 2002). Some of these factors, such as my understanding of how knowledge is constructed, have been discussed already. However, this study has also been directly influenced by who I am.

Being reflexive helps ensure the quality and credibility of this thesis. Criteria proposed for assessing the value of qualitative inquiry positioned within a social constructivist research paradigm include an acknowledgement of the role of subjectivity, an emphasis on trustworthiness and authenticity, capturing multiple views and being reflexive (Patton, 2002). Many of these standards are interlinked. The following section is concerned with my history and with biases that may have influenced the study. The data chapters (Chapter 4 and Chapter 5) report the views of staff and students. The authenticity as well as the credibility of these views has been maintained by accurately transcribing all voices and by involving all participants in the process. Measures were also in place to ensure that questionnaire data was freely given, thus the integrity of these responses was maintained. I claim that the quality, trustworthiness and credibility of the study have been heightened through these practices. Furthermore, these important standards of qualitative inquiry have been upheld via critical reflections upon my own subjectivity, through constructing clear conceptual and methodological frameworks, and by truthfully reporting the voices of others. The next section positions me as a participant in the research and highlights several factors that influenced my research design.

3.4.1   Researcher positioning

At the time of the study, I had been employed at the college for some time as an ELICOS teacher and I had experience with a wide range of programs. The centre offered a variety of English-language courses, but predominantly specialised in programs for transition into university. Since the vast majority of students were on pathways into undergraduate or postgraduate degrees, all courses had a strong academic focus.

I chose an IELTS-Preparation context as the research site because these programs fulfilled personal criteria regarding the type of students I wanted, and the commercial ambitions I had. My desire to establish a business had a significant impact on the study. I appreciated the potential of new media, and I was attracted to the possible commercial benefits. I planned to establish an online transnational language school, where people subscribe to learn and immerse themselves in English. I felt that people overseas would be willing to subscribe to an online service that provided them with access to an authentic and competent English language community; that allowed them to work with individuals in various countries synchronously and asynchronously, and that provided scaffolded courses grounded in CLT principles. I saw the online educational product, the EDR website made for the study, as a step towards this goal.

I am critical of the centre's preoccupation with profit. I believe the choices the company has made to remain economically viable have resulted in a disservice to both teachers and learners. The irony of being personally motivated by making money from teaching English has not been lost on me. I just believe I can do it better. More pertinently, this desire resulted in four months of personal study learning to code and build websites. If I had simply wished to complete a Master's thesis, I would not have committed to learning code for web-design. I would have done something less taxing, and the form of this research would have been very different[4].

As for students, personal experience with IELTS-Preparation students was that they were highly motivated – much more so than students in general English, and I wanted to work with committed people. The University-bridging program also attracted seriously minded learners, but it was never an option since it was not feasible to use such a program as a foundation for a future online course. This was simply because I would not be in a position to guarantee entry into any university upon successful completion of a course wholly owned

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[4] I have been informally schooled in the visual arts. I believe that this influence is evident in the aesthetics of the EDR website.

and designed by me. With IELTS-Preparation, I knew that I could design an effective, enjoyable, and interesting program that would result in an improvement in student-scores. In short, I could offer something tangible.

Similarly, general English lacked pathway options, and in my professional experience very few students were intrinsically motivated to learn English. Most L2 students were learning English because it was a stepping-stone towards a university qualification, or because they were forced to by other circumstances. In some respects, blending new media with general English or University-bridging courses is more logical than attempting to use educational technologies with students who are under significant pressure to succeed in a high-stakes paper-and-pencil test. However, the desire to start an online language school steered me towards the IELTS program.

I occasionally got the sense that these drives (one to finish a research degree, and the other to build a business) were incompatible. I felt that I should have been much more concerned with how my work would inform future directions in education. I should have been more focussed on what sort of an impact I could have on education now, or in a decade or two. I had a sense that not being single-mindedly driven to add to the field was somehow corrupting the study. Nonetheless, I believe that these ambitions allowed the research to find an interesting area – one that would not have been researched if I had not harboured these seemingly conflicting desires.

Other factors that pertain to the study relate to my professional identity and to my views on the college. As an ELICOS teacher, I am confident and popular with students; I base and justify my professional decisions on whether or not I believe pupils benefit. This means I do not necessarily *do as I am told*. If I believe a particular decision does little to benefit students, I argue against it, or more often than not, ignore it. This attitude, and the fact that I knew my working environment well, permitted me to redesign an entire program without seeking permission for every change. Of course, permission to do the study was sought and granted by the organisation, but the precise nature of the intervention, and the large-scale changes to the IELTS program were never scrutinised. This may be rare in the ELICOS industry as the majority of teachers have little or no job-security, and therefore, I suggest that they would not generally allow themselves to completely redesign a course without seeking approval. This has resulted in an EDR intervention that is both unique, and perhaps difficult to replicate.

Such creative freedom was also possible because the IELTS program was largely forgotten in 2013/2014. As the centre drifted towards the standardisation of course content and delivery, IELTS-Preparation was sidelined, with a view to being phased out. As long as students were satisfied, IELTS teachers were left to their own devices. These circumstances, and my own high-levels of expertise[5] resulted in EDR interventions that were designed in ways that I wished to design them, rather than as a result of compromise.

Another significant factor that may have influenced the study is my view of the organisation. I have tempered this bias by comparing my ideas against those of other staff and students, and by discussing findings with my supervisors. The interviewees were all aware of the value I placed on sincere, genuine responses to questions and to how my program was experienced. Furthermore, even though I had spent much time learning to build and then actually constructing a website, I was emotionally detached from it once it had been built. I did not mind if students viewed the site as inconsequential.

Finally, I believe the thesis is important. I found the process of engaging in qualitative research interesting and challenging. I have tried to create a high-quality EDR study, and to produce a thesis that adds something of value to this genre of research. I have tried to record an honest account of the research context, describe the effects of my interventions, and provide worthwhile insights. The next section will discuss how ethical issues were dealt with.

3.5   Ethical Considerations

The main ethical issues pertained to my dual role as an ELICOS teacher and a student researcher. Since all participants in Group 2 were once my students, it was crucial to have effective measures in place so as to eliminate any possibility of coercion. More specifically, ethical issues concerning this study were related to:

- the relationship between the researcher and the participants, particularly with regard to Group 2 (IELTS students);

- the possibility of coercion, and the need to ensure that participants volunteered their participation;

- informed consent;

- the right to decline taking part and/or withdrawing from the study,

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[5] I worked as an IELTS examiner for four years, and during the study, IELTS-Preparation was an area of specialisation for me personally. My level of expertise developed because I chose an IELTS program as the site for my Master's research and I ended up teaching multiple courses over a sustained period of time.

◆ and the avoidance of harm.

These issues will be considered in the sections that follow.

3.5.1 Description of participants

As mentioned previously, participants in this study were divided into two groups. Group 1 consisted of staff working at the college; this cohort was made up of other ELICOS teachers, course coordinators and middle managers. A total of six staff members accepted invitations to an interview, and these interviews were held at the centre from August to October 2013. Out of these six participants, five had been employed at the centre for a number of years, and one had been employed for approximately six months. They had different levels of responsibility; some were in more senior positions and tasked with managing approximately fifty ELICOS teachers, others were responsible for overseeing the delivery of specific programs and managing smaller groups of teachers, and some were L2 teachers responsible for planning and delivering ELICOS courses. All interviewees had many years of experience teaching English to speakers of other languages although not necessarily at this centre, but at different institutions, in different countries.

Group 2 participants were students I had taught in late 2013, and in early 2014. By the time they had decided to participate in the research, I had ceased being their teacher. These students had received their grades and reports before agreeing to take part in the study, so they were no longer my pupils. Group 2 had two intakes. The intakes occurred in December 2013, which was the end of EDR Cycle 1, and then in February 2014, being the conclusion of EDR Cycle 2. The pools from which these participants were sourced were different. Also, the students that I had taught in late 2013 did not continue their studies with me in 2014, and thus the participants of EDR Cycle 2 were recruited from a new pool of former students. Even though those who had agreed to participate in the study came from two different groups, and were recruited at different times, they are all identified as Group 2 for simplicity, and to differentiate them from staff.

From EDR Cycle 1, a total of 11 students gave permission for the use of data they had generated online, ten completed a questionnaire, and three agreed to be interviewed[6]. Participants from this cohort were of mixed nationalities. Many were Chinese, some were Brazilian, some were from the Middle East, and one student was Israeli. All were adults (*18+*), and they were all enrolled in an IELTS-Preparation course because they wished to

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[6] Unfortunately, interviews were never conducted as these students had left when classes resumed in January 2014.

continue their studies at an Australian university. Their language proficiency varied, and they had different strengths in different areas. All of these learners were, at least, intermediate-level users of English at the beginning of the program (with many displaying stronger skills), and all became upper-intermediate to advanced users after ten weeks of study. The degree courses that they were aiming for varied, with some students planning to study nursing, others planning to enter business courses such as marketing or accounting, and others still aiming for degrees in environmental engineering. Most were planning to commence postgraduate studies, as opposed to undergraduate studies.

From EDR Cycle 2, five students gave permission for the use of their data, four completed questionnaires, and five agreed to interviews. All participants were over eighteen, and they were mostly from China, followed by some from Brazil and one from Iraq. This group was generally stronger in terms of language proficiency than the previous cohort. These L2 learners had enrolled in the IELTS stream for similar reasons to students in the first cycle. All were planning to continue their studies at university after passing the IELTS test. They were planning to do programs for degrees in various fields, which ranged from undergraduate level to postgraduate, with one person aiming to complete a doctorate.

This second cohort was unusual in that most students (15 out of 18) were discontinuing their studies in Week 5, mid-way through the program. Officially, the IELTS program runs for ten weeks; however, a mid-term intake exists and, commonly, four or five students exit, and are replaced by others. A small change is manageable, but losing 15 students was, in effect, starting a new course altogether. In response, I shortened the second EDR cycle from ten weeks to five.

3.5.2 Recruitment processes

Recruitment occurred in three phases. Invitations for Group 1 (staff) were sent out via email in August 2013; invitations for Group 2 (ex-students) were given during two information sessions held in December 2013 and February 2014.

3.5.2.1 *Recruitment of Group 1 participants (ELICOS staff)*

Participants from Group 1 were invited to take part in the study by a centre manager on my behalf. Information about the study was sent out via email. The email briefly summarised the research, and a detailed explanatory statement as well as a consent form were sent as attachments. Some people responded to the request via email, and others asked me directly about my research before agreeing or declining to participate. All participants signed

consent forms, and all were informed that they had no obligation to take part, and that they had the right to withdraw from the study if they chose to do so.

3.5.2.2   Recruitment of Group 2 participants (IELTS students)

The recruitment process for participants from Group 2 was more complicated as there was an ethical requirement to ensure a separation of my role as an ELICOS teacher and my role as a student-researcher. The following steps were taken to remove any possibility of coercion and to avoid deception:

a.   At the beginning of both IELTS courses (2013/2014), students were introduced to the EDR website and encouraged to engage with it. They were guided through the various pages, given tasks to do, and the purpose for embedding this learning environment in the IELTS-Preparation program was explained.

b.   Students were told that we would be using the site to supplement the course they were doing. They were also informed, both in person and online on the Classmates page (Figure 3.4) that I was conducting research for my Master's degree and that this site was a central part of it.

Figure 3.4: Classmates page. Text concerning this study has been circled. Photographs of all participants have been obscured to ensure anonymity, as has any reference to the centre where the study was held. Furthermore, if permission for use of online data was denied, then material produced or uploaded by these individuals has either been blurred, or it has not been used.

c.   Students were informed that once they finished their studies with me, they would be invited to an interview, and I would request their permission to use any material they had created in class or online. The fact that they could refuse to take part in the research was stressed.

d.   At the end of the program – in Week 10 for EDR Cycle 1, and in Week 5 for EDR Cycle 2 – a staff member responsible for student-welfare (not a teacher) spoke to these students. This session occurred once student grades were finalised, and once they had received their reports from me, so I was no longer in a position to influence marks.

e.   The information session for EDR Cycle 1 occurred in the final 30 minutes of the last class that students had with me in Week 10 of the course. I left the classroom before the student-welfare officer explained my research.

f.   The information session for EDR Cycle 2 occurred in the fifth week of the course. Fifteen students from a class of 18 were discontinuing their studies, so I had decided to shorten the length of this cycle. The three continuing students attended the information session, but were told I would seek permission for the use of their data, offer a questionnaire and invite them to an interview in Week 10 (after they had been given their results).

g.   In both instances, participating students were asked to place their questionnaires and consent forms in a box in the library. This was done to ensure participants had the freedom to make a decision in private, rather than in a classroom full of peers, and in the case of EDR Cycle 2 to ensure that the course had concluded – an excursion was planned for the following day. I would see many of these learners one more time.

h.   During the information session, the student-welfare officer explained my research and highlighted that participation was entirely voluntary; students would neither be advantaged nor disadvantaged by their choices. Students were also told that they would be anonymous in the write-up of the research. Their names, any pictures that identified them and any reference to the centre would all be redacted.

i.   Explanatory statements, questionnaires and consent forms were handed out at the end of the session.

j.   Students were told that I would not know who had decided to participate until after the course had finished. Furthermore, if they happened to be enrolled in a class that I was teaching in the future, they would be automatically excluded. This was to ensure that any *perceived benefits* from participation in the study were eliminated.

k.   The research box was opened once these courses had concluded. This happened in Week 10 for EDR Cycle 1 (December 2013), and in Week 5 (February 2014) and Week 10 (March 2014) for EDR Cycle 2. The third *opening* was to capture the three remaining students from EDR Cycle 2. The research cycle itself did not continue into the final five weeks of the program.

l.   Students who had agreed to interviews were contacted, and interviews were held at the centre in March 2014.

Once these interviews were transcribed, copies were given to relevant individuals for clarification, comments and signed approval. Themes were then extracted. Data from the student-interviews, from the questionnaires, and from artefacts posted online has been used in the analysis of the two EDR Cycles in Chapter 5.

3.5.3   Generation of data

Data was generated by Group 1 participants (staff) during six semi-structured interviews. Data was collected from Group 2 (students) through participation in one-on-one interviews, through an analysis of online content generated by some of these learners, and via responses to questionnaires handed out at the end of both IELTS programs. Teachers and students consented to being interviewed prior to the creation of these data sets. Furthermore, the data generated by students online was part of normal teaching practice at the centre; the process was simply documented for the purposes of this study. Consent was sought from students for this data to be used, and only data from those students who chose to participate in this study has been used. Data generated by non-participating students has been blurred or omitted. Questionnaires were returned anonymously, and therefore consent was implied.

3.5.4   Confidentiality and informed consent

The risk of distress or embarrassment as a result of participating in the study was extremely low. This was due to the nature of the inquiry, which (for Group 2: students) was concerned with how students engaged with learning activities they experienced in and outside of class; and (for Group 1: teachers) focussed more generally on the college (e.g. the courses, the teaching approach and the students). The type of information this study elicited was highly unlikely to inconvenience anyone, or cause discomfort to anyone. Furthermore, several measures were in place in order to ensure the confidentiality of participants, to respect people's right to be excluded from the study, and to enable participants to provide informed consent.

Participants from both groups were given an explanatory statement that explained this study in detail. Some participants from Group 1 (staff) asked me personally about the research before agreeing to take part, others accepted the invitation immediately, and others ignored the request. With regards to Group 2 participants (students), the study was explained at the beginning of both IELTS courses, and an information session was held at the end of each program where the research was explained in detail. These information sessions were given by a third-party in order to maintain my dual role as a language teacher and a student researcher. These measures were in place so that people were able to give informed consent, and to *volunteer* their participation.

All data in the write-up has been de-identified, and pseudonyms have been used; thus the risk of being identified in the thesis is very low. Nevertheless, anonymity has not been guaranteed due to the small number of ELICOS centres and the small-scale nature of the

research. This concern had a bearing on staff members involved in the project rather than on students, but the risk was noted in explanatory statements for both groups so that people were informed about the nature of the research.

All participants had the right to exclude themselves from the study and the right to withdraw from it. Participants from both groups who wished to be excluded from the research simply declined the invitation for an interview, or with regard to Group 2, did not complete a questionnaire. Furthermore, with Group 2, any online data that was generated for the purposes of teaching/learning was excluded from this study unless the individual to whom the data pertained had given their consent. Participants who attended interviews with me were provided with transcripts so that they had an opportunity to comment and to sign off on the document. The right to withdraw from the research was noted in explanatory statements given to all participants.

3.6   Summary of Chapter 3

Chapter 3 presented the research paradigm underpinning this qualitative inquiry. An overview of the study was presented, the participatory/interventionist nature of the research was explained, and the two stages of data collection were described. Stage 1 was concerned with delineating the research-context, and Stage 2 focussed on the classroom interventions, and on two EDR cycles during which an educational intervention, supported via a custom-made EDR website, was implemented and refined.

The methodological framework of the study was described in detail. My research has been aligned with a generic EDR model proposed by McKenney and Reeves in 2012. Their model was chosen for the reporting of the overall research process because it endows a semi-complex study with greater clarity. The research methods were qualitative, and the procedures consisted of semi-structured interviews, student-questionnaires, analyses of online artefacts, and personal critically reflective practices. Critical reflection is evident in stages of reflection and evaluation that are part of an EDR cycle, and in the focus on reflexivity in this chapter. The application of these research methods was described in relation to staff at the language centre (Group 1 and Stage 1 of the study), and students (Group 2 and Stage 2 of the study).

Reflexivity was also discussed in order to "write [myself] into the account" (Richards, 2011, p. 57) so as to strengthen the credibility and trustworthiness of claims and accounts

presented in the thesis. As the nature of the study is participatory, bias and steps taken to limit it were also noted.

Ethical considerations were discussed last. The main issues concerned the unequal relationship between Group 2 research participants (former students) and me (the practitioner/researcher). Other issues related to the possibility of coercion; the need to ensure voluntary participation and informed consent; the right to be excluded, and the avoidance of harm. Measures taken to ensure that this study was ethically sound were explained in detail.

Chapter 2, the Literature Review, described the conceptual background to this inquiry and developed a conceptual framework for the research. This chapter provided and justified a methodological framework. Chapter 4 will present Stage 1 of the research, and contextualise the project through staff comments on the research-site.

4.0 Research Contexts, Students, and Flexible Learning Environments

The aims of this chapter are to contextualise the research by situating it in a real classroom, identify the problems that the educational design research (EDR) interventions were designed to fix, and introduce the online platform that served as an anchor for flexible learning environments. The research context begins broadly by highlighting a connection between the English Language Intensive Courses for Overseas Students (ELICOS) industry in Australia and higher education. The focus then moves to an Australian language centre specialising in transition education. The nature of this centre is explored via reference to data generated from one-on-one interviews with teaching staff and managers. The focus then narrows to an intensive International English Language Testing System (IELTS) program and to students enrolled in it, which was the immediate context of the research. The use of new media at the school, with a particular focus on uses in the IELTS program, is described, and the circumstances/problems requiring an intervention are identified. Finally, the EDR website (www.english-earth.com) designed to be a platform for the growth of a flexible learning environment is introduced.

4.1 The Wider Research Context

This section describes the broader context surrounding the study; namely a large English-language centre specialising in providing foreign students with pathways into Australian universities. Semi-structured interviews were organised with staff in late 2013, and the data has been used to position the study within a richly described context. The interviews focussed on what staff understood the school to be, on teaching practices there, on how and why new media was used in class, and finally on IELTS students and on the IELTS-Preparation program in particular.

A major aim of Stage 1 of the investigation was to clarify the circumstances that the interventions were meant to improve. I use *clarify* rather than *identify* deliberately, as I had a fair idea of what these circumstances were from my own experience of working at the school.

4.1.1   The business of the college

Students from non-English speaking countries are significant in academic life at Australian universities. This trend seems driven by a commitment to fashioning graduates who are prepared for multicultural/international contexts, and it also seems driven by a need for universities to be independently funded, resulting in dependence on full-fee paying

students from overseas (Leask, 2004). It is certainly true that the capital provided to universities by foreign students is lucrative. For instance, the Grattan Institute reports that much of the growth in enrolments in the higher education sector during the 2000s came from foreign students, "direct fee payments and student contributions, mainly from international students, were 13 per cent of total public university revenue in 1997 (then $12.9 billion), but 23 per cent in 2011, out of a total of $23.7 billion" (Norton, 2013, p. 49-50). The report also adds:

> The need for international student revenue meant that universities became "recruiting" institutions, competing for highly mobile students who could choose not only from Australian universities, but also among universities in several different countries. To ensure and enhance international student income, universities improved and adapted teaching practices, and had to re-examine the provision of many other services. (Norton, 2013, p. 50)

A major way in which universities adapted to the needs of non-English speaking students was by endorsing or incorporating privately run language centres specialising in the development of English-language and academic competency, referred to in the industry as *transition education*. To illustrate, all of the universities that comprise the Group of Eight (Go8)[7] either own such subsidiaries, or have an agreement with, and endorse a particular provider. For instance, the Australian National University promotes ANU College (www.anucollege.com.au), Monash University owns Monash College (www.monashcollege.edu.au), whilst the University of Melbourne has direct-entry arrangements with the Hawthorn-Melbourne English Language Centre (www.hawthornenglish.com). Many other universities in Australia are parent companies for similar centres, or have similar arrangements with other providers. For example, in addition to its flagship Bridging program into the University of Melbourne, the Hawthorn-Melbourne Language Centre offers pathways into LaTrobe University and Swinburne University of Technology as well as other institutions (Hawthorn-Melbourne, n.d., "Direct Entry Pathway Partners").

Even though such centres typically provide a range of second language (L2) courses catering to various cohorts of international students, the vast majority of learners attend because they are pathway students with conditional university offers. Overseas students who wish to complete undergraduate or postgraduate degrees in Australia, and who do not meet the minimum standards of language competency, are given conditional study offers,

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[7] "The Group of Eight (Go8) teaches over 325,000 students. Its members are the leading research universities in Australia" (Norton, 2013, p. 86).

whereupon they may start their university studies once they prove they have met these minimum standards. Students who fall into this category are commonly given two options: sitting a language test and/or completing a University-bridging program.

In Australia, one of the most widely accepted measures of English ability is the IELTS exam. Generally speaking, a score between six and seven (out of nine) is required as evidence that an individual is ready to undertake university studies in English; however various faculties and universities have different standards of entry. To illustrate, an undergraduate student applying to study at the University of Melbourne needs a minimum overall band score of 6.5 in IELTS (Melbourne University, 2013, "Undergraduate English Requirements"), while undergraduate students at LaTrobe require minimum overall band scores of 6.0 (LaTrobe University, 2013, "English Language Requirements"). Whilst it may appear that a difference of half a point is relatively insignificant, it is not, and many students spend weeks in test-preparation courses, and pay thousands of dollars in an effort to increase their scores by exactly this fraction.

Another option is for students to complete a University-bridging program. For example, a student who has been unable to achieve direct entry into an undergraduate course at the University of Melbourne has the option of completing a Bridging program at Hawthorn-Melbourne as an alternative entry pathway. The entry-requirements for undergraduate students for the University of Melbourne Bridging program are 0.5 lower than for direct entry – in almost every case – at 6.0 overall (Hawthorn-Melbourne, n.d., "English Test Score Required") compared to 6.5 overall (Melbourne University, 2013, "Undergraduate English Requirements"). What is more, if students do not make the grade, they may be streamed into a university with lower entry standards.

4.1.2   Views on the organisation

The site for this study was an intensive L2 test-preparation class held in a large language centre specialising in transition education, akin to the types of colleges mentioned above. The EDR interventions cycled through two IELTS-Preparation programs, with each course made up of approximately 18 students.

An important aspect of this research was the site. Therefore, describing the wider research context, via qualitative interview data generated by staff working at the school, was important in terms of "adding to the richness of the data and providing the reader with a detailed understanding of the context of the research" (J. Brown, personal communication, April 18, 2014).

The first major topics that were explored were opinions about the college, and views on teaching there. These interviews were semi-structured, and began with a focus on the nature and purpose of the school. Interviewees (*n = 6*) were asked how they would describe the place to an outsider, what they understood the relationship between the university and the college to be, and what the purpose of the school was. The two themes to emerge from the interview-data were a description of the college as a funnel into degree courses at the university, and general consensus that the role of L2 teachers at the centre was to improve students' English and academic skills.

The six staff members who volunteered to participate were Lucien, Juliet, Abigail, Jane, Amelia, and Robert[8]. They were all experienced L2 teachers (as noted in the preceding chapter), but they had different roles and responsibilities at the time of these interviews. Managers were responsible for overseeing dozens of courses at the centre and they did not teach. Coordinators were assigned to specific streams, such as the IELTS-Preparation program, or the general English stream, and their work was mostly administrative although some taught classes part-time. English Language Intensive Courses for Overseas Students (ELICOS) teachers taught full-time; they planned, prepared (often by creating material), and delivered a variety of L2 courses. Face-to-face classes lasted four hours a day, five-days a week, for 50 weeks of the year. These participants were selected because they had recent experience with the IELTS-Preparation program, except for Lucien. Nonetheless, Lucien did offer valuable insights into the college itself.

All participants described the role of the college as preparing students for tertiary study in Australia, and five participants mentioned assistance with language/academic skills specifically. The data collected described the school as "the first step in a long journey towards university, so we are often their first point of contact, and we feed into the university" (Abigail_ELICOS_Manager); the college is "an adjunct to the university, and its job is to prepare and sort of funnel overseas students through" (Juliet_ELICOS_Coordinator). The purpose of the school is "to provide students to the university, to feed the university, and to organise, or establish, the pathway for students because most of our students go there" (Jane_ELICOS_Coordinator).

Secondly, across all interviews, there was broad agreement around the theme of teaching students and assisting them with language and academic skills in order to help "students transition into the university" (Robert_ELICOS_Teacher). This was,

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[8] Pseudonyms have been used.

unsurprisingly, considered fundamental to the work of the college. Amelia said, "I think part of what we teach is English, and part of what we teach is what you need to know to get through a university course in Australia" (ELICOS_Teacher). The college was seen as important. As Lucien stated, "I imagine that [the university] sees us as very necessary for providing them with international students" (ELICOS_Teacher), and Abigail agreed,

> I think we have a quite important role... Not all students have the offer [full acceptance into the university]. They have the intelligence, they have the qualifications in their own country to enter into the university but their English language isn't up to scratch, so we provide that extra, that language support. (ELICOS_Manager)

Making money was significant. When asked about the primary purpose of the school, one offhand remark was that "the primary purpose is to make a profit for the shareholders, as it is with all companies" (Lucien_ELICOS_Teacher), and the theme of capital emerged in another response:

> We might create a future market for them to come back... because a lot of them come back. For example, a lot of study-group students from Japan – not a lot – but you know quite a few Koreans and Japanese, after being here on a five-week course, they come back to study for their Master's. (Jane_ELICOS_Coordinator)

Most of these participants described the college firstly as a business, "I think the role of companies is to be profitable. I don't see that as a problem, so for me to say that [the college] wants to be profitable is entirely reasonable considering what type of entity it is: it's a company" (Lucien_ELICOS_Teacher). The idea that teaching and making a profit may be incompatible was considered somewhat irrelevant, or even quaint:

> If we're going to talk about: "Should there be private profit within education?" That's a very different type of question, but it's a ship that has long since sailed because universities, colleges, behave very much like profit making businesses nowadays in Britain and Australia.... I think that that's an argument that has been lost, of you know, trying to keep education pure, and away from the corrupting influence of money. I'd say that that's an old and dead conversation. (Lucien_ELICOS_Teacher)

In short, the college was described as the first point of contact for L2 students on pathways into Australian universities; it existed to improve students' English language and academic competency, and its main purpose was to make money.

4.1.3 Teaching at the college

Opinions on how education was understood and/or practiced at the school varied. Some respondents were candid in expressing that they did not know what other teachers did because they had not observed their classes. For instance, "I really don't know how anybody else thinks of it but me (laughs) okay, but I haven't actually ever thought about it. I'm

assuming it's similar to what I think; we're here to prepare them for university"
(Amelia_ELICOS_Coordinator). Similarly, but in response to a question about past use of
technology, "I have no idea what other people do 'cause I've never observed someone else's
class" (Juliet_ELICOS_Coordinator). Another teacher stressed the pointlessness of
generalising about how education was practiced, and highlighted the divide between courses
as they are written and with what actually happens in classrooms:

> Any generalisation is missing the point, and not describing the situation as it is, and really
> about the only kind of generalising overarching thing is the top-down document. But that's
> not the reality of how anyone teaches, that's the reality of what the people who wrote it, came
> up with, during the sessions that they kind of came up with it in, and only that.
> (Lucien_ELICOS_Teacher)

Yet there was broad agreement around the principle that practices at the centre either
are, or at the very least should be, grounded in communicative language teaching (CLT), "I
think the philosophy is CLT; student-centred learning" (Juliet_ELICOS_Coordinator); "it's
communicative language teaching" (Abigail_ELICOS_Manager). Teachers were also
responsible for preparing students for tertiary study, and with introducing them to Western
academic practices:

> In China, for example, they're expected to repeat things. I've actually had Chinese say this to
> me – that you know – we are given lectures, this is what we're told, and then we have to
> repeat it. And they find it first really strange that here, we actually care about what they think.
> (Amelia_ELICOS_Coordinator)

Some participants mentioned the difficulties of actually implementing and practicing
a CLT approach. One reason given was that the expectations and requirements of the
language programs do not lend themselves easily to CLT:

> There's a tension there with our courses, which are very assessment focussed and
> academically themed, and academic genres; writing genres, reading genres, things like that,
> are not the easiest ones to approach with traditional 1990s communicative language teaching.
> They can with some imagination, but it's often easiest and quickest to go... ahhh just do a
> lecture format. (Lucien_ELICOS_Teacher)

Some research participants explained that another reason for these difficulties was
student reticence, "they don't tend to want to do it [learn English] using the methods we give
them in class... they find the communicative side of it very difficult because the language is
so different for them" (Juliet_ELICOS_Coordinator). Although Juliet qualified her opinion
by explaining that she often taught the lowest IELTS classes (intermediate level), and that
people who taught higher levels would probably "have a completely different view".

In the main, there was an acknowledgment that teaching practices were somewhat haphazard, that CLT is considered the best approach to L2 education, and that most teachers either practiced this approach, or attempted to. The school's policy of relying heavily on a flexible workforce was a major cause for this lack of consistent teaching quality, as illustrated by Abigail's comment:

> There is probably a lack of consistency with regards to people teaching. Definitely, it should be communicative language teaching. However, with as many new staff coming on, just getting around, just making sure that everyone's on the same page will take a bit of time, of sorting out, with the massive new intake of teachers. I mean I'd like to think that there is a teaching approach that underpins it, but I'd say, well – communicative language teaching. (ELICOS_Manager)

In late 2013, the teaching department responsible for IELTS and academic English courses had an extremely high number of casual staff. This department, which is just one area from numerous other departments at the college, employed approximately 85% of its teaching staff on short-term contracts, with the vast majority of those teachers being completely new to the centre. "We've got 54 teachers on at the moment, and of those, there's like six or seven contract teachers, probably about ten sessionals who have been here for a long time, and then the rest are pretty much new" (Abigail_ELICOS_Manager). Abigail added that a small number of these new teachers had worked at the school before, but had been away for some time. She also said that this was not unusual, and that the centre was representative of most other schools in the wider ELICOS industry. In other words, most Australian language centres had high levels of staff on short-term contracts so as to enable them to respond to fluctuating student numbers. This was certainly the case with this college; however, according to Abigail, this particular language provider distinguished itself from many others by the fact that much more was expected from both teachers and students since the entry requirements of the university, in terms of language proficiency, were amongst the highest in the country.

At this centre, as apparently at many others in Australia, the number of ELICOS teachers employed at any given time was determined by student-demand, which varies (sometimes considerably) throughout the year. Interview data indicated that ensuring the quality of language courses that rely heavily on transient teachers was challenging, and that this particular college decided to manage the situation by starting to, or more accurately *attempting to* standardise L2 courses. Interestingly, the language of the marketplace emerges yet again in Juliet's comments on this theme:

> Certainly, they've been trying to develop a curriculum that matches the pathways to make it easier for agents and people to understand, the parents you know, *consumers* [my emphasis], basically to understand how their student will travel through the course. (ELICOS_Coordinator)

Standardising courses was seen as necessary for managing large numbers of casual staff. This is reflected in Abigail's view on what ELICOS teachers newer to the centre require:

> They need that sort of direction; what the expectations are of them. And in schools like this, that have a high sessional rate, then you also have to make sure that those are really clear for people who are coming and going. (ELICOS_Manager)

Many interviewees acknowledged that standardising courses was about ensuring minimum standards were met. For instance, Robert said, "I guess one of the benefits is with less experienced newer teachers – if they follow the script – there will be no major deficiencies I guess, that's an important benefit" (ELICOS_Teacher), and Lucien more or less agreed, "I can see that there are attempts to standardise things but I think that when you take on a large number of new teachers, which [this centre] has, then that's necessary. You need to be kind of making sure that everyone's providing minimum standard or better" (ELICOS_Teacher). Providing guarantees about student-ability to the university was also presented as a justification, "you need to be able to make guarantees to the university, and to all the other stakeholders, that you have a consistent standard, so allowing too much freedom means that you don't have – you can't make those guarantees" (Abigail_ELICOS_Manager).

Some participants were not enthusiastic about courses being standardised. One concern was having a core textbook imposed. For example, Juliet stated, "the curriculum team is thinking about, you know, how they can structure the course. They're actually leaning towards textbooks I'm told. They're leaning towards going back to textbooks" (ELICOS_Coordinator). Others were more optimistic, and believed that standardising courses was reasonable as long as there was room to be creative. Jane said, "I think there has been a push towards standardisation of the courses and I hope it will come. [However] I don't believe in straightjackets – when you need to teach this page on this day" (ELICOS_Coordinator). Even though standardisation was seen as reasonable, its purpose was seen as meeting minimum standards and avoiding *major deficiencies*, rather than aspiring to something better. Lucien encapsulated this view:

> I don't have a problem with the idea that they would try to make the course clear and doable for everybody, so that minimum standard is across the board. I personally think that that's a very reasonable approach. As long as there's room for people to emphasise the things that they do well. (ELICOS_Teacher)

What is more, there was some agreement around the claim that the standardisation of courses does not encourage the best teaching. As Robert explained, "I guess it takes away the spontaneity and the individual approach that teachers might want to take.... I think that can often be when the best teaching and learning takes place" (ELICOS_Teacher). When asked whether standardisation ensures high quality teaching, Lucien replied,

> No. I mean, but there's always a tension between lofty goals and doable reality, and when you're recruiting, for example, 20 new teachers from a reasonably small pool of teachers, you may have to compromise on the amazingness [*sic*] – to get the numbers. (ELICOS_Teacher)

He then commented on the ELICOS sector in general:

> I think one of the things about TESOL and ELICOS is that it's very much about dealing with the reality.... It's not about purity, or ideals, because you know – at all levels – because the host-family aren't always the way you want them to be, or the bus driver turns up late for the school trip. It's all about trying to get by, and dealing with what's practical and available. (Lucien_ELICOS_Teacher)

With regards to teaching at the college, the last area discussed was innovation and experimentation, whether this was happening, and if it was being encouraged. As the exchange I had with Robert shows:

> Student Researcher: Do you think there's much room for experimentation and innovation?

> Robert: I don't think so. No, I can't see it.

Another interviewee, Jane, disagreed:

> A lot of teachers try new things constantly, and it's nice. You know, it doesn't happen every day because nobody can come up with something every day, something new, but it's nice to see bits and pieces of new things coming through. (ELICOS_Coordinator)

A major theme evident in discussions about how technology is used at the school, which is the topic of the next section, was the lack of institutional support for teachers. This lack of support also seemed to extend to encouraging, or not encouraging, innovation and experimentation more generally. An important point implicit in both Robert's and Jane's responses above is that teachers either try new things, or they do not, *of their own accord*. There are few, if any, incentives to foster greater creativity and experimentation from an institutional level.

4.1.4 Educational uses of new media at the college

This topic was introduced by asking about the role of new media in education, and whether it was important for language learning. Most people agreed it was. For example, Abigail affirmed this positively:

> Oh absolutely! I think it's the way the world's going. It's the way a lot of our students, you know, feel comfortable with – a lot of the classrooms in the university are moving away from paper materials and so we shouldn't be behind and not be embracing technology because otherwise you're too old-fashioned. (ELICOS_Manager)

From those who saw technology as important, most conceded that it was useful rather than essential. Amelia said, "I think it's useful, I don't know how important it is, I mean people have learnt a language for how many thousands of years without technology?" (ELICOS_Coordinator). Lucien held that technology was often used to simply replicate what was being done, or could easily be done, without it:

> I think that those kind of instant messaging chat boards, for example on a forum in Moodle[9], where you ask other people to write on the forum and then reply to other people. That can be done verbally or with scraps of paper... and the fact that no one needs to log in, no one needs electricity, you don't need everyone to remember their codes; that to me, means that the paper version is superior. (ELICOS_Teacher)

Juliet disagreed with computers being important in L2 education: "I started teaching when we still had a blackboard, so I know I can teach without any technology because I've done it. I don't – my students don't learn anymore effectively than they did in 1999" (ELICOS_Coordinator). Overall, despite some misgivings, teachers, coordinators and managers were generally positive about new media, or more precisely, about the *potential* benefits of new media.

As far as these educational possibilities were concerned, new media was most commonly used to assist with lesson preparation and delivery, as well as a tool for independent study. Lessons were often supported by simple PowerPoint presentations and by pictures/information sourced from the Internet. New media also helped with maintaining variety and interest, and needless to say, with providing a wealth of resources. In other words, students were encouraged to use various websites for self-study and for research, "they can go on the Internet, and get all sorts of information; any information that they need really, I guess. But also, it's good for – particularly for IELTS – it's good for listening and reading practice" (Robert_ELICOS_Teacher). Another perceived affordance was the use of recording software (www.soundcloud.com) that enabled teachers to provide feedback by annotating instances of spoken language. Teachers felt that this allowed students to focus on

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[9]Moodle is a learner management system, or as the web-developers explain: an online "learning platform designed to provide educators, administrators and learners with a single, robust, secure and integrated system to create personalised learning environments" (Moodle[TM], 2014, "About Moodle", para. 1). I have seen Moodle used well only when practitioners had autonomy. This was not the case at the college, and IELTS teaching staff generally avoided it, or their use was perfunctory at best. Nevertheless, there was an expectation at the college that teachers engage with Moodle as part of their practice. In this way, the concept of blended learning was being officially demarcated and standardised across the centre.

improving elements of spoken language like their fluency and pronunciation. In my personal experience however, annotating spoken language was taxing and time-consuming; therefore, such practices were rare and fleeting. Lastly, one teacher lamented that interactive whiteboards were still unavailable. She had seen them used at a conference some time ago and found them inspiring.

In contrast to idealised visions of and opinions on the affordances of educational technology, most teachers and managers (as the following response exemplifies), considered the actual day-to-day use of new media poor:

> I mean, let's face it – look at Moodle; it's a disgusting scrappy mess, it's an embarrassment, and that's been there for four years. And there's been a lot of lip service paid towards Moodle, and yet, how can we have that as it is in its current state? (Abigail_ELICOS_Manager)

Unsatisfactory technical support, and "problems we've had with reliability, access, and things like that" (Lucien_ELICOS_Teacher) were mentioned as concerns, as was the poor standard of the equipment available to students. "The equipment is bad; we never have enough computers. Even these poor computers, with poor Internet, we can't get enough in the ILC. The CALL class computers are not working" (Jane_ELICOS_Coordinator). Jane also reflected on how Chinese students might feel once they arrive:

> They come, expecting, you know, a developed country, and see slow Internet, and lots of software is not available, and the computers are old, archaic. How do they feel? They feel cheated. They didn't expect that. Yes, especially with the money they are paying.... It doesn't improve our image; we're seen as a backward country. And people – I've actually heard students, even now, saying that they're paying $400 a week, and they don't get quality. (ELICOS_Coordinator)

When asked to speculate upon why new media is – generally speaking – poorly used, a lack of any vision, a lack of investment and no support for staff, in addition to general resistance from teachers, were all given as rationales. One manager stressed that these problems were not particular to the college; rather, they were industry-wide. In response to why computer technology was used inadequately, Abigail answered,

> It's probably related to staffing, a lack of a real vision and then the follow through on the vision... [also] there's a lot of unknowns with it all. When I was at a conference in the week, last week, when people were talking about technology, I think a lot of people want to bring it in. They don't really know – it's all very much sort of a new frontier. (ELICOS_Manager)

The theme of teachers resisting, or avoiding, any rigorous engagement with new media was explored in some detail. In some instances, such engagement was seen as extra work, but more significantly, resistance existed because it was seen as a massive change in

terms of teaching practice. Resistance was also present as a result of the problems with reliability, as Abigail continued to explain:

> When you have technical problems, people aren't willing to always be involved in the technology, and it's a big change for people who have been, you know, even in my generation – born in the 70s – it's still quite a big change from classrooms that I remember as a child. It is radically different and people have to be willing to change, and they need a lot of support... Unfortunately I don't think we have the support; enough support in place to really encourage the use of technology in class. (ELICOS_Manager)

Whilst poor training and poor support were common themes, another interesting point was that there was no theoretical justification (at the college rather than in the literature) for the use of new media in L2 education. When Lucien was asked why the use of new media had been encouraged or demanded, he replied,

> I've never seen it spelt out in a way that particularly references research or theory… In fact, no argument has ever been given. The closest I can remember is a reference to a teacher, who no-longer works here, who conducted something with his class on a Wiki and got an enthusiastic response from a class that was otherwise not particularly fluent. But that's very anecdotal; there's no reference to what was produced, whether it has any particular worth; you know – if it got them producing good English, or if the English they produced led to any improvement, or anything. (ELICOS_Teacher)

For Lucien, a theoretical justification was important:

> I'd love to be convinced! But until I am, I'm not convinced. You know, I think many teachers are kind of evidence-based and sceptical in a good way. They want to see, they want to have their mind convinced and until I am – to make huge changes in how I do things – you know, I need to be convinced before I'm happy to do that. I will do it [use new media in class] because, of course, I'm employed. This is not my hobby; this is a job, but to be really happy about doing it, I would need further convincing. (ELICOS_Teacher)

Despite these realities of everyday practice, and great inconsistencies in terms of how, or if teachers engaged with educational technologies, there was a strong official emphasis on using technology in the classroom. From the company's perspective, this would appear to be an important strategic goal as training-days often focussed on new media.

In response to why technology was considered important from the college's perspective, most people agreed that the organisation had to use computers so as to appear cutting-edge. The whole industry uses technology, "so the company must follow along" (Robert_ELICOS_Teacher). Many interviewees also noted that students were familiar with technology, and that this should be accommodated. Nevertheless, the major theme was that the college had to assimilate, that it had to use computer technology because its competitors did. As Juliet stated,

> I think the idea of blended learning is very big all throughout the industry, and I think [the college] feels that in order to be cutting edge, or up with the rest of the industry – not just in Australia – but all over the world, they need to have all of the latest blended learning technology to be at the forefront of teaching and learning. (ELICOS_Coordinator)

Even though the college claims to aspire towards excellence with regard to embedding new media into its courses, it would appear that the rhetoric is often at odds with the reality:

> As for technology, I think probably the biggest way that technology has been introduced into the classroom – particularly for IELTS – is the fact that we have laptop projectors. Now I don't write on the board anymore, I tend to type everything. Um, but – yeah – that's probably the biggest change. But using it as a glorified whiteboard isn't really groundbreaking, is it?" (Juliet_ELICOS_Coordinator)

The focus of this chapter now turns to reporting data on the immediate research context – the IELTS program and IELTS students – and to the needs/problems that the EDR interventions were designed to address.

4.2   The Immediate Research Context: IELTS-Preparation

IELTS is a high-stakes exam that is widely accepted as a measure of English-language proficiency. The test has two streams; the General Training test, which is used for work, or to meet certain visa requirements, and the Academic test, which is used by universities (and other institutions) to determine whether potential students have the standard of English required to commence further studies in Australia. The vast majority of students enrolled in IELTS-Preparation programs at the college sat the Academic test, and many were under significant pressure to pass.

4.2.1   IELTS students

When asked to describe IELTS students, and to explain what motivates them to learn English, teachers and managers agreed that these students were highly motivated. Robert said, "they know what they need to do, they know what they want, they've got their eyes to the future" (ELICOS_Teacher). Many of them were "extrinsically motivated" (Juliet_ELICOS_Coordinator), but many were also far too narrowly focussed on succeeding in the test so as to enter programs for degrees at the university. "They see it as passing exams. They don't really see it as learning English" (Juliet_ELICOS_Coordinator). Many had lost sight of the fact that they needed to improve their English if they were to achieve their goals. Jane described IELTS students as "focussed, but sometimes focussed not on the things they need to be focussed on. I would say their vision is blurred by focussing too much on the mark

rather than gaining the skills they will need" (ELICOS_Coordinator). Abigail summarised this predicament succinctly:

> Well, they're obsessed with IELTS.... They've just lost track of the bigger picture, which should be about improving their English, and they're just purely focussing on this IELTS test. I mean this is what a lot of them are like. It's a tough situation, because we have this IELTS hurdle and students have to pass this IELTS hurdle, or they can't go into the university. (ELICOS_Manager)

Conversely, a few of these students were described as relatively unmotivated. Some felt that if they just turned up to class, their language would improve, regardless of whether they applied themselves or not. Others were content to take their time. In terms of national differences, the IELTS program was described as oddly familiar to Chinese pupils because it is concerned with passing an exam, which was seen as similar to how Chinese students experienced education at home. As Juliet stated,

> I think IELTS is a strange comfort zone for them [Chinese L2 learners]. They find that maybe they feel a bit more at sea in general English because there isn't a very clear aim, and they're used to an exam-based curriculum, so they are a bit more comfortable in an IELTS class because they know exactly what they have to do. (ELICOS_Coordinator)

Juliet also suggested that some students from China were being forced into studying at a foreign university by their parents:

> A lot of our students are Chinese, which means that they're only children, which means that there's a lot of pressure on them... it's kind of important to talk about the Chinese because they do – since the financial crisis – they have made up 90% of our IELTS classes. And I think their parents want them to do a degree at a prestigious university, and so they want their children to do this, but often the students don't seem to really know why they're here, they're not really that interested, they don't enjoy studying. (ELICOS_Coordinator)

That being said, the majority of IELTS students were described as dedicated, focussed, and hard working.

4.2.2   The IELTS syllabus

Even though IELTS teachers often faced demanding students, the course documents were not especially useful. The IELTS syllabus was very poorly organised, and it did not support teaching in any meaningful way. Jane said that she did not "like the course structure very much … a lot of things are missing, and you're constantly struggling to patch up the course" (ELICOS_Coordinator). Furthermore, Amelia "found the syllabus didn't build. It went backwards and forwards – all over the place – so I ended up just doing my own thing depending on the class" (ELICOS_Coordinator). The syllabus was not thematic. Abigail disliked "the way the syllabus is organised because it's not thematic, and it should be

thematic because I think that that's a really good way to develop language, and the vocabulary that I think is necessary" (ELICOS_Manager). The syllabus seemed to have been lazily developed; for instance, Juliet explained that in writing the curriculum, consecutive units were simply chosen from books: "I mean if we talk about the IELTS 5 curriculum, I know that it was designed just to follow the chapters of Masterclass [a course-book] and Sue O'Connell [the author]" (ELICOS_Coordinator). She added that the syllabus was not flexible enough to address student needs:

> The IELTS curriculum – the classes tend to be a one size fits all, which tends to be a problem because, obviously, Arabic students have terrible problems with spelling and writing, and Chinese students have terrible problems with productive skills. (Juliet_ELICOS_Coordinator)

As a result, teachers adapted and redesigned the course, and addressed student needs independently of what was stipulated on the syllabus. Amelia worked, "not directly from the syllabus, but kind of indirectly" (ELICOS_Coordinator), and Jane adapted "the course according to my vision" (ELICOS_Coordinator). Juliet said, "very few people who teach IELTS permanently, consistently here – whether they're permanent or sessional really bother to use it [the syllabus]. We're sort of working without a curriculum" (ELICOS_Coordinator), and Abigail noted that "none of the IELTS team follow the syllabus, essentially" (ELICOS_Manager).

Since these course-documents offered little guidance, one result was great variation in quality. The IELTS program worked well when experienced teachers ran it, and it did not work as well with inexperienced teachers. As Abigail pointed out,

> It works when you've got the very experienced teachers doing what they know, and what they think is right, but when you've got new teachers coming in or less experienced teachers, it does tend to get rather jumbled and a bit confusing. (ELICOS_Manager)

Abigail also cited the expertise and the high levels of commitment from experienced teachers as factors that enabled the IELTS program to run smoothly:

> Abigail: It's definitely the teachers. I think the level of commitment that we put in, with the amount of marking that we put in, and the amount of feedback that we put in, and the knowledge that we have...
>
> Student Researcher: That's the difference?
>
> Abigail: Yeah, and I think that there are a lot of great teachers here, but I think that the teachers who are – who have been on the IELTS team for a long time – are experts in their field, and the students notice the difference when you bring other teachers in who don't have that level of experience. And even then, they may be very experienced teachers, but they may not be very experienced on IELTS though.

During the months of data collection, syllabi for English courses at the college were being rewritten, with a view to becoming more prescriptive and standardised. The IELTS stream was not part of this review because IELTS-Preparation programs were going to cease being offered. IELTS was "seen as something that's got a use-by date on it here. They really want to phase it out" (Juliet_ELICOS_Coordinator). It was going to be an elective, rather than an intensive program of study.

This possibility – speculative at the time of these interviews – had some support amongst staff. IELTS-Preparation was considered pointless in many respects, and University-bridging was considered more worthwhile as a form of preparation for university. As Abigail proposed, "ideally we'd have, we'd get rid of the IELTS hurdle and have direct entry into Bridging. That would be fantastic!"(ELICOS_Manager). Juliet agreed,

> You'd definitely be better doing a 30-week Bridging course than 15 weeks of Bridging and 15 weeks of learning how to describe a graph[10]. At the end of Bridging courses, students have often said to me that they thought the Bridging course was really worthwhile, and they thought that now, on reflection, IELTS was a complete waste of their time. (ELICOS_Coordinator)

The fact that the IELTS teaching teams were not micromanaged was fortunate as far as this research was concerned. These programs worked with experienced IELTS teachers. As a consequence, as long as students were satisfied, experienced IELTS teachers were given, and many took advantage of, a lot of scope in terms of what they did with the course.

4.2.3 New media in IELTS-Preparation programs

Finally, questions turned to whether new media was used effectively in these programs. Many respondents pointed out that it was difficult to use new media in this particular program since IELTS is a paper-and-pencil test. The use of technology was considered more of an ideological imposition rather than something that was really helpful in terms of improving student learning. Juliet identified the key tensions:

> We're supposed to be using CLT here, and CLT – according to CLT – we should be trying to replicate the situation as authentically as possible as the one that the students are going to go in and practice their language. So if we want to say okay the IELTS exam is the authentic situation that they're going to use their language in, then we should be authentically replicating the conditions of that situation in the classroom. So no [technology is not necessary] – other than listening to a CD to do the listening test – there's no technology used in this particular exam. (ELICOS_Coordinator)

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[10] During the written part of the IELTS exam, candidates respond to two tasks. Task 1 is a 150-word description of visual information, typically in the form of a graph, and Task 2 is a 250-word opinion piece in which candidates express a position on a social issue.

Nevertheless, though there was some agreement around the idea that it was difficult to incorporate new media into the IELTS program, there was also an acknowledgement of the desirability of using technology in these courses.

4.3   The Interventions

The preceding sections encapsulated the research context. This was considered important since EDR is responsively grounded. According to McKenney and Reeves (2012), "design research is structured to explore, rather than mute, the complex realities of teaching and learning contexts, and respond accordingly" (p. 15). In line with this perspective, the interventions were fashioned to respond to challenges found at the college, and to improve learning outcomes for IELTS-Preparation students. Many of the features of the EDR site are responses to issues that are particular to the research context. They would have not been possible nor would they have been necessary, had this study been situated elsewhere.

In addition to illustrating the research context and describing the general characteristics of the type of student who took part in the study (in so far as this is possible), the main problems with teaching/learning as well as the educational use of new media were clarified through interviews with staff. These needs/problems were described thus:

◆   Generally speaking, there was little evidence of effective engagement with new media in IELTS programs.

◆   Many IELTS students were extremely test-focussed, and ignored improving language/academic skills per se.

◆   The syllabus did not provide enough guidance. It was not thematic, and it was not designed to build upon language, nor did it rigorously engage with topics.

A theme that emerged from Stage 1 of the research was that many staff members did not regard the use of new media as essential to language learning, and even less so in the context of test-preparation. A few teachers stressed that in CLT it is vital to replicate the authentic language situation that learners will find themselves in. Arguably, from this perspective, using new media in any capacity with students preparing for a paper-based test is theoretically unsound. However, there were also arguments supporting the use of educational technology, more so in general English and Bridging programs than in IELTS-Preparation programs; though, there was a view that educational technology should be used in IELTS as well.

Whilst these are all valid perspectives, this study is underpinned by a claim that L2 courses can be more engaging and more effective when new media is used meaningfully to

extend work done in class. The fact that a high-stakes test preparation course was chosen as the site for the study presented its own challenges, but my contention was that L2 learning could improve with the aid of educational technology in this program too.

4.3.1   Responses to identified needs, problems and circumstances

Ineffective use of new media in IELTS programs was not in itself an issue. It is possible to design an excellent course without utilising technology at all, and this thesis does not suffer from an "inherent positivity" (Selwyn, 2012, p. 9) towards educational media. On the contrary, much of Chapter 4 dealt with technology not being used to any great effect at the college. Embedding new media in L2 courses is by no means a panacea, as the use of technology cannot be divorced from the educational context(s) in which these tools exist. This includes the social and political characteristics of a school, as well as those all too human qualities like goodwill or petty jealousies.

There is a body of literature that lauds the perceived affordances of new media. In this academic genre, claims depicting information technology as "a game changer in higher education" (Oblinger, 2012, p. 37), or as potentially "improving the student learning experience" (Keppell & Riddle, 2012, p. 2), or most strikingly as affording "a quantum leap in learning and teaching" (Salmon, 2013, p. 17) are not unusual.

This study began as an attempt to realise and test such claims, but it was not bound by these idealistic views. And yet, it is important to keep in mind that EDR intervenes with a design to improve an educational exchange, and it is therefore an optimistic, idealistic project from the outset. It has to be. Otherwise, it would be ethically untenable.

What is more, I perceive a resonance between educational technology and CLT. The creation of a website was not done so as to improve how new media was already being used at the college, rather it was an evolution of the research, a *design experiment* that strove to realise some of the possibilities expressed in the literature. In other words, the problem identified was not that new media was being poorly used at the school; the problem was that with a student-centred instructional process, new media had the potential to genuinely improve and enrich learning for L2 learners, and by and large, educational technology was not being used to this effect. This is an important distinction; the EDR interventions began with students as central elements, not the college or practices at the college.

As far as IELTS students were concerned, many were characterised as highly motivated, but extremely test-focussed. Whilst some understanding of the test is useful, and some strategies may be helpful, these students had to improve their English. Many students

also needed to develop their critical thinking capabilities. The website, and the flexible learning environment that grew around it, was primarily designed to address these two shortcomings.

Finally, problems with the IELTS syllabus were addressed; namely, the course was not structured to build and extend skills/language, and it was not thematic. Responses to these two issues were incorporated into the EDR design and started being refined during its second iteration. During the second EDR cycle, the content presented in class became semi-thematic. In fact, a huge amount of work was done in terms of curriculum and syllabus development. These are, of course, important aspects of EDR, and since the IELTS syllabus was in a state of disrepair, this allowed the realisation of these design research elements.

4.3.2   The thinking behind the design of the site

A core component of my research was the co-creation of a flexible learning environment made jointly by the students, and built/guided by me. This process was collaborative. I was responsible for providing a framework on which the site was built. The EDR website was refined through two major iterations, the ten-week and five-week cycles, but numerous minor iterations occurred throughout the process as I responded to reactions and feedback from pupils. Both interventions were undergirded by socio-constructivist learning theories, CLT principles, web/visual design principles as well as "craft wisdom and creative inspiration" (McKenney & Reeves, 2012, p. 13).

Much educational research into new media uses existing software and explores how it has been exploited in learning contexts. This study was different. A website was purposefully built simply as a result of personal and professional interest (discussed in Chapter 3). I believe that a significant drawback with pre-existing media is that teachers and researchers are limited by the functionality that web-designers engineer into their products, and L2 teaching/learning theory does not always inform their decisions. One of the advantages of building a site from scratch is that it provides complete control over functionality, and considering that the concept of design is fundamental to the methodology chosen for the project, I found this important. Having control over all aspects of the design allowed me to use white space, and to put some of Nielsen's (2000) recommendations into practice, such as the focus on simplicity and usability.

The website was restricted to my students, and it mirrored/extended work being done in my classroom, thereby meeting ethical conditions whereby I only collect data from groups

that I had been granted permission to collect data from. Equally importantly, access had to be restricted so as to comply with copyright regulations. This issue is discussed in Chapter 5.

All screenshots in the sections that follow were taken in mid October 2013 – at the beginning of EDR Cycle 1. The website at this stage was rather skeletal.

4.3.3 The EDR website (pre-implementation)

Figure 4.1 shows the homepage that students encountered once they had authenticated for access. The first week's unit of work was uploaded to the Course-texts pages. The five major areas of the site are shown in the top navigation bar, these are: the Classmates page, the Course-texts units, the Forum, the Activities area, and the Self-study area.

The Course-text pages were the most time-consuming to create. They were also some of the most important; I was teaching students who were under great pressure to pass the IELTS exam, and they had very little time for activities that were irrelevant in terms of preparing them for the test. If I was to succeed in nudging them towards engaging with each other online, I had to convince them that they would benefit from such engagement. The result of this thinking was the creation of these Course-text pages, where all key material presented in-class was uploaded.
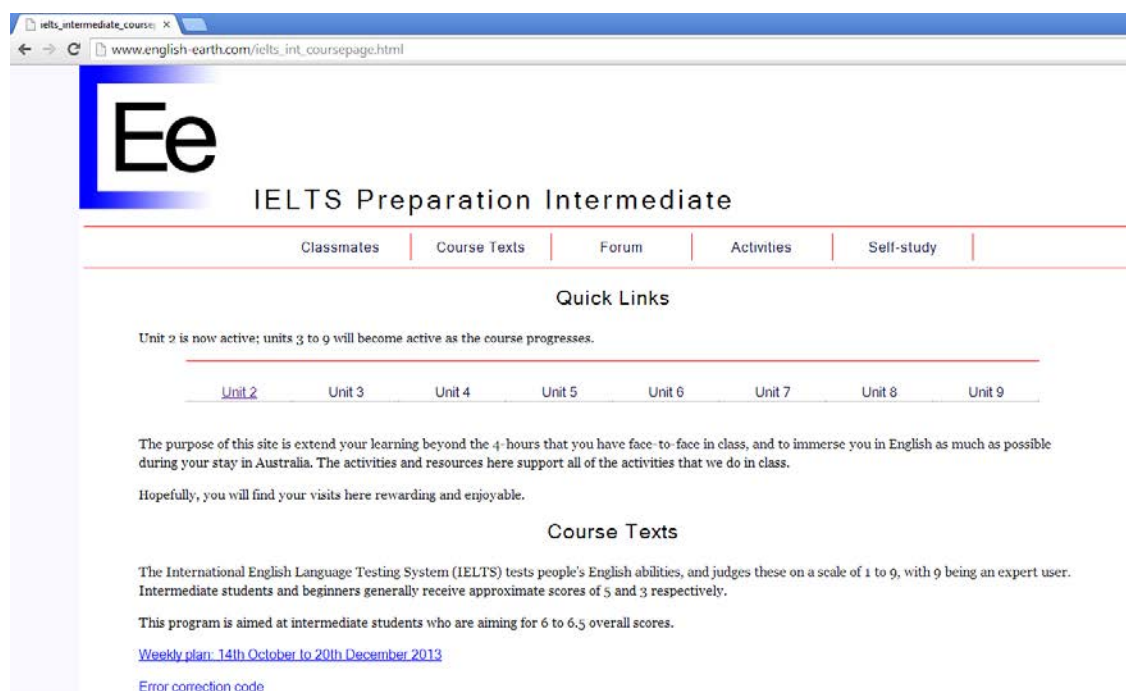
Figure 4.1: Course-texts pages (Oct. 2013). Once students entered their usernames and passwords, they encountered this homepage every time they accessed the site. Images of how the homepage changed are shown in Figure 5.2 for EDR Cycle 1, and in Figure 5.10 for EDR Cycle 2.

As the course progressed, different units of work became active (i.e. Unit 2 became accessible in Week 2, Unit 3 in Week 3, and so on). The EDR website helped to structure

course content. White space, clear succinct language and simplicity were fundamental design elements. Foreign-language students already had a lot of information to deal with; one of my tasks was to assist them by only placing useful, comprehensible, and relevant information on their screens. Easy, straightforward navigation was at the forefront of my thinking.

The Classmates page shown in Figures 4.2 and 4.3 was designed to foster a sense of community, and this was where students created individual online profiles.
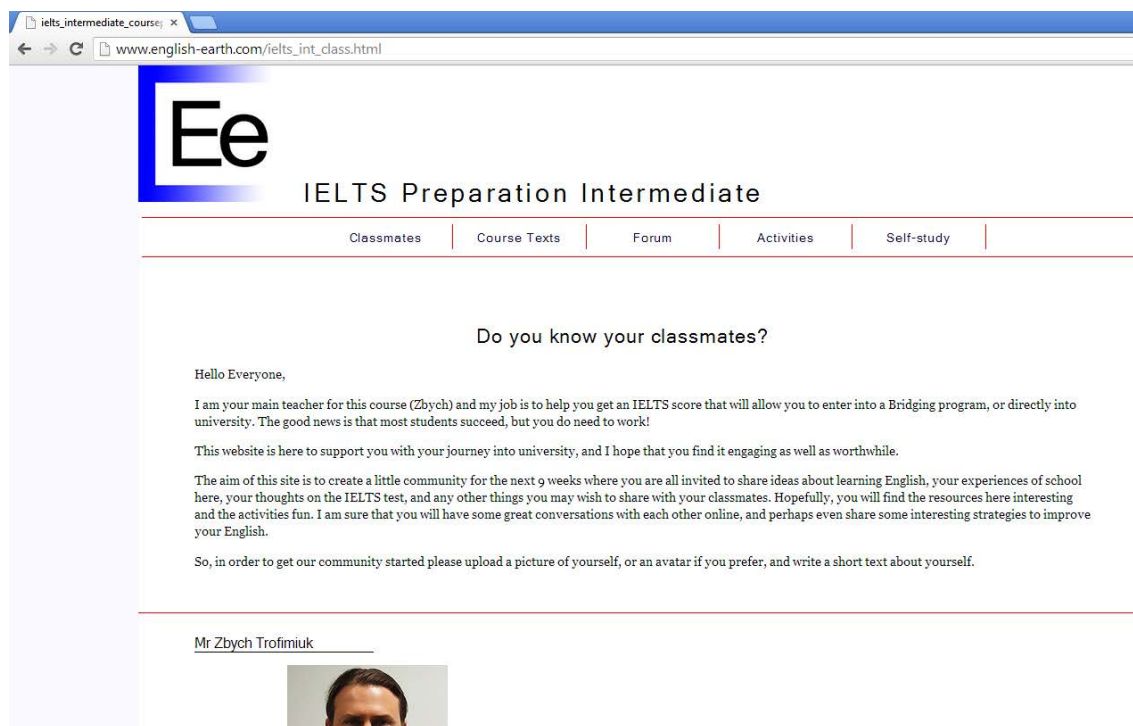
Figure 4.2: Classmates page (Oct. 2013).

The first profile was logically my own, and it served as a model. I told my students that they could use an image of themselves, or an avatar if they preferred. The important element was to create something personal so that they stood out from one another.
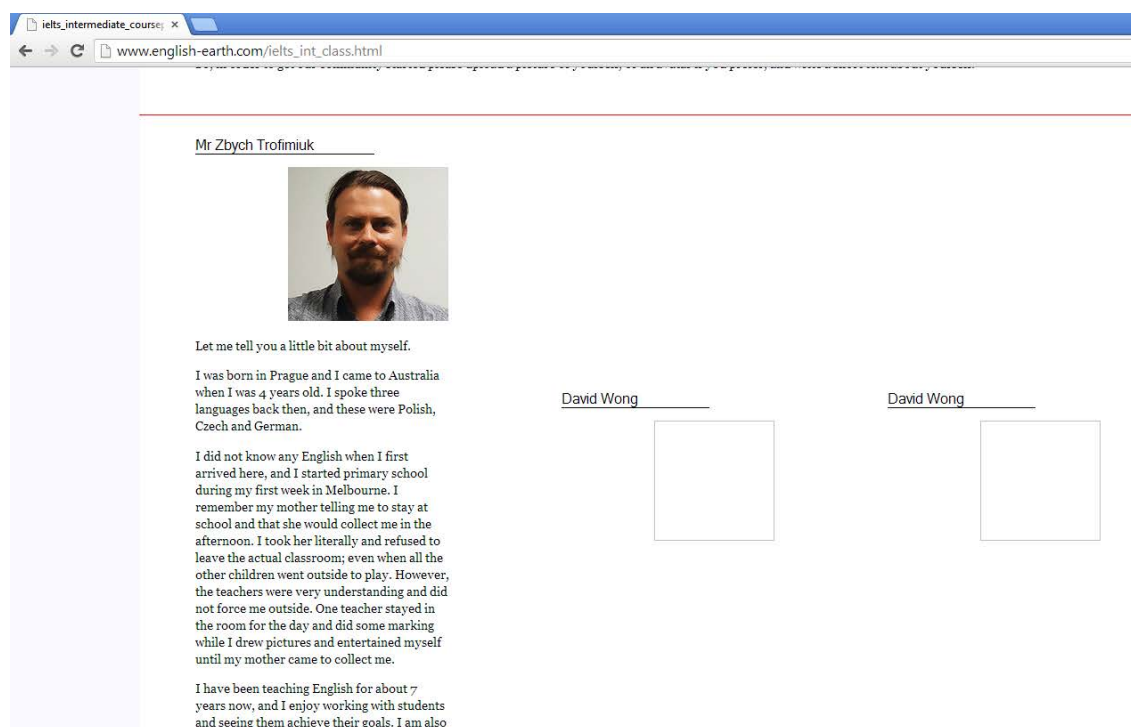
Figure 4.3: Classmates page. A template was created, i.e. a model of what I wished this page to be. Students soon populated this space.

The Self-study area was also bare when the first EDR cycle was launched in October 2013. It functioned as an online library – a central repository for links to other resources. An important consideration was to avoid simply dumping content. Worksheets and/or classroom activities with manageable options were developed to support items that were made available. Similarly, the Activities area was also under-construction[11] when the first EDR cycle began. The idea was to have a space where various student-generated artefacts could be uploaded and shared. Different challenges and activities were also promoted here. In time, other elements (like a notice board and examples of student writing) were added to this page.

As with the Course-texts area, the Forum was another crucial element. Here, students were given opportunities to work with each other online. The main purposes of the Forum were to address the need for deeper critical thinking skills, and to extend learning outside of the four hours students already experienced in class (and thus exposure to/use of English).

Vanilla was used for the Forum (www.vanillaforums.org). Vanilla is a free community-built open source piece of software that can be embedded into and customised for any website; it was very useful.

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[11] This term is misleading, as the whole site was *under-construction* as the course progressed. There was a very real sense of constructing a group-space during the program – a virtual area where people accessed additional content, shared ideas and deepened their level of engagement with the course. Hopefully, as a result of this process, the student experience of learning English was better, and the language gains were greater.
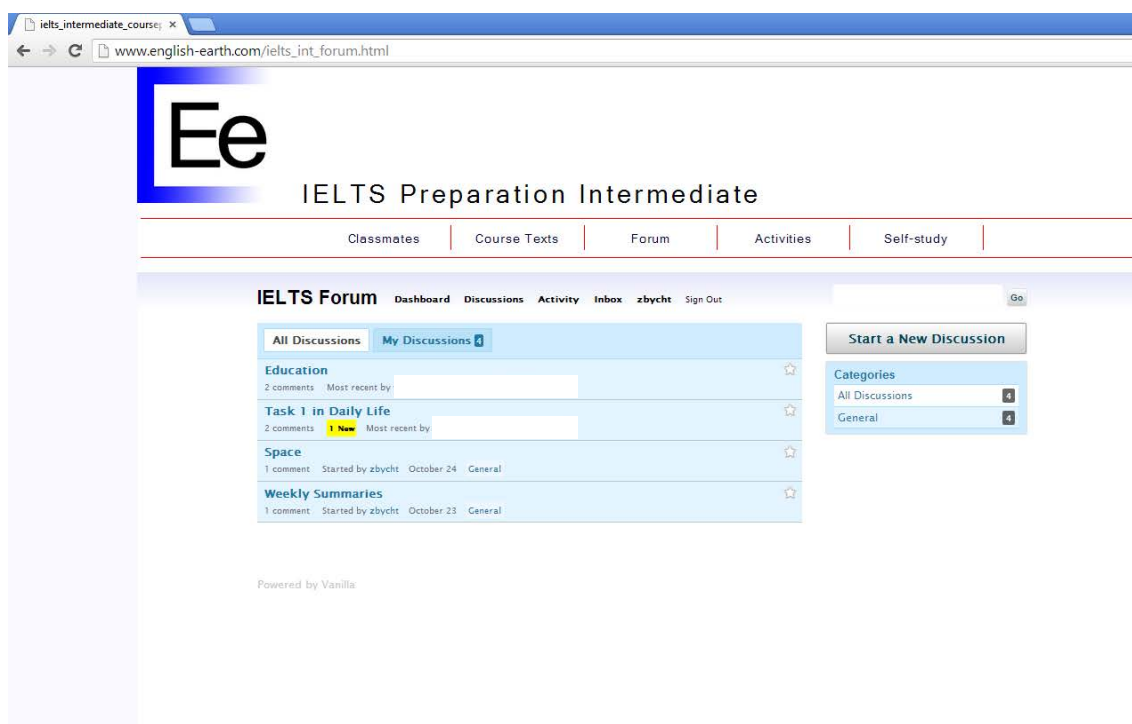
Figure 4.4: The Forum (Oct. 2013). I started the forum with 4 posts.

The topics on the Forum were all related to ideas or themes covered in class. Starting discussions online about classroom-topics was a way of extending topic knowledge, building subject-specific vocabulary, and seeding a collaborative space where ideas could be shared and challenged.

Figure 4.5: "Education" on the Forum. It was possible to embed videos into discussions.

Students were encouraged to make videos, short recordings and/or pictures as part of their responses. They were also asked to provide links to documents online or to websites that were relevant to the topic they were commenting on.

Some class-time was allocated for students to engage with each other via the Internet, especially in the first two weeks, but work on the Forum was predominantly in student hands. They were invited to participate in their own time. Occasionally, additional activities were set as homework in order to promote engagement online. One of these homework tasks was to write a summary of the preceding week so as to encourage reflection and review.

The next section of this chapter describes interactions during typical face-to-face classes. These exchanges were just as significant to this project as the EDR site introduced above.

4.4   Face-to-face Classes and Responsibilities

The EDR website is a visible trace of dynamic flexible learning environments that once existed. The site was closely linked to a traditional classroom, and the rapport that was generated between the students and I, in addition to the support materials/educational tasks that were created to prompt interaction in-class and online were all crucial in attempts to successfully run these two interventions.

The site was not merely introduced to learners; it was blended with the face-to-face component of the course. Screenshots of how the site evolved will be provided in Chapter 5, yet these illustrations are only examples of learning artefacts that were jointly made. The flexible learning environment was not this product, which is no more than a remnant. It was the human ecology that grew around it. It is therefore important to acknowledge the face-to-face component of these cycles.

Students enrolled in IELTS-Preparation received four hours of face-to-face tuition each day. Student numbers were capped at 18, and both IELTS classes (2013/2014) were full during the study. In my professional experience, best-practice CLT demands a high level of focus and intensity during classroom interactions, and these programs were no exception. The classes were very interactive; students often worked in pairs, or in small groups; they were closely monitored and questions were frequently asked. Any materials that were presented in class were personalised, prior knowledge was activated, and any key lexical items were elicited. In other words, strategies were in place to engage students and prime them for the content that followed. Although much of the material used consisted of test

papers, these passages were not 'administered'; rather they were used as springboards into communicative lessons. Students worked individually and collaboratively with various texts until such time as an adequate (if not quite full) understanding was found.

In order to illustrate a typical reading lesson, the stages of a 'test-day class' with reading as a focus are outlined below. On this day, a passage about the history of Cacao was used first. I selected it because I had a few Brazilian students, and I assumed they would know something about this topic seeing as the plant was native to South America. The following steps were taken:

a. An image of a Cacao tree was projected, and students were placed in groups, with at least one person from Brazil in each group. They were asked to share everything they knew about the image. The Brazilian students were responsible for these discussions.

b. A few minutes later, the whole class shared some of the ideas they had spoken about. During this exchange, key vocabulary (about five words) was elicited and explained. Through this discussion, some of the main ideas of the text were previewed.

c. Students were then given a short text (about 750 words) about the Cacao tree. They were to read it and map out the passage by identifying the main ideas of each paragraph and by familiarising themselves with the overall structure of the text.

d. After ten or so minutes, students were asked to work in pairs and compare what they had done. Main ideas were either highlighted in the passage or noted in the margins by all students. I monitored each group by checking progress, discussing answers and answering questions.

e. Then, feedback was given to the whole class, and the key ideas of the text were written up on the whiteboard.

f. Once students had a reasonably clear understanding of the text, they were given IELTS type questions to answer. Reading strategies for dealing with various question types were discussed, and students had another 10 minutes or so to work with these questions.

g. After they had finished, students had time to compare and discuss their work with each other, and ask me questions before feedback was given to the whole class. During feedback, scans of the text were projected onto the wall and students were either asked to explain where they found answers or certain sentences were both read out by me and shown projected on a screen. I circled or underlined relevant words/sentences in the text when giving feedback.

The second passage was about Panda bears, and this time the Chinese students were tasked with guiding initial conversations. All of these micro-strategies were used to maintain interest and to personally engage each and every student in classroom dynamics.

Listening lessons were particularly interactive and student-centred. After the content of a recording was contextualised/personalised, and key vocabulary discussed, students worked both individually and in small groups to check answers. Recordings were commonly

played twice (occasionally thrice), before class-feedback was given. Strong students were given extra questions to work with, and weaker students were given clues, such as the first letter of the word or words they needed to catch. Once learners were familiar with the procedure, I would step outside of the exchange and guide the lesson from behind so to speak. One student would be responsible for writing answers on the white-board, and another student would work with the recording and stop the track whenever the class yelled out for her or him to do so. I intervened only when necessary, to clarify a point or to extend an idea.

The point of these illustrations is to describe how I worked with CLT principles in my teaching practice. These interactions, the classroom atmosphere, and the rapport generated between students and me were extremely important in terms of engendering a willingness to engage with the IELTS program online. If students experienced a well paced, responsive, well-organised, stimulating and worthwhile class, they were simply far more willing to engage with L2 work online, outside of classroom hours.

The two interventions created what were essentially blended learning environments, and as such, the face-to-face elements (though a detailed discussion of these elements is beyond the scope of the thesis) cannot be separated from the EDR intervention itself.

4.5   Summary of Chapter 4

Chapter 4 delineated the wider and the immediate research contexts. The major problems that the interventions were designed to address were identified, and the initial design of the EDR website, built to anchor flexible learning environments, was described.

The chapter began by referring to the financial investment that overseas students bring to the higher education sector. In order to attract foreign students, Australian universities use English-language centres to provide extra linguistic and academic support, and one such centre is the broader site for the study. The immediate context(s) were two IELTS test preparation courses taught by me. IELTS is used to determine whether potential students have enough language ability to commence further studies. The EDR interventions were designed to help students improve their English so they were able to enter university.

The essential features of the college, elicited from staff, were described in order to provide a research-context, and three key circumstances/problems that intervention research could fix were clarified as a result of these interviews. The flexible learning environment (anchored online) was designed in response to these problems. The contention underpinning the EDR interventions was that the educational experience of L2 students would be enriched,

and that learning would both be deepened and extended by engaging with the course in person, as well as extending levels of engagement online via the EDR website, and by collaborating with others. The website was not built to improve practices at the college; it was created to explore the potential benefits of educational use of new media as cited in academic literature characterised by a favourable view towards educational media.

The final sections of Chapter 4 discussed the first generation of the website as it existed at the start of EDR Cycle 1. The website was only an aspect of the flexible learning environment, as interactions in class were closely linked to the online platform. Therefore, Chapter 4 concluded with a brief description of what typically occurred in the physical classroom.

This chapter described Stage 1 of the research by describing the research-site, and by contextualising the inception of the first flexible learning environment. The next chapter considers Stage 2 of the project, which consisted of two EDR intervention cycles. The EDR website discussed in the final sections of Chapter 4 changed, evolved and became refined as an educational resource through teacher-selected class content, and student-generated content. Chapter 5 deals with the learning environment that was built as a result of, and around, this instructional design system.

5.0 The Educational Design Research Cycles: Processes and Data

Chapter 5 explores Stage 2 of the study, focusing on the flexible learning environments that were progressively refined during two research cycles with different cohorts of students. These descriptions and reflections make reference to online artefacts and student data.

The chapter begins with an explanation of why a custom-made website (www.english-earth.com) was built as the central element around which the design research cycles revolved. Educational design research (EDR) Cycle 1 is then introduced, and the International English Language Testing System (IELTS) Preparation program I was responsible for is discussed in relation to how the website was embedded into the course. The copyright implications of uploading scans and recordings of published content, and how these were addressed are also considered.

Thereafter, the focus turns to discussing how each section of the EDR website evolved through the first research cycle. The description of EDR Cycle 1 concludes with an analysis of questionnaire feedback from students who had completed the first IELTS program. The second, and final, research cycle is discussed next. The characteristics of the website during EDR Cycle 2, with a focus on how it assisted learning and teaching, are explored. This analysis is followed by feedback from students who had either answered questionnaires, or attended interviews.

5.1 Preamble

I was drawn to the educational use of new media because I perceived a resonance between communicative language teaching (CLT) and the affordances of Web 2.0. Another reason for building a website was my desire to create an online language school.

This perspective concerning CLT and educational technology, and my personal motivation to become self-employed directly affected the kind of program chosen as the research setting – a high-stakes test-preparation course – and was the underlying reason for my decision to learn web-design. I had already experimented with educational technology in my teaching practice and during the coursework component of the Master's program, and I wished to create something more robust for these interventions. I wanted more control and flexibility, and I did not wish to be limited by the predetermined functionalities of products readily available online.

I considered using Moodle as a platform, and I also discussed the possibility of collaborating on this project with a web-designer. Ideally, the website would have been built for me, and I would have had more time to experiment with learning-theories online. This partnership never eventuated, and when I was looking into Moodle as an alternative, I found that I would have had to have learnt code if I wished to use the software freely. I decided that my time was better spent learning to build websites from scratch, and I taught myself how to do so.

This process resulted in the site shown in the preceding chapter. The EDR website then changed as it progressed through two iterative research cycles, where teacher and student-generated content brought the site to life. However, the screenshots shown here are merely relics of two dynamic and ephemeral learning ecologies that once existed.

5.2 Educational Design Research Cycle 1 (October 14th to December 20th, 2013)

The first research cycle began when the initial design-phase was incomplete; the EDR website was imperfect, but it had to go *live*. The alternative was delaying implementation and that was unworkable. Besides, the elements that were already online were reasonably satisfactory.

In EDR Cycle 1, much time was spent on building the Course-texts pages, uploading class-content, and ensuring that each unit was functional as well as visually minimalistic. Much work went into devising ways to get students to engage with the online environment; all key classroom material had to be scanned, referenced and uploaded each day, and as the IELTS syllabus was essentially random, I redesigned the course. The IELTS-Preparation program I ended up creating was a blended course consisting of 16 hours of weekly face-to-face tuition[12], plus an online component. The EDR website was designed to foster a stronger community of students, to encourage cooperation, and to extend engagement. The site also improved my teaching by providing a framework for the course, and by allowing course-materials to be progressively refined.

A large number of texts, sourced from many course-books, were used throughout the program, and in order to make all of the content manageable for students, links to various units were made available over time. In other words, only the introductory unit was available when students were first given access, and other units were made available at the end of each

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[12] I was the main teacher for both programs (i.e. EDR Cycle 1 and Cycle 2), and I worked with these classes from Monday to Thursday each week. Another teacher was responsible for classes on Friday. Face-to-face classes lasted four hours each day.

week. Because I was teaching L2 students, the use of white space on the screen, and clear succinct instructions/explanations were important, as was ease of navigation between pages. As noted earlier, these web-design decisions were informed by principles of functionality and simplicity articulated most popularly by Nielsen (2000) in his call for simplicity and usability in web-design. Furthermore, L2 learners preparing for a university-entry test were under great pressure; therefore, the content online and the focus of all online activities had to be, and had to be seen as being, immediately relevant.

5.2.1 Complying with copyright

The first page of the EDR site required user-authentication. One condition under which the Monash University Human Research Ethics Committee (MUHREC) approved this study[13] stipulated that all data used in this research had to have approval from those to whom it pertained. Data about students in other courses, or data generated by participants who had declined invitations to participate had to be excluded from the study. Restricting access was one method to ensure compliance with this requirement.
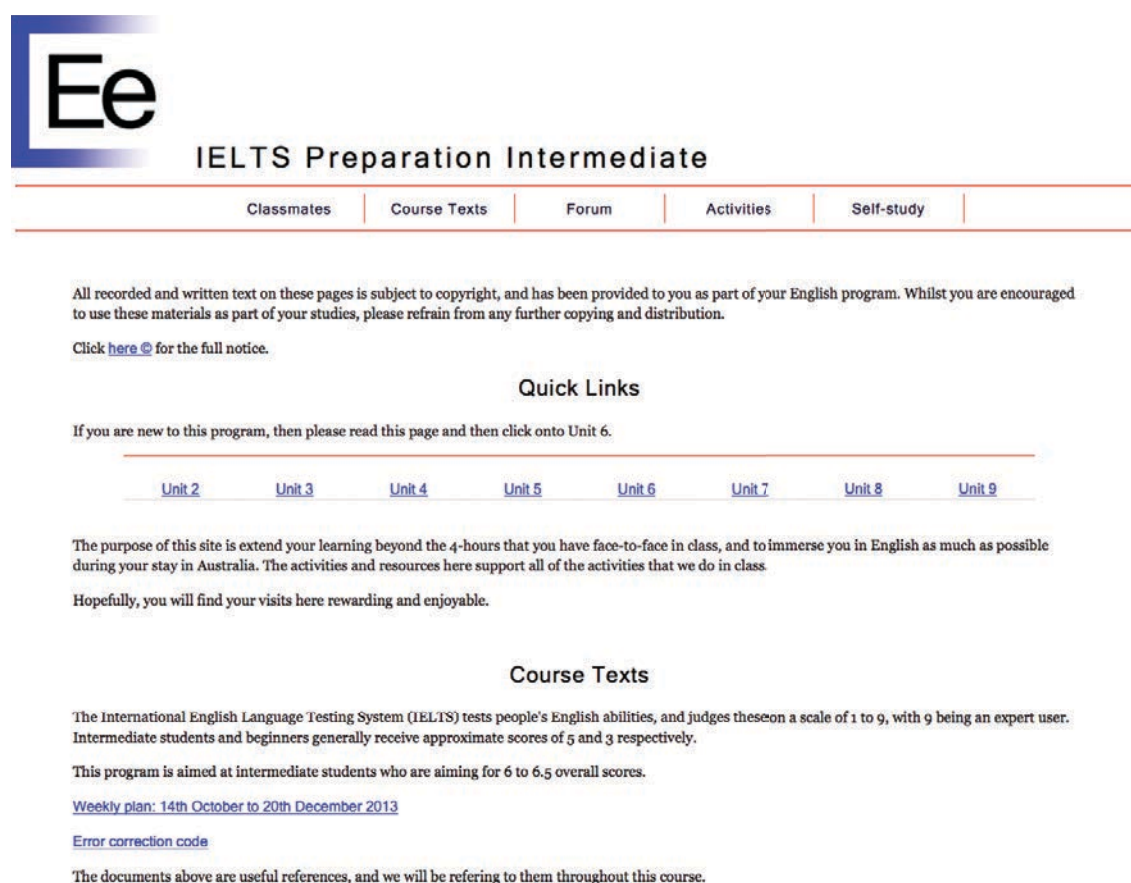
Figure 5.1: Welcome-page (Dec. 2013). Access to the site was only granted to students enrolled in the IELTS program that I was teaching, and to my supervisors.

Access to the website was also restricted because I had to comply with copyright legislation. The materials used in the language program could not have been uploaded onto

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[13] Approval number: CF11/2240 - 2011001239

the world-wide-web as this would have made them available to all people. The texts I used had to be restricted to students enrolled in the program I was teaching.

The copyright act allows educators and educational institutions to make limited copies of text and audiovisual material without seeking permission from the creators as long as this use is fair, and for the purposes of education. All material that was uploaded online was made available to students under Part VB of the act, which permits a reasonable portion of material to be used (Australian Copyright Council [ACC], August 2012), and under Section 200AB. This section provides an exemption from infringement for audiovisual material in certain circumstances that include "loading material onto servers in educational contexts" (ACC, February 2012, p. 5). In order to comply with these regulations, care was taken to use only 10% or one chapter from each and every textbook used in both courses[14]. Similar care was taken with audio recordings, and commonly only one chapter from any book was used in class, and later uploaded online.

Figure 5.2: Course-texts pages (Dec. 2013). A copyright notice was included on the homepage that students encountered when they accessed the site.

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[14] This often necessitated creative solutions as a sufficient number of books were not made available by the centre (i.e. in the syllabus) to allow for compliance, and as a consequence many other resources had to be found or created.

A link to a copyright notice was created on the main Course-texts page, and all materials were referenced. Finally, access to the site was removed once students had completed their studies with me.

The Welcome-page was challenging to construct. I had to learn about server-side programming, and how to link databases to the website. Basic webpages provide static information; users read the content but do not interact with it. My site was more complex. The following sections discuss the five main areas of the site, and provide screenshots of the EDR website immediately after the first research cycle.

5.2.2   Course-texts and Classmates pages

As mentioned previously, the purpose of the Course-texts units was to get students on the website. The EDR website had to be helpful. If it was poorly designed, or if the material and activities were irrelevant, then students would not bother logging on. The Course-texts pages were closely linked to work done in class; it was a way of coaxing students to engage with the site, and once there, to engage with each other.
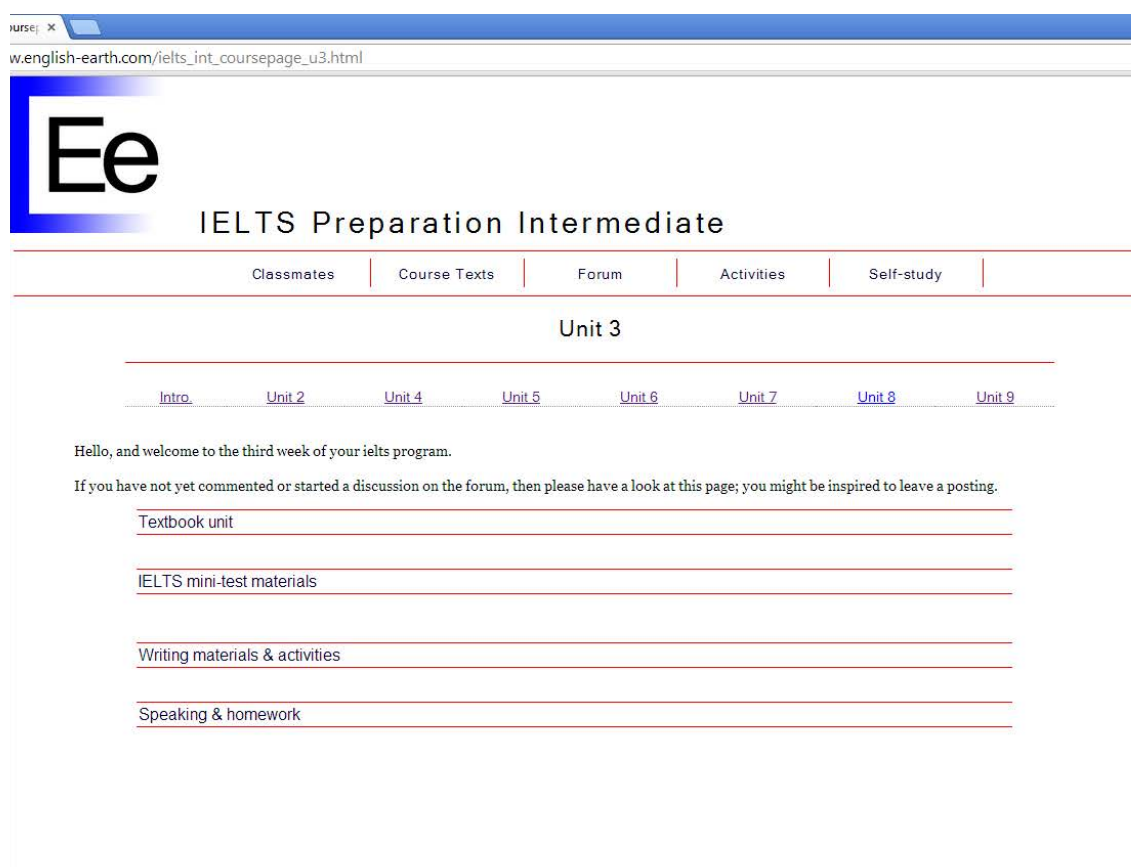
Figure 5.3: Unit 3 (with content-panels closed). This was a typical Course-texts unit. There were two rows for navigating to different areas of the website. The top row takes users to any of the five main areas (e.g. the Forum, or the Self-study area), and the row below allows users to link to any of the nine Course-text units (as long as they were unlocked). Unit 3 (pictured) had four Spry-collapsible panels below these two navigation bars.

EDR Cycle 1 lasted for ten weeks. Students were given access to the site during the second week of the course, and each study unit was *unlocked* at the end of the week to allow students to review the preceding week's work.
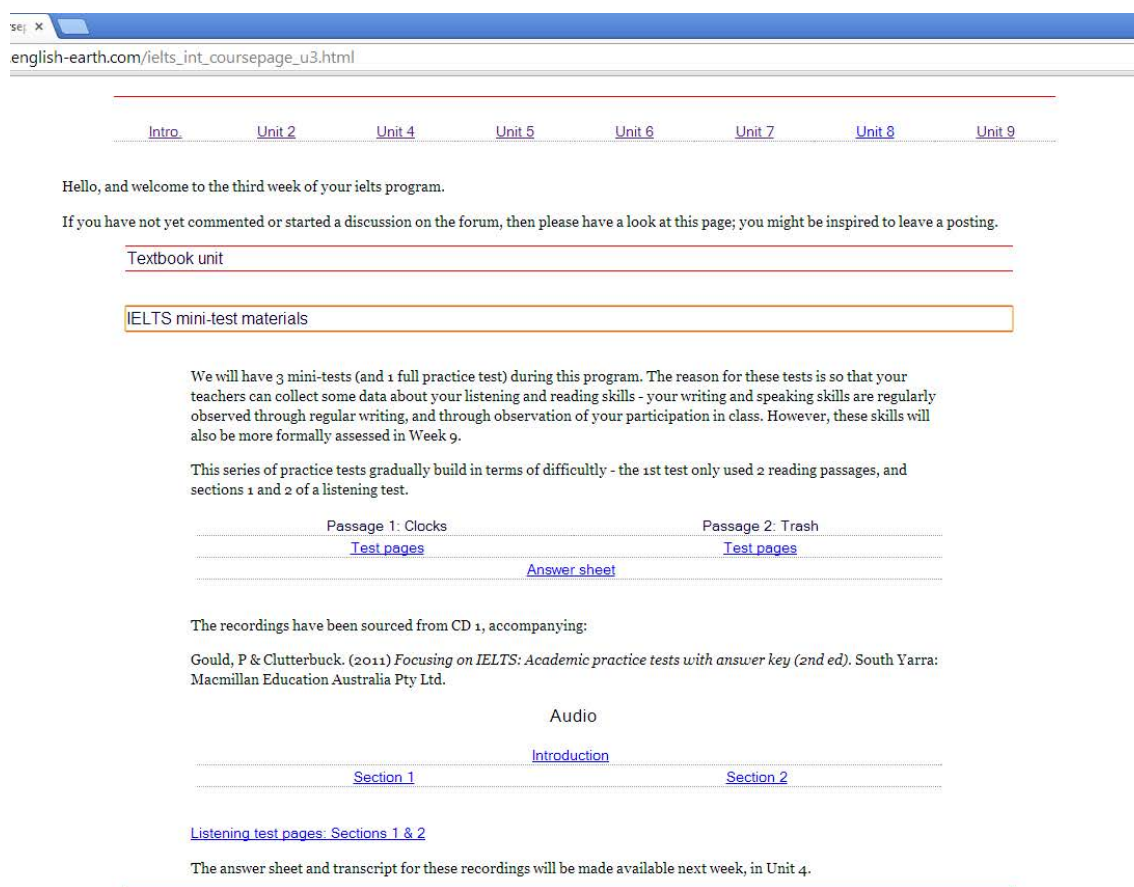
Figure 5.4: Unit 3 (with content-panels open). The second Spry-collapsible panel is open in this screenshot. A short introduction explained the material (reading and listening resources), and why it was included in the program.

The Course-texts units were not particularly attractive in EDR Cycle 1. I was far too busy teaching in class, and scanning and then uploading course-material afterwards to concentrate on improving the aesthetics of the site. In this first cycle, much time was spent building units every week, ensuring that all materials were properly referenced, that I had not exceeded the amount of copyrighted content I was allowed to use, and basically ensuring that the site functioned properly. Once this base was established, it could be refined, which is precisely what happened during EDR Cycle 2.

Nevertheless, the process of developing these pages was already responsive. I purposefully selected materials that targeted specific linguistic features from week to week, and common themes started to run through the course. These decisions were made in response to teachers' criticisms of the IELTS syllabus. And yet, these choices were also

(more or less) an extension of my ordinary teaching practice into the field of online educational design.

On the Classmates page, students used images and text to establish an online presence. They explained who they were, where they came from, why they were learning English, and sometimes, what their aspirations were. Figure 5.5 below shows three student profiles:

My name is
China which is the big countries in the world.

Today I will introduce myself to you guys. I will study in
for three years. So I need 6 scores IELTS then I can go to

For me about my study has some problem. For example when I reading alway feel tired and want to sleep, before I did not have this bad habit. My weakness is reading and writing for this two I alway cannot get high scores. I have to watch TED every day and YouTube, and I think is good at my listening.

For speaking I think not too bad because I try to speaking English every day.

I love basketball and every Saturday and Sunday I will go
with my friends. In the other time when I am leisure that I will play games like League of Legends a kind of athletics online game.

In the end I have summary myself. I am good at listening and speaking and the other two is so bed. A lot of time I have to play basketball and go to gym, and I also play games.

Hi everyone my name is

was working in a hospital for seven years as CT. Technician and I will complete my study in same filed to be Radiologist. I have been here in Australia five months ago. I wonder if I can speak or understand English as it`s my first language.

I was leave in Riyadh which is the capital city in my county. Its modern city with high buildings and towers not as some people thought as desert.

It existing to be a member of this class and I hope it will be useful for passing IELTS.

Hi,   coming from

There are four members in my family. I am studying   my subject is accounting and business. I like listening music, watching movie and surfing in the internet as well as sport specially for basketball and swimming.

Oh. There is one thing I should mention, I love traveling, and I dream to travel all country throughout Europe which must be amazing.

Figure 5.5: Classmates page (Dec. 2013). The names and images of students above have been obscured so as to ensure anonymity. Any reference to the school where this study took place has also been redacted.

The profile model that I had created was helpful (see Figure 4.3). Many students followed a similar pattern with their posts.

5.2.3   Self-study and Activities areas, and the Forum

The self-study area expanded. All websites included in this digital library were placed into three categories: vocabulary building, learning English, and sites for general knowledge. However, the Activities area was sidelined during EDR Cycle 1, as I was focussed on

constructing the Course-texts pages. I did manage to scan and upload good examples of student writing early in the program, and in every instance, permission was sought from students before their work was uploaded to the Activities area. In general, I felt this space had a lot of potential that was not realised in this cycle.

The Forum was another central element. Students could use the EDR website alone for independent work, or they could engage with it communicatively by participating in online discussions. The intention of this space was to provide opportunities for learners to share opinions and challenge ideas about topics covered in class (thereby developing their critical awareness), and to give students opportunities to immerse themselves in English for longer.
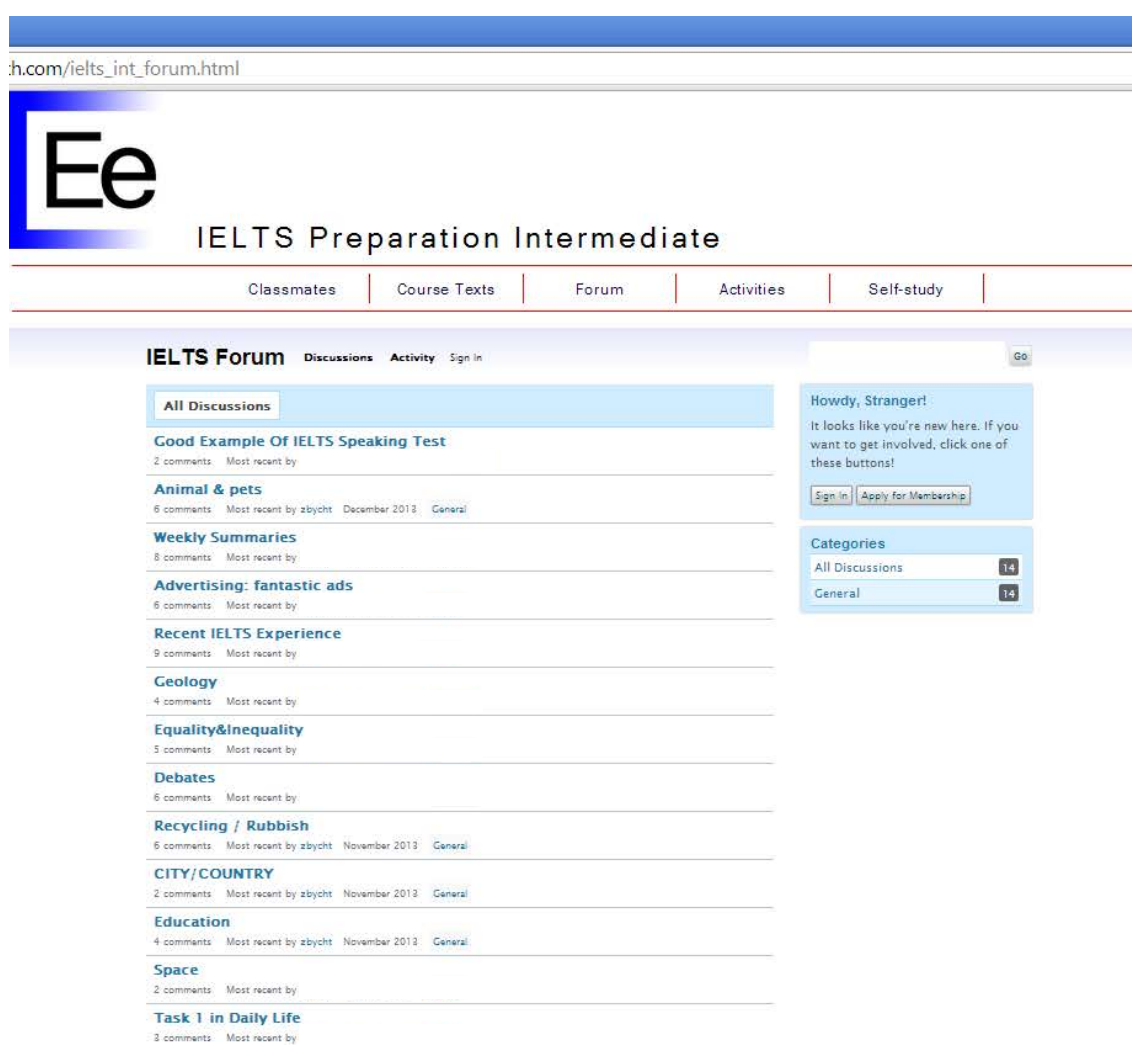
Figure 5.6: The Forum (Dec. 2013). These discussions were predominantly related to topics covered during formal face-to-face classes.

Second-language students in IELTS-Preparation programs often felt that they lacked ideas for writing responses to test questions. Many learners also used their native language

outside of class despite being in Australia; the Forum was a learning-intervention designed to address these two issues.

Figure 5.7: The first weekly summary. This post served as a model for subsequent posts.

One of my initial posts was a summary of the work we had done during the week. These summaries were created to encourage self-reflection and review. Two students self-selected each week, kept detailed notes on each lesson, and at the end of the week, one of these students posted a summary of work that had been covered in class.

few tigers are man-eaters.

Listening

We did a whole listening test on Tuesday and also did some practices on the other days of last week.

November 2013

Summary of Week Six

During the 6th week of this course, we looked at the following things:

Writing:

The task2 was about Violent Games and the question type was give your own opinion. We shared our ideas about this topic with each other, then done it in class and returned in Thursday.

The task1 was describe two process, one was about acid rain, another was volcano. We only wrote the first paragraph of each essay in class and finished them as homework.

We also learned articles rules and some idioms. We guessed their meaning then did more practice.

speaking:

Because last week our class came some new students, we did introduction as speaking on Monday. Therefore, we know more about new classmates.

We also did different part1 topics on Tuesday.

Reading:

Last week we did three reading passages, two in class and one was for homework. There were about early Egyptian society, visual art education and aspirin. We also looked at various question types that are common in the exam.

Listening:

We practiced all sections of the listening test. Worked with various question types.

December 2013

During the 7th week of this course, we looked at the following things:

Writing:

The Task 2 response was about employment of workers from developing countries and all students have to discuss both view. The essay was done in class, marked, and then returned together with an error-correction code. Our job now is to complete rewriting it, and to discuss our work with our teacher.

We also studied useful Academic vocabulary Crossword to gain new vocabulary in funny way in order to improve our writing.

Speaking:

Last week as every week we practice section two and three. The practice consist of groups each group have two students asking each other about different topic. After that Mr. ZBYCHT asked each group about interesting idea they have been discussed to let us know about each other and to gain new idea. We also look at Idioms every week to get high score in Ielts test as well as to learn how native people speak and this week we learnt new idioms such as :

Figure 5.8: Student summaries of Week 6 and Week 7.

The posts above illustrate how a model summary assisted L2 learners with their written work. My original post created a framework for others to follow, and it helped simplify how they presented information by categorising major topics. One student even highlighted key words in the same manner I had in my original post, as shown in Figure 5.8 above.

Figure 5.9 shows a typical discussion thread. All of these participants had allowed their data to be used, so it is possible to show a number of replies to one topic.
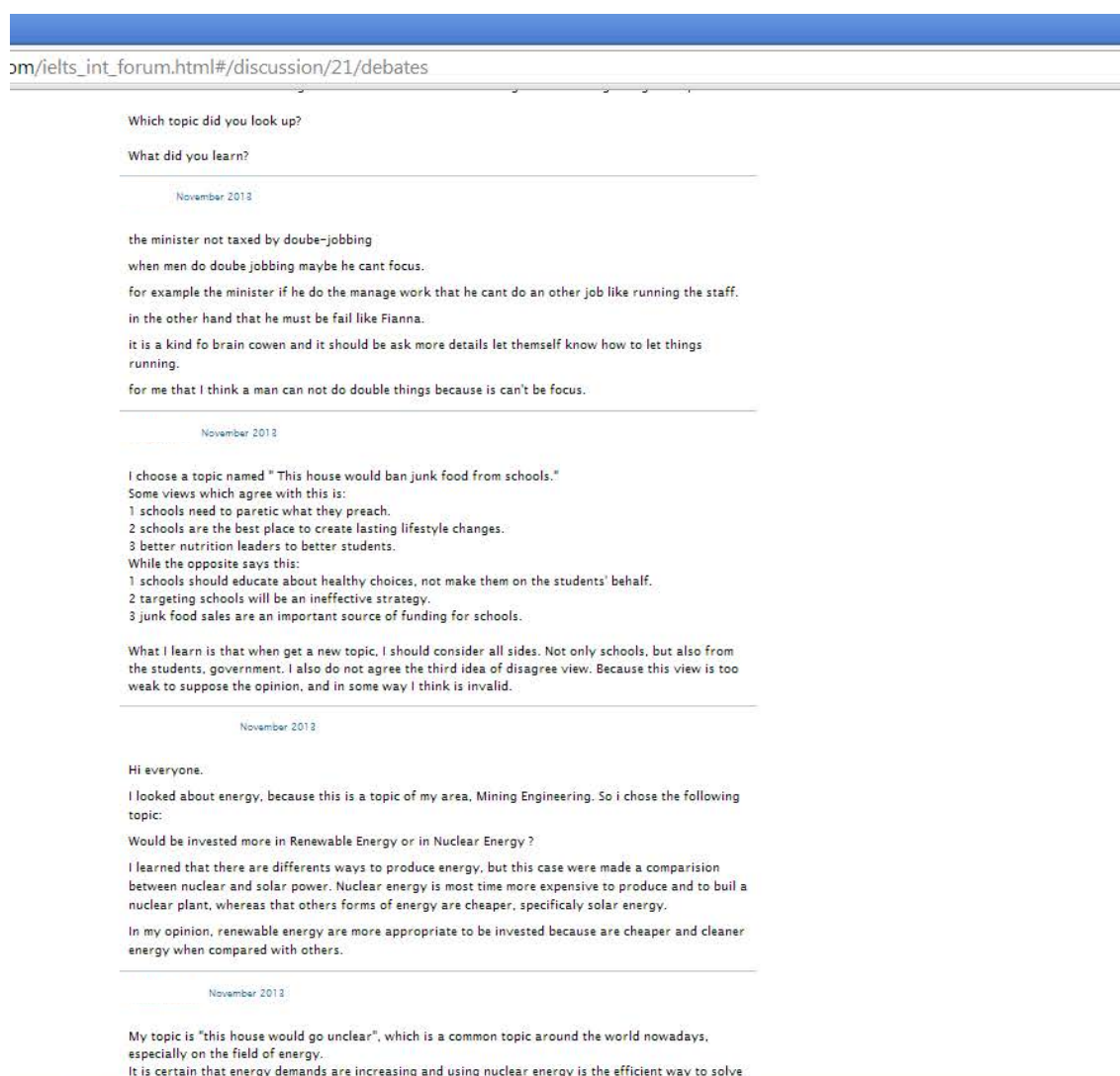
Figure 5.9: A typical discussion on the Forum.

Many posts on the Forum could be characterised as instances of students attempting to engage critically with topics. These pupils read different articles on various social issues, and they summarised the many views that they encountered in their studies, which in turn elicited further responses. Students often expressed their own reaction to particular topics, and reflected upon what they had learnt as a result of doing these tasks. At first students tended to display their knowledge on the Forum, as shown in Figure 5.9, but there were also instances of students developing their knowledge through the Forum.

5.3 Student-experiences of the Flexible Learning Environment in EDR Cycle 1

Students were given questionnaires once the IELTS course concluded. I was interested in discovering reasons for doing a test-preparation program; views on learning English and studying in Australia; views on the IELTS-Preparation course itself – in

particular, opinions on the face-to-face component of the program, and on the use of new media. In EDR Cycle 1, from an approximate pool of 18 students, ten returned questionnaires.

The length of time that students had spent at the college varied, with most having studied for 15 or 20 weeks (the maximum was 45 weeks). In December 2013, most learners had completed ten weeks with me, but a few may have been in my program for five weeks only. Three new students entered the program during the mid-course intake and three left. Since these questionnaires were returned anonymously, it was impossible to identify who had experienced the entire ten-week course, and who had only been there for the latter half of the program. These details are interesting in so far that some questions asked about technology, teaching and learning more generally to compare this program with other programs at the centre. Responses would have been invalid if students had only experienced my program. As it stood, all respondents had spent at least five weeks, and often more, in other classes.

5.3.1 Learning English in Australia and the IELTS program

The ten students who returned questionnaires after the first research cycle have been assigned the label *Cycle_1* in order to identify them as EDR Cycle 1 participants, and the roman numerals *i* to *x*. Respondents[15] (*n = 10*) explained that they were in the IELTS-Preparation program in order to "advance [their] education" (EDR_Cycle_1_Student_vii). One stated that they "would like to study abroad" (EDR_Cycle_1_Student_i), but most said, explicitly, that they were doing the course to pass IELTS in order to enter university.

In reference to learning English, nine enjoyed learning the language. "Yes. I like learning English because it is a popular language and it is an international language" (EDR_Cycle_1_Student_ix), and somewhat more amusingly, "if I don't like it, why I come to Australia?" (EDR_Cycle_1_Student_viii). One person said they did not enjoy studying English, and another qualified their statement, "I like, but it depends who is the teacher. I had big luck with [the main teacher] in this course" (EDR_Cycle_1_Student_iv). When asked more generally as to why they were learning English, in contrast to preparing to pass a test, many learners reiterated that they had to study the language in order to enter university, and the themes of future employability and to a much lesser degree personal development/interest also emerged.

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[15] Since upper-intermediate L2 students generated this data, some errors in expression persist. The adverb *sic* has been used judiciously; when it has been used, it has been used to add clarity rather than to identify errors as such.

I was curious as to why an Australian degree was important. One student explained that Australia "is a multicultural country, and here I can improve my English and know about different culture and traditions as well" (EDR_Cycle_1_Student_x), and another pupil claimed that an "Australian education is considered one of the best in the world" (EDR_Cycle_1_Student_v).

As far as the IELTS-Preparation course was concerned, the majority of respondents found the course enjoyable, "this course encouraged me to study more" (EDR_Cycle_1_Student_x). They found it enjoyable because of the classroom atmosphere, "I can talk to friends and teachers in the classroom. Atmosphere of teaching is fun and friendly" (EDR_Cycle_1_Student_i), and because of the tasks, "we often do some interesting activities" (EDR_Cycle_1_Student_vii).

In contrast, one student said the course was "so, so" (EDR_Cycle_1_Student_viii), and another found the course enjoyable because it involved "all aspects of the English language, but it could be more dynamic" (EDR_Cycle_1_Student_v). All respondents agreed that their IELTS scores had improved as a result of doing the program, "I think the information that I study is very useful" (EDR_Cycle_1_Student_ii), and the program helped "to improve my English score for IELTS. Because it is make me [*sic*] face IELTS everyday, and I do it everyday" (EDR_Cycle_1_Student_viii). Another student said that their score improved slightly, but "the class not enough [*sic*] to improve your skills" (EDR_Cycle_1_Student_iii). Nevertheless, many learners stated that their English improved because they had opportunities to practice, "I learn English skills every day. I have homework to do every day" (EDR_Cycle_1_Student_i), and they appreciated the information/skills they learnt, "this course gave me a [*sic*] greater knowledge about the IELTS test, as well gave me tools to improve my English" (EDR_Cycle_1_Student_v).

5.3.2 Formal classes

Other questions considered the traditional component of the program. People unanimously agreed that formal classes helped them, "I think face-to-face is a good way to study English because it is good for getting feedback from each other" (EDR_Cycle_1_Student_ii), and "teacher can find and solve some problems" (EDR_Cycle_1_Student_viii). With regard to which specific language skills improved the most, the responses varied, and all four macroskills were cited. When asked to explain why these areas had improved, individual practice was often given as an explanation. For instance, listening and writing abilities developed for one individual "because of use [*sic*] of

the skills that were given in class and self-practice" (EDR_Cycle_1_Student_iv); speaking and reading improved for another person because they were "talking everyday [and] reading more" (EDR_Cycle_1_Student_viii). The quality of the teaching was another common reason for student improvement. "Teacher can use the media to summarise the material very well. Teacher can teach and explain the material perfectly" (EDR_Cycle_1_Student_i). The high level of individual feedback was also noted, for example, writing improved because teachers "can tell you the reason why you fault [*sic*]" (EDR_Cycle_1_Student_vi), and "I can know my article's [*sic*] mistakes, including vocabulary and grammar" (EDR_Cycle_1_Student_vii). Writing skills were developed on an individual basis throughout the program, and *EDR_Cycle_1_Student_ix* appreciated this, expressing that their writing improved because of intensive individual feedback.

Curiously, despite there being a lot of time devoted to work on student writing, one learner felt that their writing abilities developed the least because "this skill isn't so widely trained" (EDR_Cycle_1_Student_v). Similarly, in spite of the fact that reading passages were often analysed in detail, and reading strategies were regularly discussed, one student said that "we don't talk about it [reading]" (EDR_Cycle_1_Student_vii). In fact, when explaining which skill(s) improved least, each student had a different opinion, and this seemed not so much to reflect deficiencies in the course, but more so, personal views on what each individual still needed to work on.

Sometimes, blame for this lack of ability was directed at teaching methods, "the conversations student-to-student is less helpful if I was speak [*sic*] to teacher and he was correct [*sic*] me or advise what to improve" (EDR_Cycle_1_Student_iv), or the environment, "I am not familiar with English [perhaps, 'Australian'] accent" (EDR_Cycle_1_Student_i). Sometimes people blamed themselves, "speaking [has not really improved] because I am very shy to speak" (EDR_Cycle_1_Student_ix). When asked more broadly about aspects of the program students disliked, two people mentioned the focus on academic skills, and one mentioned the fact that learners at this college did not have any breaks between courses. Being disgruntled at having to learn some basic academic skills was a moot point as this understanding was necessary as preparation for tertiary study. The fact that students were not allowed to rest between programs seemed fairer[16].

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[16] The college worked outside of the semester system. Courses were delivered for 50 weeks of the year. People on student-visas were obliged to study when in Australia, and for some, this could mean daily attendance for a year (except for two weeks over Christmas).

Most people replied that they would not change anything about the face-to-face program; two people said that they wanted the course to be more intensive and to have more time in class, and *EDR_Cycle_1_Student_vi* jokingly replied that they would like less writing in the program.

5.3.3　　　The EDR website

Finally, views about the flexible component of the course, the EDR website designed to supplement lessons, were sought. The vast majority of learners found the website "very helpful"(EDR_Cycle_1_Student_viii) for improving English and academic abilities, although a couple of respondents referred to other websites, or to the Internet in general, and one person was unimpressed, "I had known [*sic*] better websites. Sorry" (EDR_Cycle_1_Student_iv). Students used the site in various ways; one enjoyed "exploring the available tools like forums and other websites" (EDR_Cycle_1_Student_v), others engaged with material/opportunities for practicing different macroskills, and one respondent "used this site to do my profile [and] share my point of view with my classmates"(EDR_Cycle_1_Student_x). People appreciated different aspects of the site, and used it to practice different language skills. One student commented that the site "has focus in the IELTS test, but at the same time in the general English skills" (EDR_Cycle_1_Student_v), which was precisely what I was aiming for, and another person said that they liked the Forum "because I can check my idea with all student and review what we study every week. I also like self-study" (EDR_Cycle_1_Student_ix). The forum and the materials uploaded each week for independent study were key components of the site, so it was nice to receive positive feedback on these elements. The one respondent who expressed disappointment with the website explained that it was "almost empty, it has one good part – self learning [but it should contain] more links or helpful information" (EDR_Cycle_1_Student_iv). This student did not use the site outside of class, and *EDR_Cycle_1_Student_iii* did not answer questions about extra-curricula use. All other respondents (*n = 8*) used the website in their own time.

One learner logged on "every evenings [*sic*] to review all of the skills" (EDR_Cycle_1_Student_i), a few others used links in the Self-study area "because these sites are really interesting and helped me to improve my English" (EDR_Cycle_1_Student_v), and some students described posting text on the Forum. "I often use it to share idea about topic with classmate... because it is useful to improve my writing skill"

(EDR_Cycle_1_Student_vii). This person engaged with the IELTS Forum in the manner in which it was intended – to develop ideas for writing.

When asked to consider, more generally, whether their use of technology benefitted their studies, of the eight people who answered this question, all agreed that their engagement with new media helped them. When asked to elaborate, these students explained that technology made studying easier, and they all used computers to study independently online. Asked whether they would like to change anything about the use of technology, only one person said they would: "to increase the amount of laptops, it was regular problem: *no laptops left*" (EDR_Cycle_1_Student_iv). This problem however, was beyond my control.

Students were complementary of the use of new media in this program, compared to the use of technology in other programs. "In this program, the use of technology is more focused than in other programs, not being useless" (EDR_Cycle_1_Student_v); the use of new media was described as "more useful and specific" (EDR_Cycle_1_Student_vi), and "we use technology in this program in good way that improve our skills" (EDR_Cycle_1_Student_ix). All of these students had been at the centre for at least 15 weeks, and thus they had some experience of how computers were used elsewhere at the college.

In concluding remarks, *EDR_Cycle_1_Student_iv*, who was critical of how technology was used throughout my program and quite frank in terms of how the course could be improved, praised both teachers. I was described as "a great teacher, and thanks to him I improved a lot. [My co-teacher] is a perfect teacher too! And except them, I didn't find another teacher that taught good" (EDR_Cycle_1_Student_iv). *EDR_Cycle_1_Student_x* suggested that students could do a whole IELTS test and receive detailed feedback on their performance: "I believe that could be useful, and analyse carefully the situation of students when this is requested and needed, because there different situation and these cases must be analyse of [*sic*] different ways".

5.4 Insights from EDR Cycle 1 for EDR Cycle 2

McKenney and Reeves (2012) state that evaluating and reflecting upon an EDR cycle is partially done to "drive intervention development" (p. 133). Through this process feedback is solicited from research participants in order to help determine what type of changes should occur for the next cycle. Data concerning elements that students disliked about the site, and views on how the site could be improved was sought for this purpose.

Most people said that they liked the site; however, a couple of respondents expressed that the site "could contain [more] IELTS materials" (EDR_Cycle_1_Student_x), and it ought to have "more material about IELTS Task 2, such as ideas for possible arguments" (EDR_Cycle_1_Student_v).

I respected these views, and the feedback helped inform the second cycle of research. There were a number of other ideas expressed as well: *EDR_Cycle_1_Student_i* suggested the site should allow the general public "to register for classes as well", and *EDR_Cycle_1_Student_vii* mentioned that the website could be "more colourful". One person explained that it should have "a section for teachers to answer student questions" (EDR_Cycle_1_Student_vi). From an instructional-design perspective, many of these ideas were worthy of consideration, and some were implemented and others were not; for instance, the site could not have been opened to the public as copyrighted material was being used online. A section where teachers answer student questions was a very good idea, but it had to be considered in terms of practicality. How much extra-time would it take to answer these questions?

As far as the site being more colourful was concerned, this did change and many more images were used in the second research cycle. Lastly, in response to how the site could be improved, one response was "[by] doing a survey like this, but I believe that at the moment the site is very good" (EDR_Cycle_1_Student_x).

Overall, a foundation for creating a working flexible learning environment was established by the end of EDR Cycle 1. The EDR website continued to evolve through the next iteration, and it created a stronger structure for the course. The materials on the site were much more logically connected, building on language skills from unit to unit, and working with major weekly themes. Discussions on the forum were clearly focussed on developing linguistic and critical proficiency, and they became much more closely integrated with work done in class.

5.5   Educational Design Research Cycle 2 (January 6th to February 7th, 2014)

The teaching program was refined and shortened during the second research cycle. Online and face-to-face teaching design elements/practices that seemed unnecessary were discarded, and elements that worked were kept and refined; furthermore, feedback from the previous cycle was incorporated into the design of Cycle 2. Key concepts and major themes were chosen and extended online, mostly through opportunities for students to continue

working with themes from various lessons. Personal critical reflections on what worked and on what could have been improved also influenced the design of the EDR website in the second, and final, research cycle.

5.5.1 Course-texts pages

The Course-texts pages functioned like a digital course-reader. The first three units from this cycle have been selected to illustrate – in detail – how class-material was exploited online in EDR Cycle 2. The Course-texts pages provided a thematic focus for the week, and all tasks were designed in an effort to deepen learning. Each unit exemplifies how a particular theme was either extended through collaborative exchanges, or how an individual student could engage with it independently. These three units showcase the logic underpinning my design decisions, and portray how flexible L2 practice was realised online.

5.5.1.1 *Unit 1: Thematic links*

All students were provided with access to the site during the first week of the IELTS-Preparation program. After logging on, people were taken to the Course-texts pages. Figure 5.10 shows how the homepage appeared after the final design research cycle:[17]
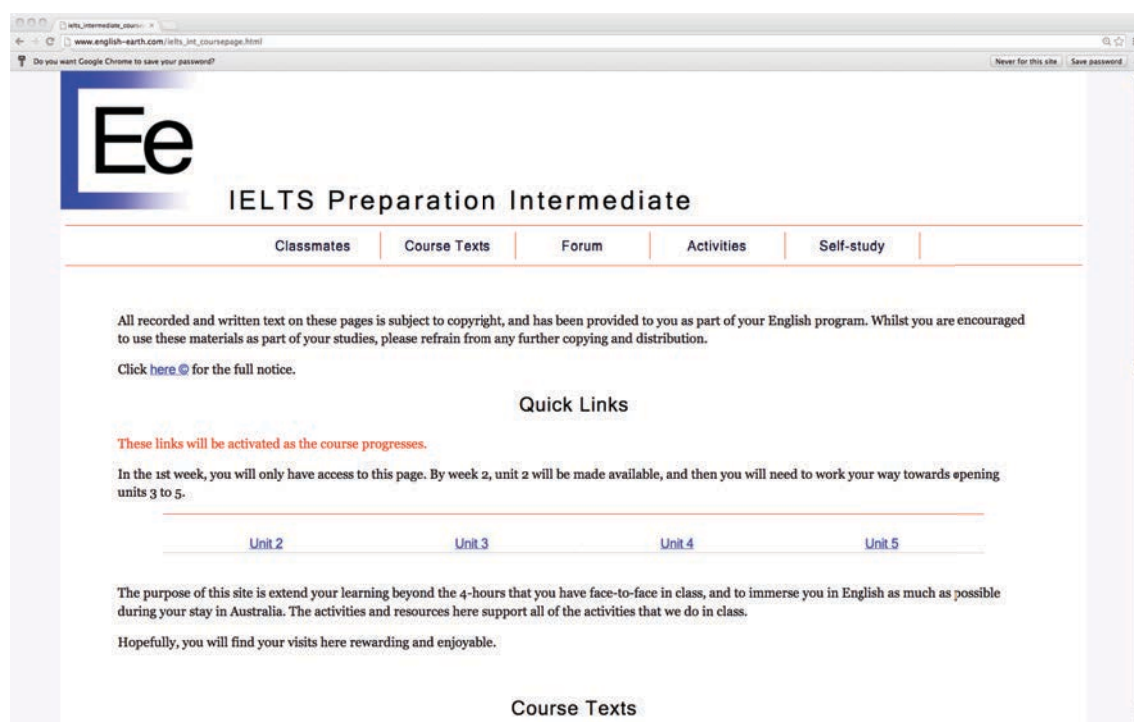
Figure 5.10: Course-texts pages (Feb. 2014). This image depicts the homepage at the end of the second program when all course units were unlocked.

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[17] Earlier examples of this webpage were shown in Figure 4.1 and in Figure 5.2.

The Course-texts pages contained key course-documents like the weekly schedule and links to detailed information about the IELTS test itself, and each unit contained class materials. Figure 5.11 below illustrates how these pages started to mature, for instance, Spry-collapsible panels continued to quieten the visual layout of the space, but images were being used to make the site more appealing. Also in EDR Cycle 2, the IELTS-Preparation course became explicitly *semi-thematic*. In other words, major topics anchored language instruction each week, and all online material mirrored and extended work done in class.
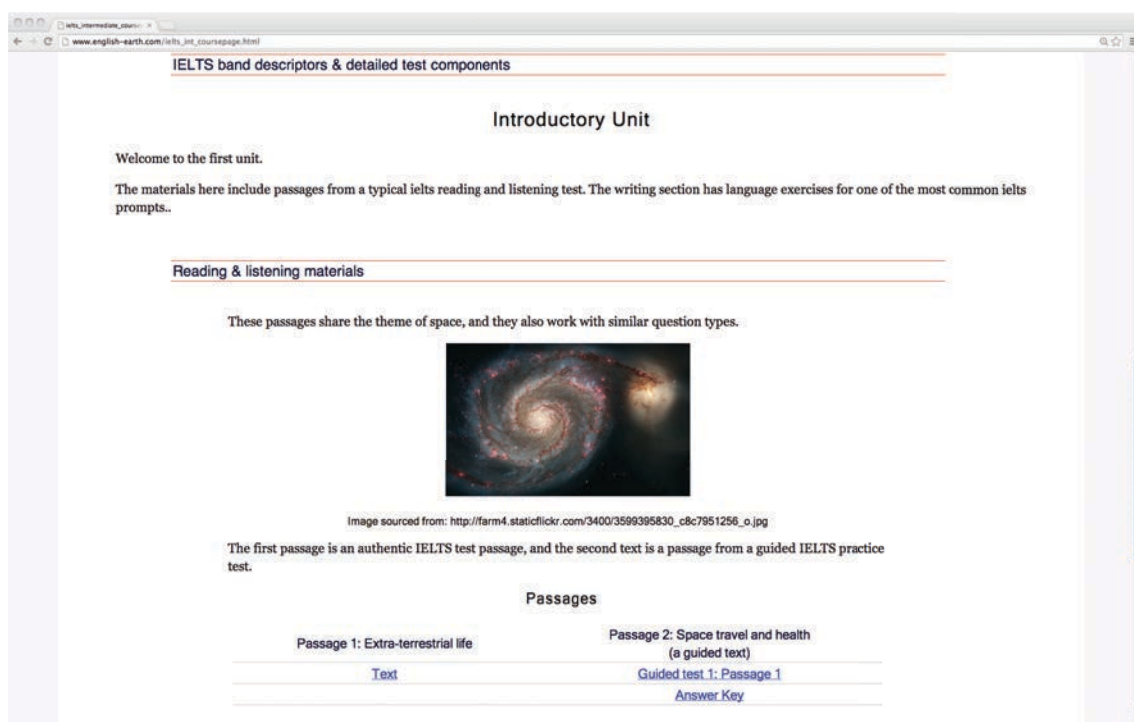
Figure 5.11: Introductory-unit.

Important refinements occurred with the organisation of material targeting the development of listening and reading abilities, and more indirectly, targeting the development of critical thinking skills. The theme for the first week of the program was *space*. The photo shown in Figure 5.11 was not used merely for aesthetic purposes, but to aid comprehension, and to serve as a reminder of what the classroom lesson was about.
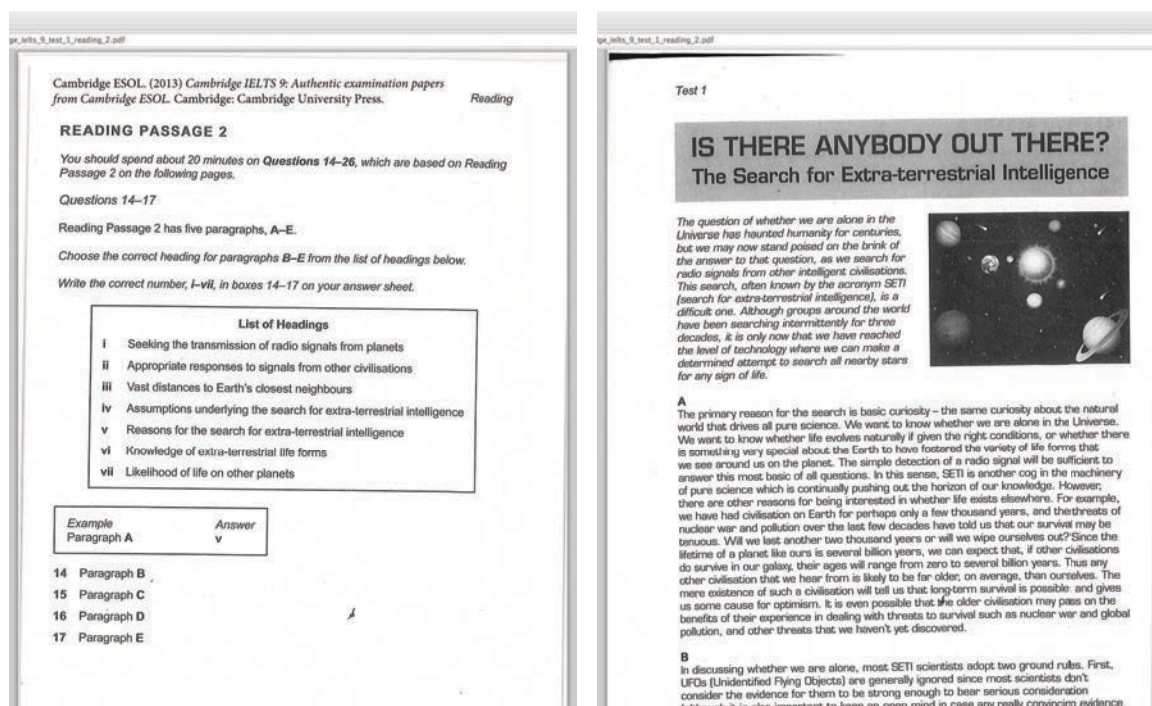
Figure 5.12: An authentic IELTS reading passage (Cambridge ESOL, 2013). The IELTS reading test uses approximately a dozen different question types to assess English proficiency. The question type shown here asks candidates to identify the main idea or purpose of each paragraph by choosing the best heading from a list of possible answers.

These screenshots are remnants of a much more dynamic human ecology. For instance, the texts about space (shown in Figures 5.12 and 5.13) were exploited over two days in class, and then used as springboards to other activities online. The classroom interactions, and the learning(s) that took place there were inseparable from online activities. These interactions were dynamic, intensive and individual. There were 18 students in the IELTS-Preparation program during EDR Cycle 2, and this allowed for much one-on-one work. Capping student numbers and personal interactions result from communicative language teaching (CLT), which stresses the importance of engaging student-interest, establishing clear contexts for the target language, personalising content, making language use meaningful, and building rapport. What is more, the rapport that was built between the students and me, and the rapport that was created between the students themselves, was significant in terms of sparking an inclination to work online.

Figure 5.13: An IELTS reading passage given for homework (May, 2008). All homework texts were guided in that they had hints and/or strategies. In this example, these notes can be seen immediately above the box in the left image, and in magenta in the margin on the far left of the image.

Whenever possible, the themes and tasks done in-class and given as homework were identical. In this case, both texts concerned space, and both texts dealt with the same question type: matching headings to paragraphs. Basically, this was done to give students practice with, and exposure to, subject-specific vocabulary. It also provided students with more practice with particular test-questions and developed reading skills.
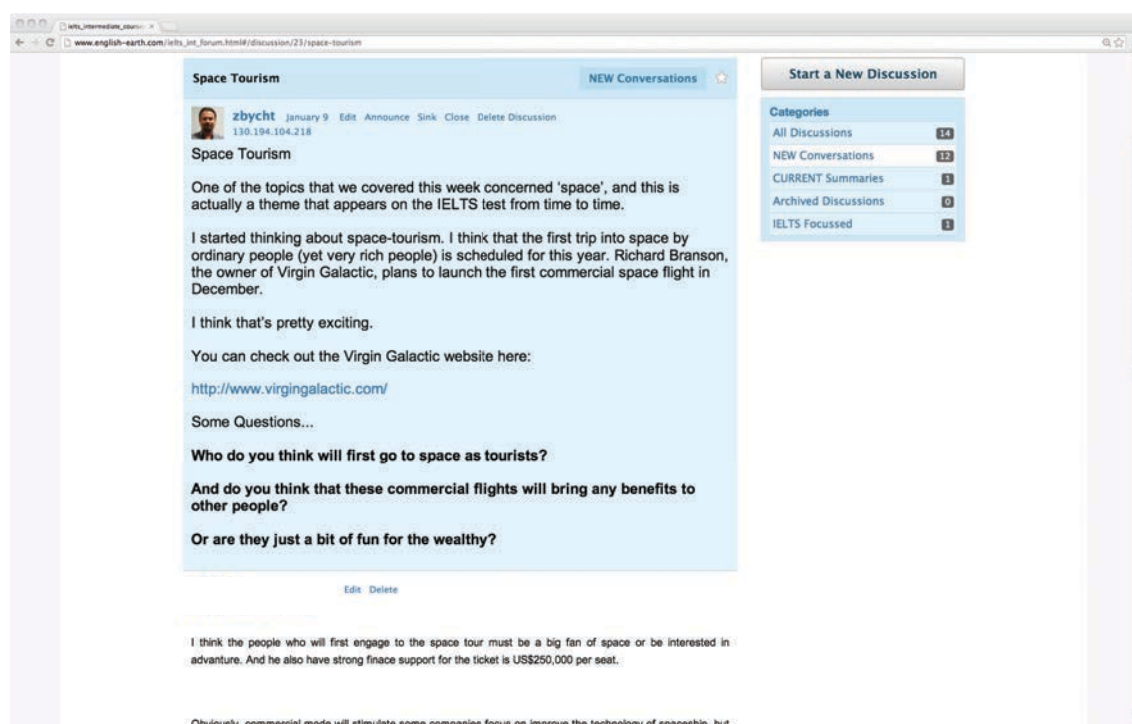
Figure 5.14: Extending the topic of space through the Forum. At first, I would begin discussions with the aim of eliciting student responses. Later, some students started discussions of their own, and I was less involved; control of the forum was gradually handed over to the class.

Major themes, like space in Week 1 or *architecture* in Week 2, were extended in the Forum. Figures 5.14 and 5.15 depict the first forum-posts in this cycle. As already mentioned, the purposes of the Forum were to extend student exposure to the English language – after all, they would be thinking in English and writing their posts in English – and to develop critical thinking capacity. Whenever possible, I would link work done in class with events happening in the real world. I assumed that some students would run with certain ideas and explore them in more detail. Perhaps they would discover facts that they had not known before, or they might think about their own opinions in a different way. I was basically aiming to broaden the viewpoints that were available to my students on a number of different topics, and I was providing a flexible learning environment within which they could find opportunities for further practice.

Figure 5.15: My response in the discussion on space.

Discussions on the Forum also allowed for some fun to be injected into the course. With regard to the response shown in Figure 5.15, I had come across a newspaper article about scientists finding water on Europa (Hanlon, 2014, January 19), which is a moon circling Jupiter, so I placed a link to this article in my post. I then steered students to a movie about the same topic: Europa Report (Browning & Cordero, 2013).

Many IELTS-Preparation students were extremely test-focussed, and these invitations were attempts to get them to *loosen up* and be a little more creative with how they developed their understanding of certain subjects. If students decided to follow these links and watch the movie I had suggested, they would still be learning English, and they would still be developing skills that would help them pass their exams, but they would be doing so indirectly, and hopefully they would enjoy the process a little more.

5.5.1.2 *Unit 2: The structure of the second week of the course*

All students were introduced to the site by Week 2 of the program, and many had started to interact with me, or with each other on the Forum. The Forum and the Course-texts pages were the most important elements of the EDR website. A unit sourced from an IELTS-Preparation course-book was used at the beginning of each week to establish a weekly theme. These units typically had short exercises targeting different skills; they were ideal for work on language and for learning test-strategies.
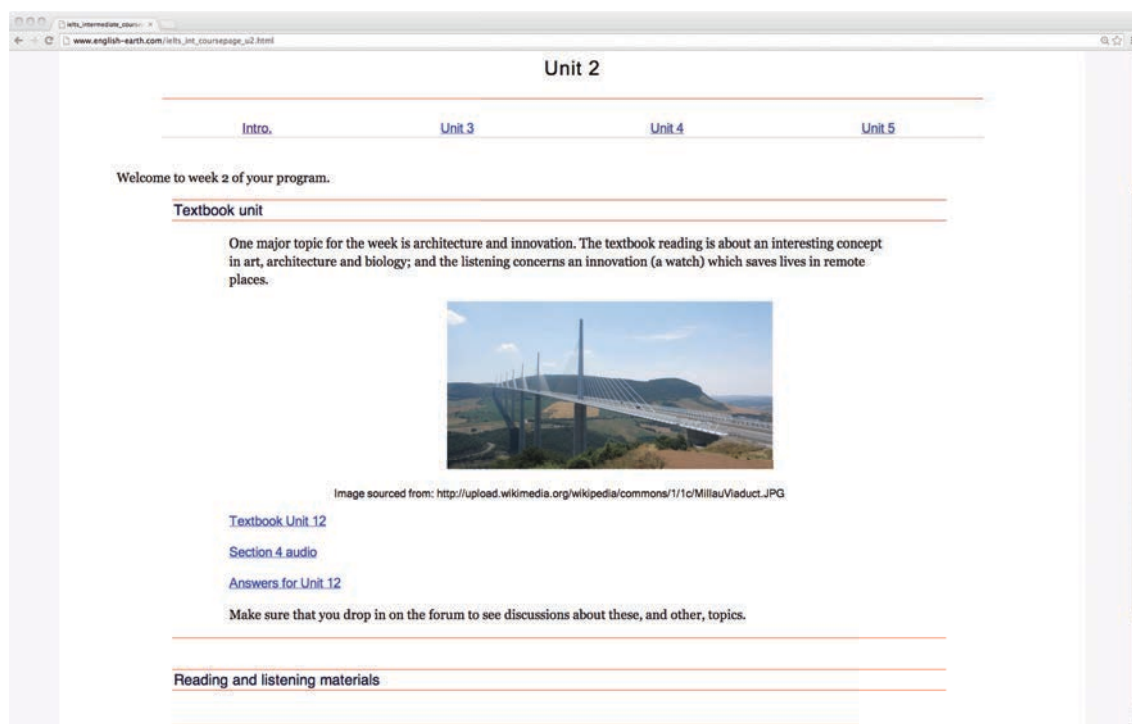
Figure 5.16: Unit 2 (with the "textbook" panel open). Class material, recordings, answers and transcripts were all uploaded to these units.

A key theme in the second week was *architecture and innovation*. The Millau Viaduct was briefly discussed when the lesson-context was being established and when key vocabulary was elicited for a text that students were about to read. An image of this bridge was used online to trigger recollection, and written, as well as recorded course-materials that had been used previously were uploaded so that students could review what they had learnt.
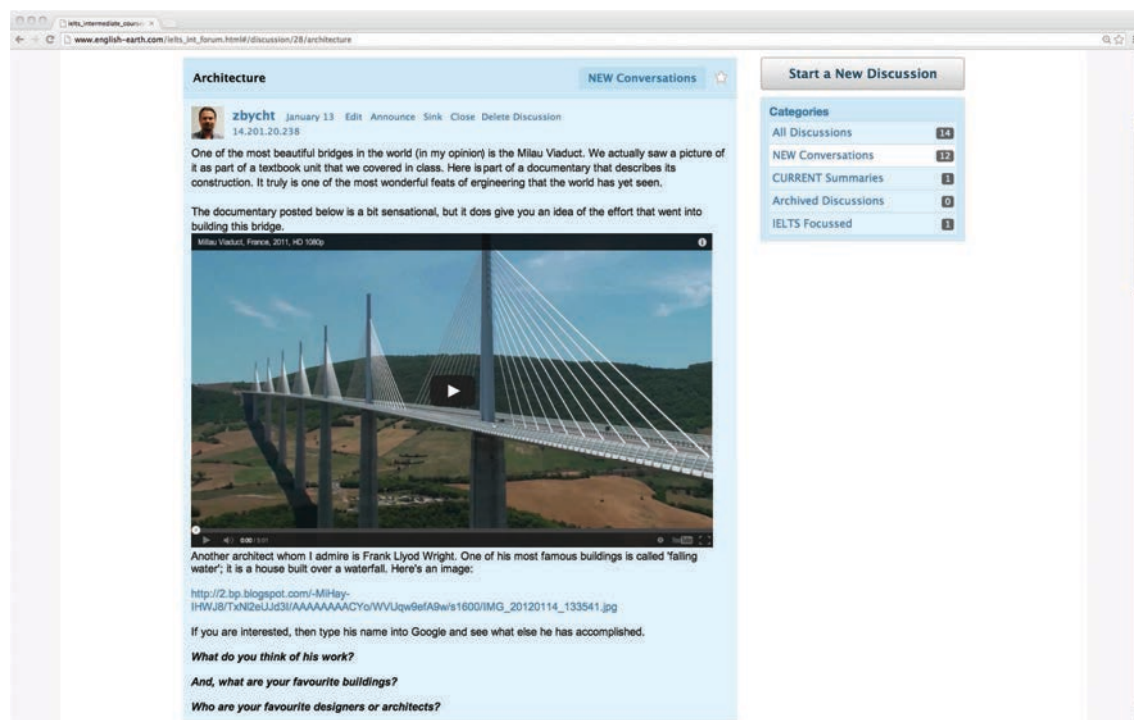
Figure 5.17: A discussion on architecture in the Forum. Whenever I started a discussion, I included questions at the end of my post to prompt student-to-student interaction.

I started a discussion on architecture in the Forum in an effort to extend work on this theme. Weekly topics were also extended in other ways, for instance, the writing tasks were often connected to these themes as this allowed students to recycle key vocabulary in yet another mode. The writing task for Week 2 concerned public housing, which was loosely connected to the themes of *architecture, buildings and innovation*.

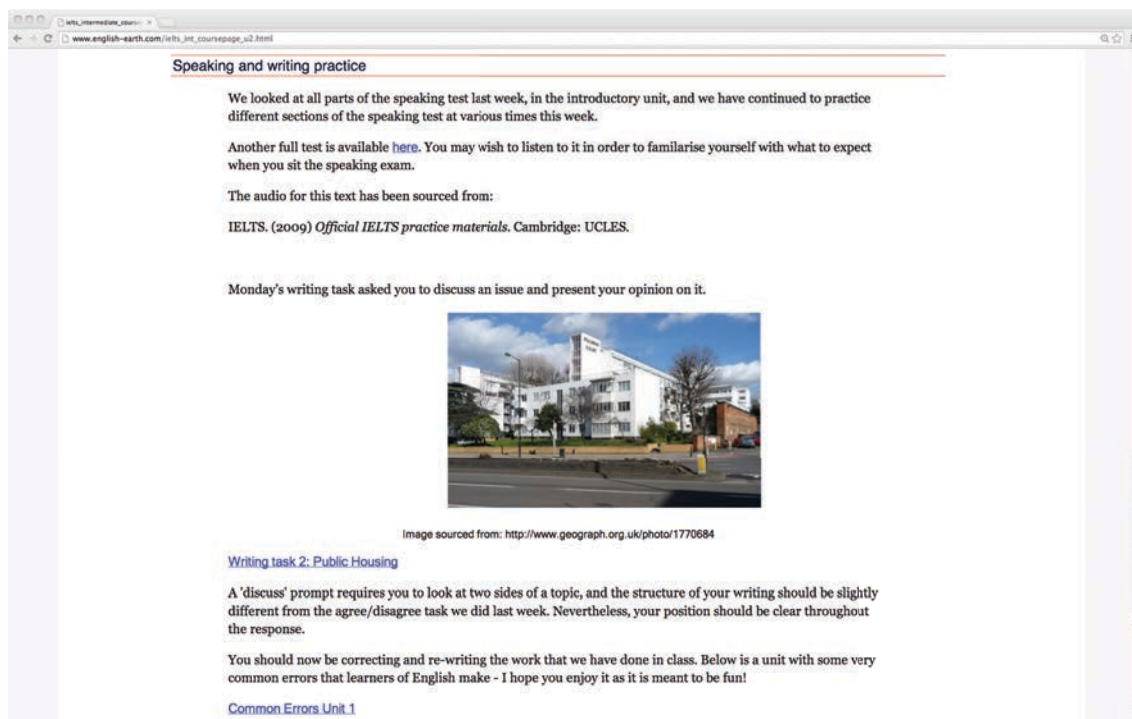**Figure 5.18: Unit 2 (with the "speaking and writing practice" panel open).** The IELTS test requires candidates to write a 250-word response to topics of a social nature. The tasks varied; for instance, candidates could be asked to agree or disagree with a statement, to discuss views on an issue, or to provide solutions to a problem.

One of the problems clarified through staff interviews was that the IELTS syllabus was not thematic, and that it should have been, as this was the best way to teach the language that was needed. Redesigning the program so that it was semi-thematic was my solution. The IELTS course was not completely based around themes because the test itself deals with texts on a variety of topics. As a result, part of the course had a thematic framework, bound by a common IELTS-type topic, and part of the program used unrelated materials so as to authentically reflect the nature of the test.
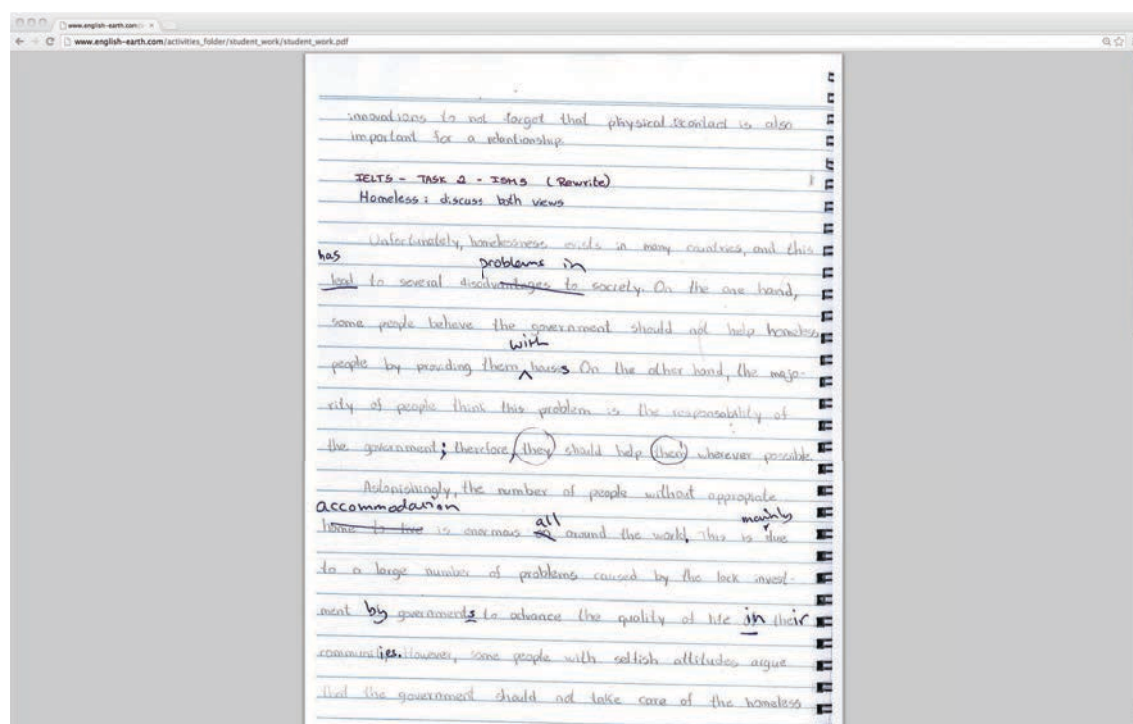
Figure 5.19: Student writing. Good examples of student work would occasionally be scanned and uploaded online. Permission was sought, and the written text was de-identified.

All students wrote responses to the same prompt during class-time. Students worked with these prompts collaboratively; they were given time to discuss ideas, to ask questions and to draft a structure. Afterwards, students were given 45 minutes to complete handwritten compositions.

These compositions were corrected for errors. I used an error-correction code to highlight mistakes, rewrote some parts and provided comments. Using an error-code encouraged students to think about their own writing and to find their own solutions rather than relying on me to give them answers. The corrected texts were returned and rewritten. Once students had rewritten their work, they met with me individually and we discussed their writing in detail. I answered any questions they had, and we found ways to improve the text together. I also identified important areas to concentrate on, such as word-form errors, verb-tense mistakes, the repetition of sentence-types and other grammatical problems. An example of one of these final drafts is shown in Figure 5.19.

Since everyone in class was working with the same topic, uploading examples of how other students dealt with the task was beneficial. Even though these student-models were imperfect, people could still draw information from them and perhaps gain some insight into their own use (or misuse) of the language.

5.5.1.3   Unit 3: Possibilities for independent use of the site

One of the affordances of the Course-texts pages was that it allowed students to revisit audio-recordings. This section highlights in yet another way how a weekly theme was exploited and extended online, and it explains how online materials could be used for independent study. Opportunities for collaborative study around these themes occurred in the classroom and on the Forum. In the third week, students were also nudged towards engaging with and/or continuing to engage with the Forum. A few students had not yet started discussions nor replied to any posts, so they were invited to do so. The theme in the third week was *nature*.
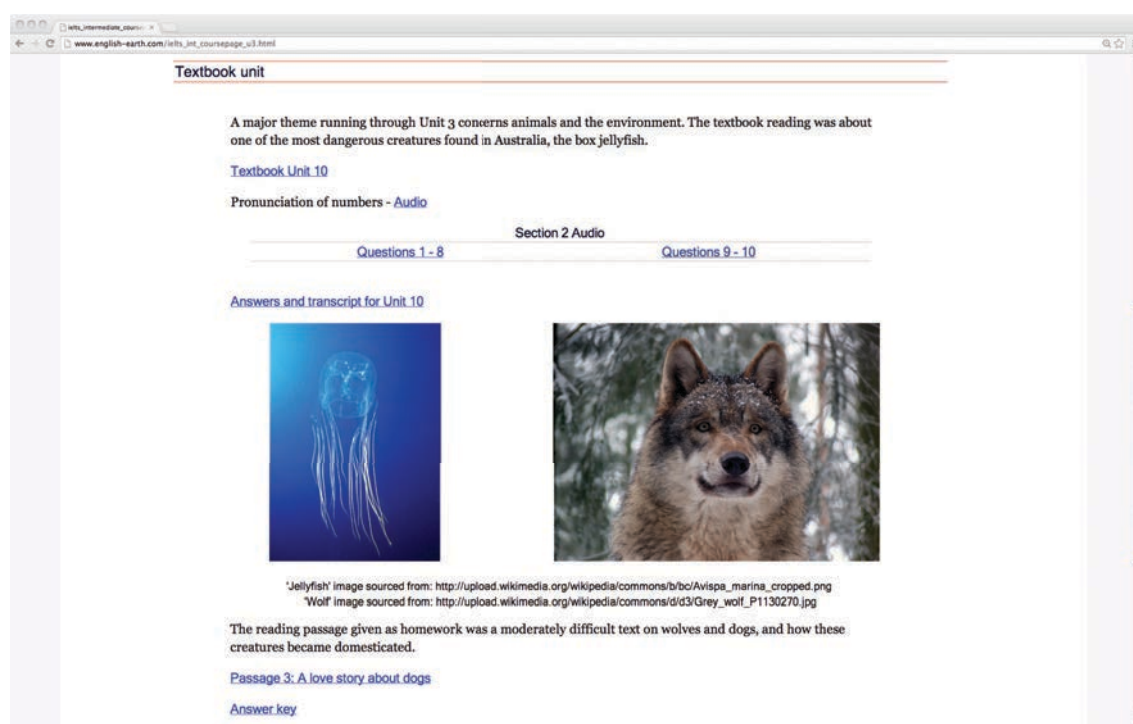
Figure 5.20: Unit 3 (with the "textbook panel" open). The texts concerning box-jellyfish and wolves were sourced from two different resources, but they both shared linguistic and thematic similarities.

A unit from an IELTS-Preparation textbook was used for the first lesson on Monday mornings. These units were selected from different textbooks because the materials used for each week had to comply with copyright regulations. As mentioned previously, the textbook units established the major theme of the week, and material/activities that dealt with similar subject matter extended these themes online.
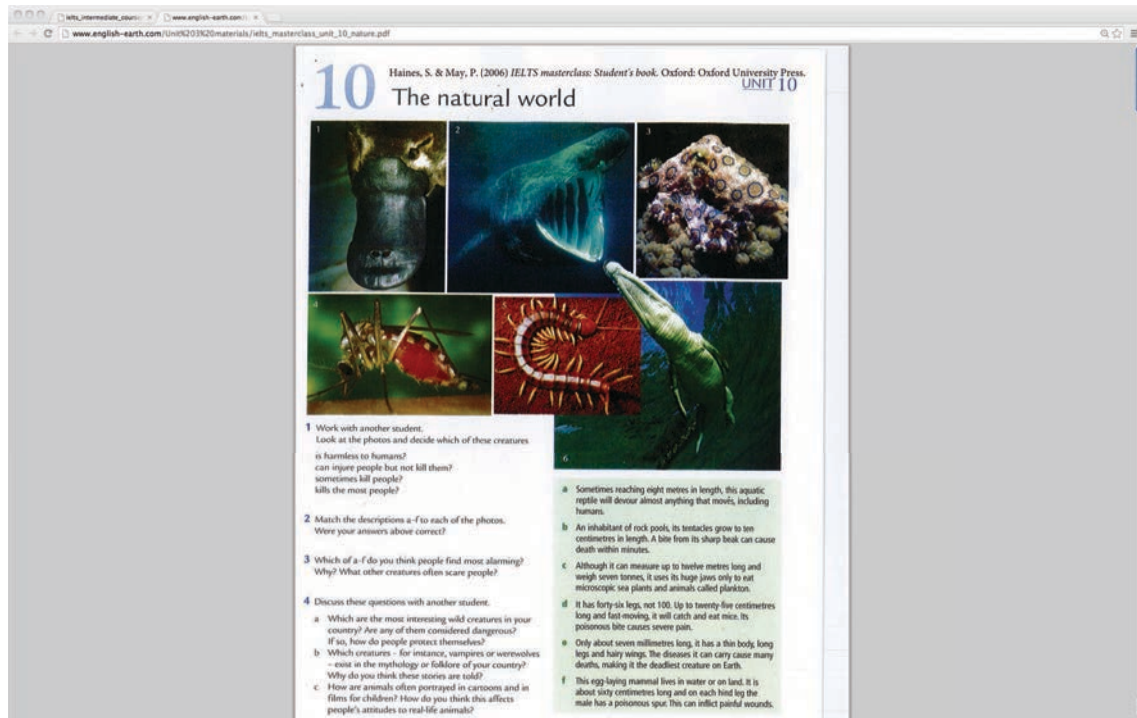
Figure 5.21: A textbook chapter (Haines & May, 2006).

One possible way for students to revisit work done in class was to review listening activities. Whenever a recording was uploaded, a transcript was also provided. Transcripts were rarely used during face-to-face lessons, as these documents were better suited for reviewing material at home. Online, they had the option of listening to a text they already knew, and they could deepen their understanding by comparing what they heard with what they read, as shown in Figure 5.22.

Figure 5.22: Working with a recorded text at home (Haines & May, 2006; Jurascheck, 2006).
Three elements are shown in the screenshot above. The transcript has been placed in a window on the left, the media player is in the top-centre of the image, and a worksheet fills the rest of the screen on the right.

The writing task for the week was linked to the topic of nature. For this task, the class had to speculate upon the causes of environmental degradation, and describe its effects.

Figure 5.23: An IELTS Writing-task 2 worksheet.

I created many worksheets dealing with common IELTS prompts. The aim of these exercises was to get small groups to generate ideas, discuss vocabulary, and draft a structure for their responses before individually writing them.
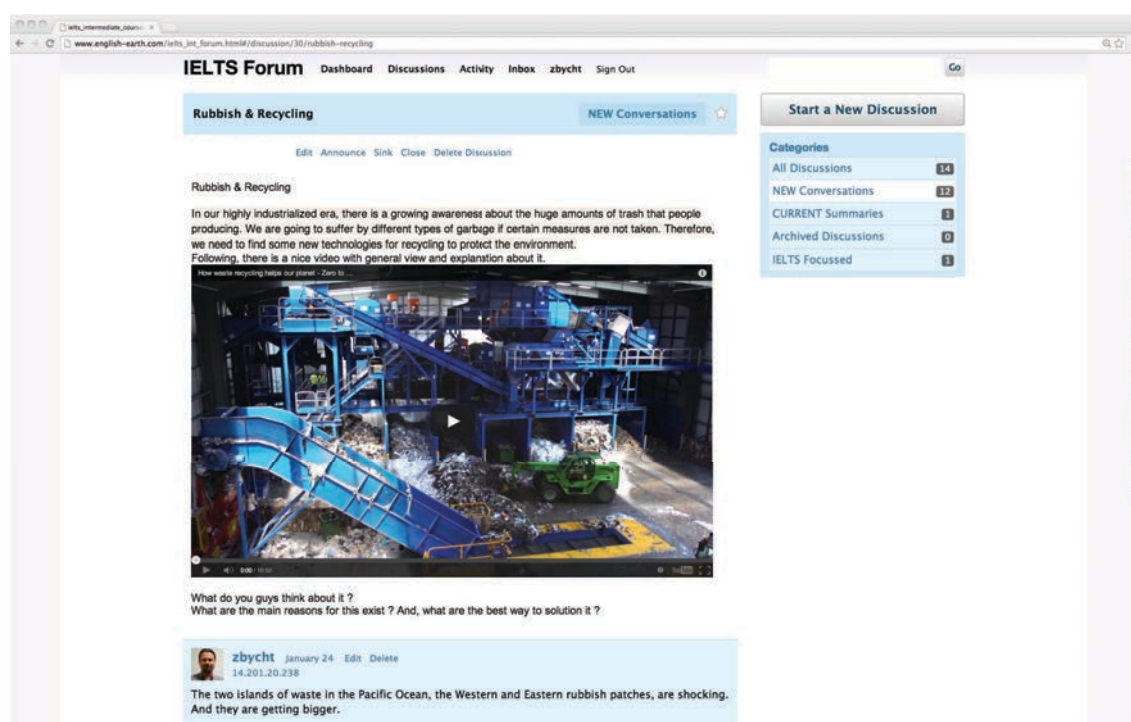
Figure 5.24: A discussion about "rubbish and recycling".

Figure 5.24 illustrates how the theme for Week 3 was further developed on the Forum. The next two sections consider the four other major areas of the site.

5.5.2 Classmates page; Self-study and Activities areas

The purpose of the Classmates page was unchanged; it was designed to build rapport online. Learners were encouraged to *break the ice* by sharing something about themselves, and by establishing a personal rather than anonymous online presence. Ideally, students would have been able to upload images and edit text by themselves. Unfortunately, my understanding of server-side programming was quite basic at the time of the study. Even though such functionality is taken for granted, students still had to email pictures/text to me during EDR Cycle 2, and I manually edited this page.

The self-study area – a digital library containing links to useful resources online – ended up with more content. All of these links were introduced and explored at various times. Worksheets with associated activities were also created to exploit items that were made available here.
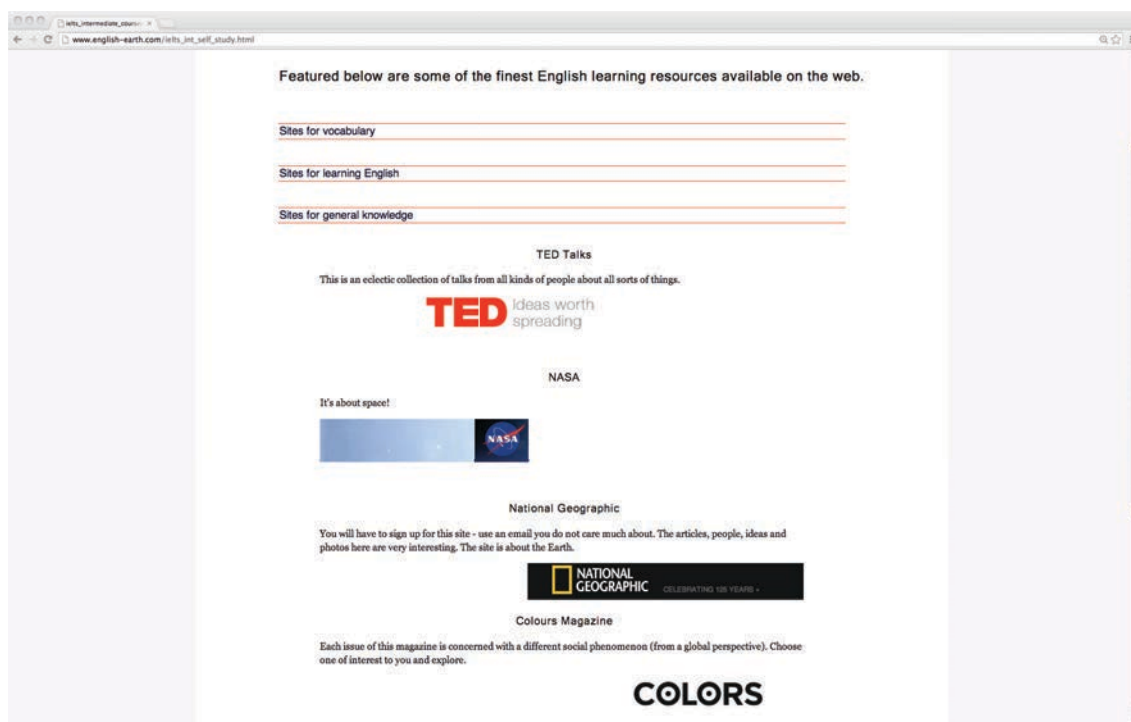
Figure 5.25: Self-study area (with "sites for general knowledge" open).

The Activities page continued to function as an online notice board, with visual/textual elements designed to be minimalistic and easy to understand; it was very similar in design to the Self-study area shown in Figure 5.25 above. Various documents were uploaded to the Activities area. Sometimes exercises were not completed in class and were left as homework, and answers to these exercises were often provided in the Activities area. At other times, general College-related information about student clubs or upcoming excursions, for instance, was uploaded. Examples of student-generated work, as shown in Figure 5.19 earlier, were also found here. More important documents, like reading and listening practice-test results, were also uploaded rather than pinned on a physical bulletin board.

These efforts were not solely for convenience; they were another lure. All students were interested in practice-test results, and they had to enter the site to find out. Many students were interested in answers to work they had completed, or in information about extra-curricula activities, and they needed to visit the site to find out about these things too. Once there, I hoped that they would spend some time exploring the rest of the website, and contributing to it.

5.5.3   The Forum

Though I had more time to focus on the Forum during this iteration since the bulk of the web-construction was complete, I found that people did not engage with it as fully as they had during the previous cycle. This may have simply been due to the fact that this cycle was shortened, or it could be that some tasks worked with some groups, and simply did not work with other groups, and tinkering with the design had no effect.
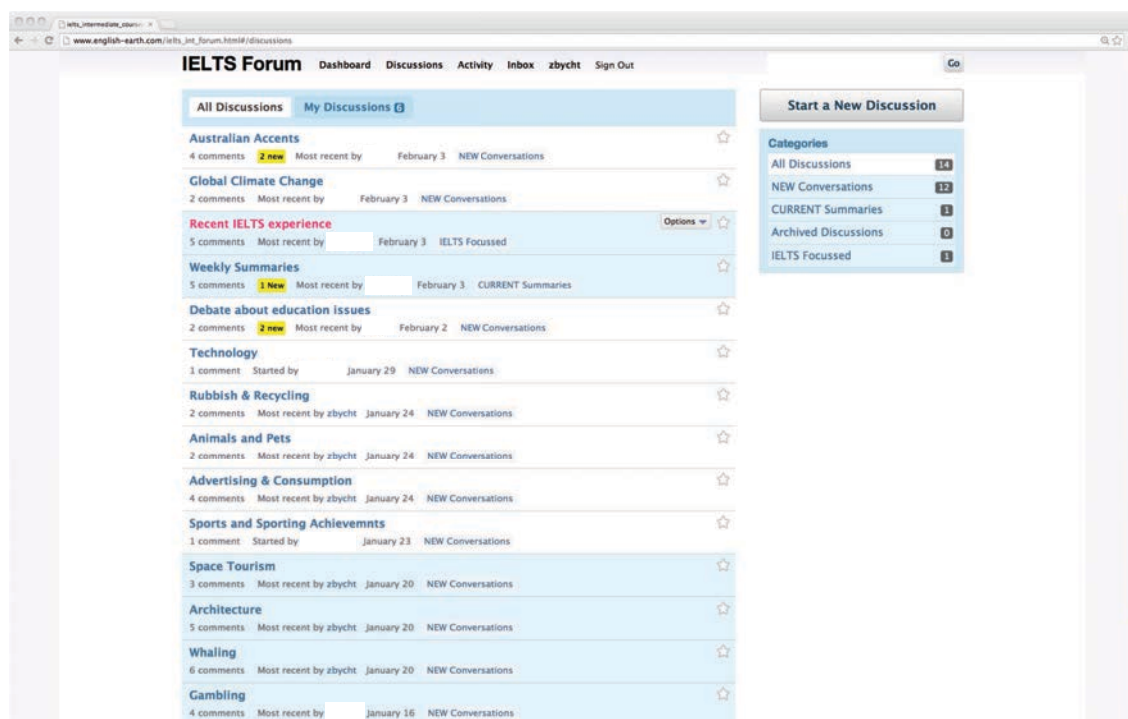
Figure 5.26: The main forum page, with "recent IELTS experiences" highlighted (Feb. 2014).

The relationship between discussions on the Forum and work done in class has already been explored via extracts from discussions on space, architecture, and the environment. These were used in an analysis of three Course-texts units earlier in this chapter. Whilst a number of interesting discussions occurred online, two topics that were particularly useful from a learning and test-preparation perspective were *recent IELTS experiences*, and *the weekly summaries*.
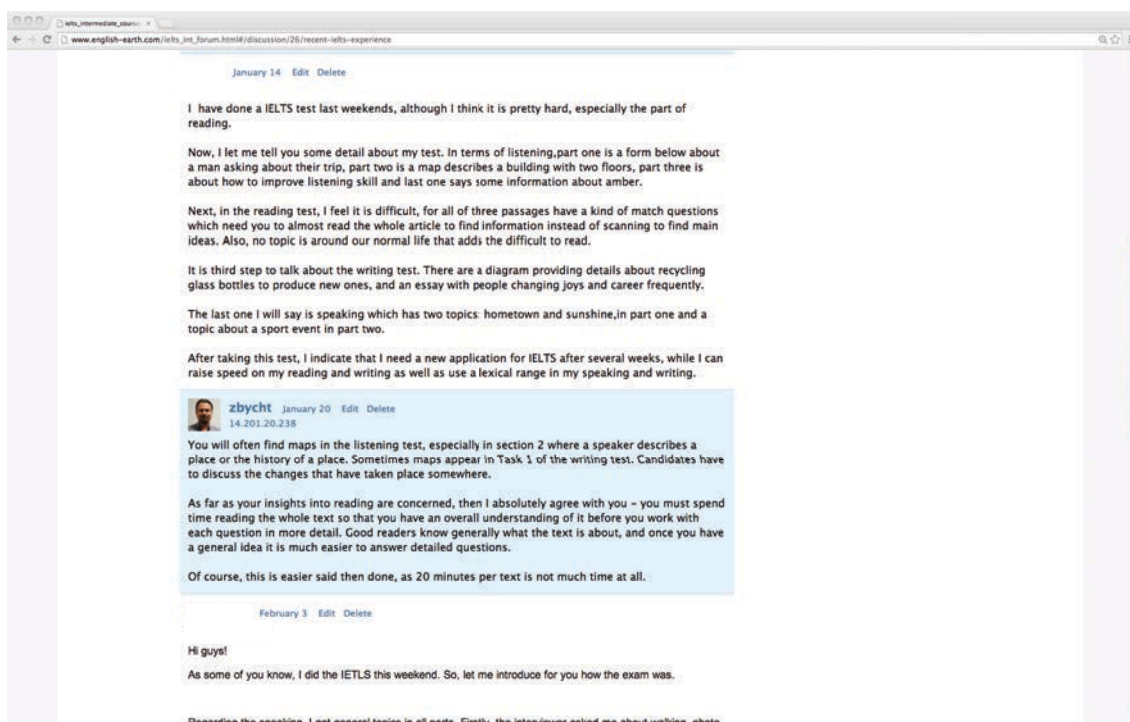
Figure 5.27: "Recent IELTS experiences" was a popular discussion during both EDR cycles.

Students sat the IELTS test at different times during the course. Many students did the test two or three times before they achieved a score that allowed them to enter university or a Bridging program. Students shared their experiences of the test, and information about what they were tested on in this forum category.
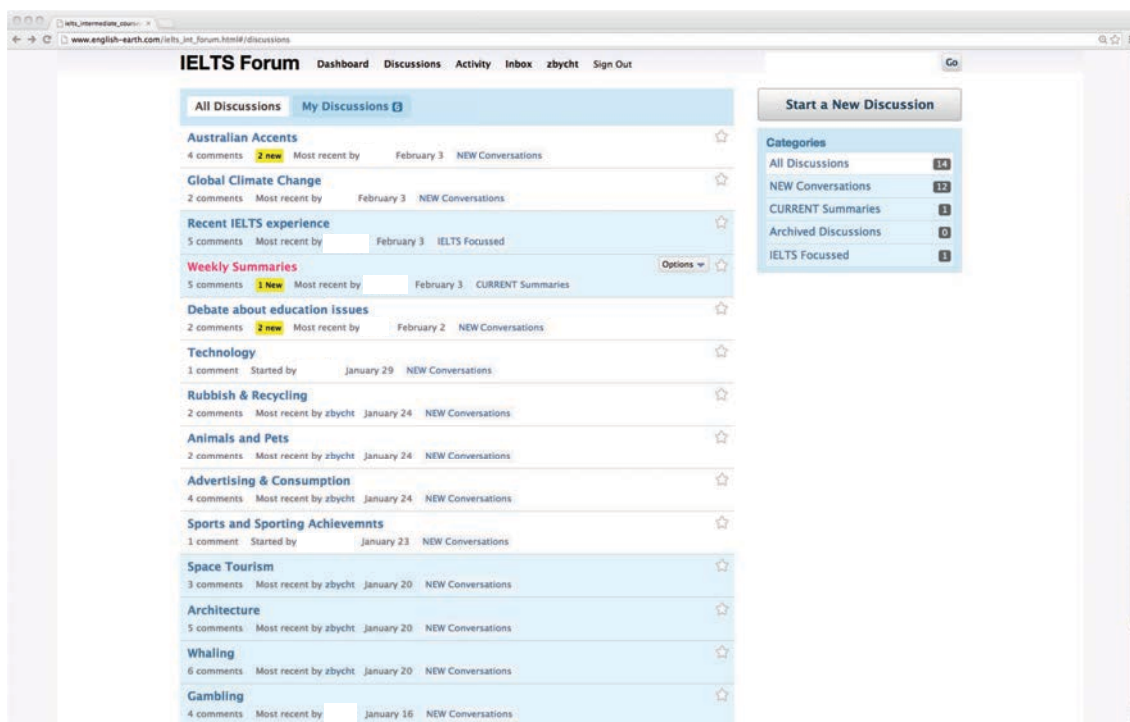
Figure 5.28: The main forum page, with "weekly summaries" highlighted.

I started weekly summaries by summarising what we learnt in the first week of the program. The initial post served as a model for students to follow. The week's work was divided into a number of categories; some dealt with macroskills, like reading or writing, and others were concerned with lessons, such as time spent learning English online or in the centre's library. At the end of each week, a different pair of students summarised work that had been done in class during the last five days. This online discussion served to review what had been covered, and to assist students with reflecting upon/revisiting what they had learnt.
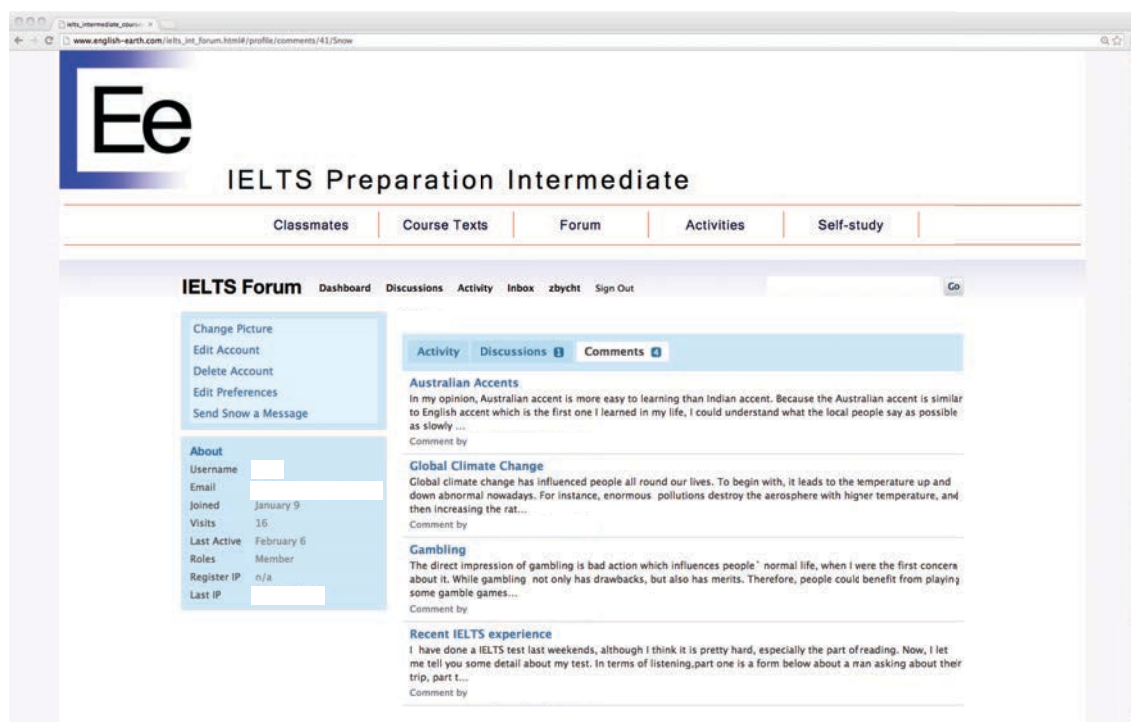
Figure 5.29: The Forum profile page. Teachers could see all of the contributions that individual students made online.

Finally, even though student comments online were not assessed during the course, the possibility to do so existed. It was possible to view student contributions online on their forum-member profile page. This functionality is very useful for assessment or for feedback as examples of all written work done online are automatically collected by the software (www.vanillaforums.com). Since participation on the EDR site was not part of any assessment for the IELTS course, alternative methods were devised to encourage online contributions.

5.6 Student-experiences of the Flexible Learning Environment in EDR Cycle 2

At the conclusion of EDR Cycle 2, in Week 5 of the program, explanatory-statements, questionnaires and consent forms were given to former students. Pupils were

asked about course related information, such as why they were doing the program, and they were requested to share their opinions of the course in general. Their views on learning English were sought. Their opinions on educational technology, the use of new media in the IELTS program, and their views on formal face-to-face classes were solicited. In Cycle 2, from a pool of 18, four learners returned questionnaires.

5.6.1 Learning English in Australia and the IELTS program

These students[18] ($n = 4$) had enrolled in an IELTS course because they were aiming to enter university, and all had been learning English at the college for at least ten weeks. Therefore, all pupils had completed five weeks of study with me, and they had been in other classes previously for a minimum of five weeks.

Most pupils said the course helped them improve their English and their test scores, and most found the program enjoyable. One person however, was not so enthusiastic about class "because I need to focus on IELTS" (EDR_Cycle_2_Student_iv), and another respondent wished there had been a greater variety of writing tasks. Views on learning English were mixed, with two students agreeing that "learning another language is interesting and fun" (EDR_Cycle_2_Student_ii), and two saying that they did not enjoy learning English. Work and tertiary studies were the most common reasons for studying English; respondents were also asked why an Australian degree was important for them. A couple of students said it was important for employability, and one person stated that it would give them "more confidence" (EDR_Cycle_2_Student_iii), but did not elaborate.

5.6.2 Formal classes

All learners felt the face-to-face component of the program was valuable, and helped them with their English. They thought that their speaking ability improved the most. This improvement was due to "circumstances"(EDR_Cycle_2_Student_iii) and practice in class. When asked whether any other skills improved, responses were mixed. One person said their writing improved because "teacher will help me [*sic*] to correct my writing" (EDR_Cycle_2_Student_i), another explained that reading improved because they learnt new strategies, while two others said their listening developed – one said that they were forced "to listen"(EDR_Cycle_2_Student_iii) when attending class. Asked to explain which skill improved the least, writing was mentioned, "because I didn't do enough to improve"

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[18] All students who submitted questionnaires or participated in interviews after EDR Cycle 2 have been assigned the label *Cycle_2* since they were EDR Cycle 2 participants. Additionally, the four students who returned questionnaires are identified through the numerals *i* to *iv*.

(EDR_Cycle_2_Student_ii) as well as reading, "I'm confused about reading" (EDR_Cycle_2_Student_iv). These responses were similar to responses in EDR Cycle 1. Students cited self-study, practice and teacher feedback as reasons for any improvement or lack thereof.

5.6.3   The EDR website

People generally believed that technology benefitted them, and when asked to compare how technology was used in this program to how they had seen it used before, a couple of students explained that they had not used new media in college programs before, "I never saw a program like this" (EDR_Cycle_2_Student_ii). All respondents found the EDR website worthwhile since it offered "information about English learning" (EDR_Cycle_2_Student_i), it had a variety of topics and useful links, and it was described as "very clear and user-friendly" (EDR_Cycle_2_Student_ii). All respondents used the site outside of class, mainly for independent work.

5.6.4   Student interviews from EDR Cycle 2

Students[19] were invited to one-on-one interviews after they had finished the IELTS-Preparation program. Two former pupils attended 20-minute semi-structured interviews in March 2014. Because the number of interviewees was so limited ($n = 2$), I have extracted *common ideas* rather than themes from their responses. I felt that a theme was a larger concept, one that more people mentioned, and I just did not have the numbers. However, the voices here provide another dimension to the study – one that enriches the descriptions of the student experience of these interventions.

5.6.4.1   IELTS students in EDR Cycle 2, and learning English

Interview questions were concerned with the student experience of learning English in Australia, the IELTS course and the IELTS test, their educational use of new media, and whether they had engaged with the EDR website. The interviewees were Brazilian, Mary was female and Billo was male; they had both spent approximately six months learning English, and they did not know much English when they arrived in Australia. As Billo explained, "when I arrive here, I didn't know nothing about English. Hello, how are you? Just a few

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[19] Former students were invited to interviews after each design research cycle. These were difficult to arrange as I could only conduct them, due to ethical reasons, once IELTS courses had finished. EDR Cycle 1 concluded in late December, and even though some students had agreed to interviews, they had moved on after the Christmas break. There were similar complications in EDR Cycle 2. I found out who had agreed to being interviewed after students had left my class, and some students who had accepted invitations had left the college before I started conducting interviews.

words" (EDR_Cycle_2_Student). They were studying the language because it would help with future employability, "it's really important in Brazil. If you want to get a job, a wonderful job, you need to know how to speak another language, like English, or German, Spanish" (Billo_EDR_Cycle_2_Student). English was also a prerequisite for tertiary study, which is why these students had enrolled in the IELTS program, and in Mary's case, English was also useful for travel:

> First of all because I want to enter into the university so I need to know English, and because it's very important for my job because I study Biotechnology. How I work with research – I need to read a lot of papers in English and write in English as well. To travel it's very important, to talk with everyone. (EDR_Cycle_2_Student)

Both students had passed[20] the IELTS test by the time these interviews were held. They had an IELTS Band-score high enough for a place in a 15-week University-bridging program at the centre. Upon successful completion of the Bridging program, both students would begin their postgraduate studies at a university in Australia. Mary would start postgraduate studies in Biotechnology, and Billo was planning to commence a Masters in Engineering. As far as the IELTS test itself was concerned, both students claimed that it was not a true representation of their English ability.

Billo and Mary enjoyed learning English, "it's fun because it's completely, it's too [*sic*] different between English and my major. My major is Engineering, it's too much count, math, and English is just grammar. It's different" (Billo_EDR_Cycle_2_Student). Although Mary did not enjoy learning English much at first, she does now because she can see an improvement in her proficiency. She is pleased that she "can watch a lot of movies in English, and listen to music and understand the words" (Mary_EDR_Cycle_2_Student). She also thinks that learning English in Australia is worthwhile because she is immersed in the language:

> I think it's very different because the way that the teacher teach [*sic*] is different. Here is better, maybe because it's a country that speaks English so I can learn some words in the class and I can go to the street and I can use these words. It's much better. (Mary_EDR_Cycle_2_Student)

Billo could not compare teaching styles in Australia and Brazil because he did not study English in Brazil.

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[20] The IELTS test measures language proficiency on a scale from 0 to 9, with a Band score of 9 being an expert user. It is not possible to *pass* such a test because it is not designed to measure success or failure. A passing grade would be whatever Band-score a particular institution requires in order to accept a new student. This varies, but it is typically a score of 6.5 or 7 for university study, and 6 to 6.5 for University-bridging courses.

5.6.4.2 The IELTS-Preparation program in EDR Cycle 2

Both students were pleased with the program overall. Billo was appreciative of the responsive and individually focussed teaching style:

> You liked to explain with much [*sic*] details. For instance, with the listening – you stopped, oh okay. Did you hear that? You understand that? You explained each part very well. And the reading, you give, you gave to me some tips to improve my reading. (EDR_Cycle_2_Student)

Mary appreciated the use of authentic test-material, and both students found the classroom atmosphere friendly; they said that all students were engaged, and I was described as "happy and enthusiastic" (Mary_EDR_Cycle_2_Student). The students felt that the skills they gained were transferrable, that is to say, their English improved overall – not just their ability to sit an IELTS exam.

There were mixed views regarding the course structure. Mary thought that the program was well planned, whereas Billo found the way in which materials were handed out somewhat haphazard. He suggested having a course-book because it would allow him to preview content and prepare before class, and then review content post-class.

> If I have a course-book, I always know where I'll be. It's better to organise my ideas in what I learn, and what I will learn. If I learn about this before the class, I can understand better. This is important for me. (Billo_EDR_Cycle_2_Student)

I found the response a little surprising as the Course-texts pages of the EDR website were essentially how the IELTS-program was given structure, so I probed a little deeper. Billo seemed unaware that he could access class texts, recordings and transcripts at home. This was despite being active on the EDR website. He had set up a profile and he had engaged on the Forum numerous times.

5.6.4.3 Technology and the EDR website

Both students agreed that technology was important for language learning, and they used new media independently to check the meaning and pronunciation of new words, to watch videos, or to listen to audio online. They used the EDR website once or twice a week on average. Mary cited the Forum when asked how she used the site, and Billo mentioned the Self-study area, which he used as a platform from which to surf to other websites. "I liked the Forum because there are different topics, and I can read or watch some videos about that, and learn vocabulary, and discuss with other students" (Mary_EDR_Cycle_2_Student). The Forum was used by both students to discover different views, learn new words or expressions, and increase grammatical awareness. It helped with writing ability, and it helped extend ideas around topics.

Mary used the Course-texts pages. She worked with the transcripts and audio-recordings at home, and found that it improved her comprehension, partially because the transcripts highlighted precisely where certain answers were. Billo, on the other hand, did not fully explore the site – he missed the core function of the Course-texts pages (revisiting classroom materials), and he did not read other students' profiles on the Classmates page. Mary did read these since "it was very interesting because we can know more about our classmates" (Mary_EDR_Cycle_2_Student).

Nonetheless, both students were complimentary of the site. Billo believed that the site helped steer people towards credible, valid, or useful information about the language and about the IELTS test. As is evident in the following response:

> For example, when I want to improve my reading, or my listening, or my writing – in [*sic*] the website, I know where I need to look. I can avoid some awful news, awful grammar. I know what I need with your website. Um, I know what topic will be important in the IELTS or not. (Billo_EDR_Cycle_2_Student)

Mary thought that the EDR website was very useful, but she did not think it was necessary for the course because it was possible to learn about the IELTS test without it. However, she stated that it improved the program, that it helped with learning English, and resulted in greater engagement, "because every weekend we had homework; to read the forum, or answer something that you need to read and answer" (Mary_EDR_Cycle_2_Student). Billo agreed, "I improved my English in general with your website because I learn new words. I listen to new topics that I had no idea before – general knowledge as well, not so [*sic*] English" (EDR_Cycle_2_Student).

Lastly, these students were asked how the site could be improved. Billo explained that the website needed more IELTS-specific links, and in reference to the course in general, he thought that there should have been more opportunities to write in English. Mary said that the materials on the site should have been different, and should not have merely duplicated (and minimally extended) work done in class. She said that there ought to have been extra activities/materials online.

5.7   Summary of Chapter 5

Chapter 5 explored the two EDR cycles that ran in late 2013, and early 2014. EDR Cycle 1 started in October 2013, and continued for ten weeks. This process, in addition to being worthwhile in its own right, resulted in a foundation for the second iteration of the

intervention. The work involved in co-constructing the site with students was discussed, as were measures taken to comply with copyright regulations and ethics.

The five main areas of the site were discussed next. The Course-texts pages were linked to classroom content, and designed to trigger student engagement with the EDR site. The Classmates page allowed learners to establish an online presence, the Self-study area provided links to useful websites, and the Activities area served as an online notice board. Key educational problems were addressed through the Forum; namely, opportunities were provided for students to be immersed in English for longer and tasks were designed to develop critical-thinking skills. Issues concerning the quality of the IELTS syllabus started being addressed through the Course-texts pages during the initial cycle, but the course-structure and its thematic content were more fully developed through the second research cycle.

The student-experience of the program was captured via questionnaires. In general, students were satisfied with the course, and stated that their language skills and their IELTS scores had improved. A period of more structured evaluation and reflection followed; the EDR website was re-designed, and stripped back in preparation for EDR Cycle 2. Feedback from students influenced this process, as did my own judgement.

The second EDR Cycle commenced in January 2014 and lasted for five weeks. The Course-texts pages were refined, and much of this chapter focussed on the first three units of the course to showcase how various areas on the EDR website were designed to cohere around a weekly theme. Student feedback was similar to data generated in the previous cycle. Students felt their English had improved, and independent study, practice, and teacher feedback were cited as reasons for this improvement. The two students who attended interviews in March 2014 appreciated the use of authentic materials, the teaching style, and the classroom atmosphere. Both learners engaged with the EDR website to varying degrees and suggested ways in which it could be improved. The site was described as *very useful* rather than necessary for the course.

This chapter concludes the presentation of data in the thesis. Chapter 6 continues with a more detailed discussion and analysis of the data, and the research project is formally evaluated. Design principles that may be of benefit to others working in similar contexts are extracted from the process of running these cycles, and from the research context.

6.0 Data Analysis, Discussion, EDR Principles, and Future Directions

Chapter 6 critically analyses the data collected in the thesis, and articulates design principles that may benefit organisations, researchers, and practitioners working with new media in similar contexts. The chapter begins with a visual representation of the study. As Akkerman, Bronkhorst and Zitter (2013) attest, "design research is complex by nature" (p. 421), and so the use of a model simplifies the project by clearly illustrating stages of the study. It is mainly for this purpose that McKenney and Reeves' (2012) generic model (introduced in Chapter 3) has been customised.

After this overview, the focus turns to answering each research question in turn. The first research question corresponds to Stage 1 of the study, *investigating the context*. Relationships between the conceptual framework defined in the literature review, and data collected from staff and students – and how this data supports or diverges from my own views – are discussed so as to richly describe the research context. Closely bound to this context are the needs/problems that the educational design research (EDR) interventions strove to fix. These were the focus of the second research question. Student needs/course problems are reintroduced and discussed with reference to data so as to promote these to the level of evidence-based claims.

Stage 2 of the research, *investigating the interventions*, is discussed next. Here, the central contention of the study, that educational technology can improve L2 teaching/learning, is evaluated, and the final research question is considered. Research Question 3 is concerned with developing theory. Nine EDR principles crystallised as a result of and through the process of conducting this project. These theoretical outputs are articulated in discussions presented in this chapter.

Finally, limitations are discussed and future directions are proposed. The thesis ends with some concluding comments, where the potential value of this project is noted.

6.1 A Model of the Study

In order for EDR to mature as a methodology, there is a need for clear research processes and standards, and "there is a need for comprehensive models to guide design research" (Bannan-Ritland, 2007, November, p. 53). McKenney and Reeves' (2012) generic model (see Figure 3.2) is one answer to these calls. In this model, only key elements of design research are included "to render it customisable across the rich variety of approaches" (p. 76). Their model has been adapted for my study in Figure 6.1 to better outline the major stages, and the thinking processes, behind this project.

This EDR study fits into the structure depicted overleaf, but the research was not as delineated as this illustration suggests. For instance, whilst Analysis/exploration generally coincided with the literature review and with staff-interviews, the educational setting continued being explored throughout the study as my understanding of the research context deepened, and my ability to articulate this understanding grew.

It is important to keep in mind that these brushstrokes are broad. In fact, the McKenney and Reeves' (2012) articulation is more complex than Figure 3.2, or for that matter Figure 6.1, suggests. McKenney and Reeves describe cyclic, iterative relationships between stages; major processes are explained in detail then further deconstructed into micro and macro research cycles. However, I find the broad representation of EDR research, their generic model, most useful for explaining this study to the reader.
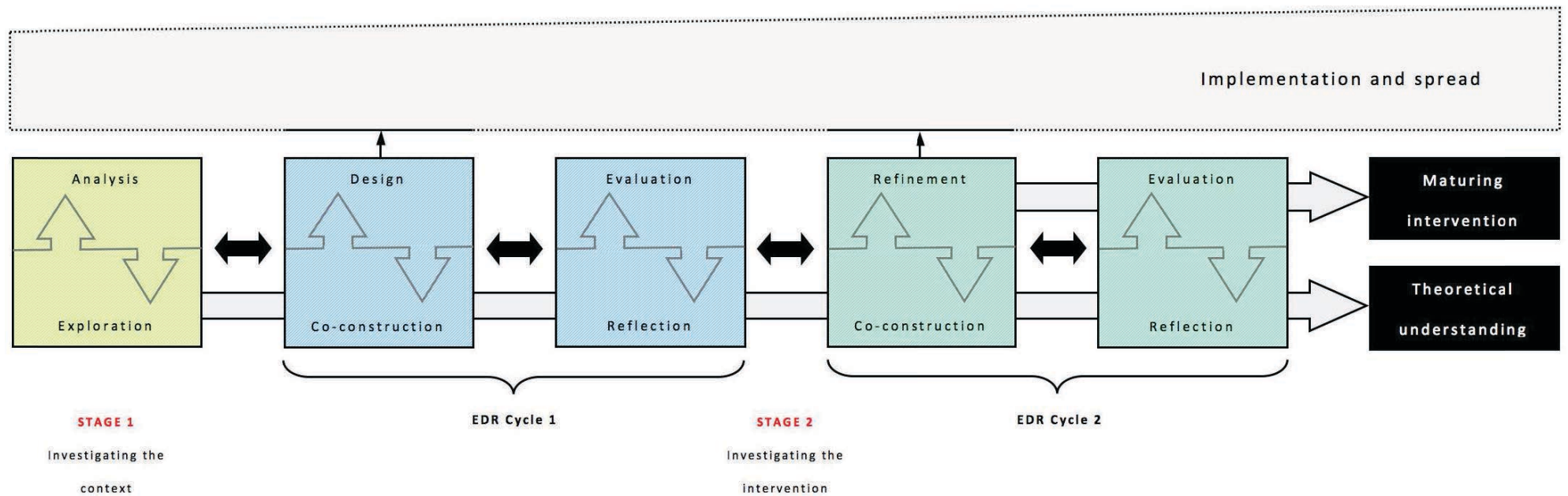
Figure 6.1: The generic model as customised for this study.

McKenney and Reeves' (2012) original model has been altered to depict the two main stages of research carried out in 2013 and 2014 (shown in red). In Stage 1, the research context was investigated, and this evaluation consisted of a literature review, an articulation of my views, and data from interviews with members of staff at the college. Stage 2 was concerned with the interventions. The EDR website was built in skeletal form prior to EDR Cycle 1, and it was used in the first EDR cycle as an anchor for the course and for the flexible learning ecology that grew around it. In EDR Cycle 2, this intervention ran once more, and was refined.

In addition, McKenney and Reeves (2012) highlight a *maturing intervention*, and *theoretical understanding* as the two outputs of design research. In my adaptation, I wished to identify when these processes began. I view the search for theory as starting from the very first stages of the study, and growing during the process of engaging in the research, rather than it being an output of the research, which seems to be much more fixed and static as a concept. The long grey arrow moving through all five study-phases represents this idea. The educational product, the EDR website, began to mature during the second/final research cycle, but I believe that it is still very much in its infancy.

Interacting with teaching practice, or *implementation and spread*, was described as both a direct intervention, and also as "*anticipating* [my emphasis] how the design will align with the needs and wishes of practitioners and other stakeholders [i.e. students]"(McKenney & Reeves, 2012, p. 80-81). In my customised model, the concept of anticipation is depicted by the dotted line outlining the trapezoid. The two instances of actual implementation are depicted by two unbroken lines above the phases of Design/co-construction during EDR Cycle 1, and Refinement/co-construction in EDR Cycle 2.

Another departure from the original model is the concept of co-constructing the flexible learning environment, as there was a very real sense that I was involved in a collaborative process with my students during which we jointly built the EDR website. After all, most of the forum content was student-generated, and many of the materials I selected were uploaded to address student needs. What is more, the importance of mutually constructing flexible learning environments is one of the findings of the study. The notion of refinement is implicit in the cyclic nature of the McKenney and Reeves (2012) illustration. My adaptation is specific to the research I did, and this concept of refinement is overtly noted in the first phase of EDR Cycle 2 because I wished to highlight how all cycles of EDR (except the first) are refinements of a design.

There were two formal phases of Evaluation/reflection. One occurred in late December 2013, after the conclusion of EDR Cycle 1, and the other happened in mid-February 2014, after EDR Cycle 2. Instances of *evaluation and reflection* however, occurred regularly throughout the five months of student data generation since the EDR website was a responsive, iterative, flexible tool. Nevertheless, there were two instances of structured reflection. The first formal instance of Evaluation/reflection was reported in Chapter 5 where students were asked to comment upon the efficacy of the site, and to suggest ways in which it could be improved. Information from the second phase of evaluation and reflection feeds into this chapter, and has been used to assess whether these flexible learning environments were effective in addressing the student/course problems they were designed to address.

Lastly, the defining characteristics of EDR, the twin pursuits of designing an intervention and of generating theory, are represented by the black boxes on the far right of the diagram. The creation of useable knowledge is a key aim of EDR, and as far as a maturing intervention is concerned, the EDR website has only just started to more fully develop as a learning/teaching tool. It started to mature as the intervention went through the second EDR cycle, but it would need more cycles before its potential was exhausted.

6.2   The Educational Setting: A Discussion Concerning Stage 1 of the Study

The research context was defined through data generated in staff interviews, and via reference to relevant literature. Interview questions were influenced by neoliberal perspectives, two major approaches to second language (L2) acquisition, and the affordances of new media in education. Since I had worked at the language centre for some time, I also had personal views about the college, about IELTS students, and about the structure of the IELTS program. The purpose of generating data from other members of staff was to test my own ideas against the views of others, and in instances of agreement, to endow my insights with credibility. In instances of discord, it was important to probe deeper and find more accurate propositions.

It was crucial to situate this study in a real-world context because the educational use of new media, and any meaningful exploration of such use, cannot be divorced from the context within which it is being used, by whom, for what purpose, and how. Through conceptually framing the college via reference to existing theory, and then referring to voices at the college that add to or disagree with these conceptual frames, a rich description of the

educational setting for the study was achieved, and the reader could gain a sense of the learning environment in which this project was situated.

Stage 1 of the study was concerned with understanding the research context, and then with clarifying the needs/problems that EDR interventions could potentially address. Thus, the first research question focussed on the site of the study:

Research Question 1. How do ELICOS practitioners regard the culture of the college?

The broader research context (the language-centre) is, first and foremost, understood as a business, with profit-making its core function. This theme was established as a facet of the conceptual framework through the inclusion of neoliberal theory in the literature review. This conceptual frame was reinforced in reflexive sections concerning my own views on the centre, as well as via reference to the lucrative nature of the foreign-student market in Australia (discussed in Chapter 4), and it was then compared to views elicited from staff working at the college.

In this data, the school is characterised as providing the university with human capital. The school is "the first step in a long journey towards university, so we are often their first point of contact and we feed into the university"(Abigail_ELICOS_Manager). Interestingly, the concept of *feeding the university* is mentioned by a few people. The purpose of the school is "to provide students to the university, to feed the university" (Jane_ELICOS_Coordinator), and the school "sits outside it [the university], feeding into it" (Lucien_ELICOS_Teacher). Creating profit was mentioned. The purpose of the centre is, "to make a profit for the shareholders, as it is with all companies" (Lucien_ELICOS_Teacher), and the theme of capital also emerged with, "we might create a future market for them to come back [to]... because a lot of them come back" (Jane_ELICOS_Coordinator). In short, the college was characterised as a business, and this was most clearly expressed by Lucien:

> I think the role of companies is to be profitable. I don't see that as a problem, so for me to say that [the college] wants to be profitable is entirely reasonable considering what type of entity it is – it's a company. (ELICOS_Teacher)

Furthermore, much of the data in response to why students were learning English begs to be interpreted through a neoliberal discourse. A point raised in the literature review, with regard to the effect of neoliberalism upon learning, was that education serves to set a person's future *use-value* for work, "the importance of this is that there is no other standard to which to aspire, other than that defined by capital, for the purposes of capital" (Hill, Greaves & Maisura, 2009, p. 108). This conceptual frame resonates with the theme of *future*

employability as being a prime motivator for learning English. A number of students explained that they were learning English because they wished "to study in the university and to take [*sic*] a good job in the future" (EDR_Cycle_1_Student_ix), and an Australian degree was important "for my career. The degree could give me a better resume" (EDR_Cycle_2_Student_iv). Nevertheless, some students cited other motivations for learning the language, and occasionally when work was mentioned it was in the context of it being a vocation rather than there being *no other standard to which to aspire*. As can be seen in Mary's comment:

> First of all because I want to enter into the university so I need to know English, and because it's very important for my job because I study Bio-technology… how I work with research, I need to read a lot of papers in English and write in English as well. To travel it's very important, to talk with everyone. (EDR_Cycle_2_Student)

The research context was by no-means simple to describe, and for every practice defined, counter-practices and resistance were found. I believe that an appreciation for these levels of complexity is characteristic of the data reported in the thesis. That being said, appreciating the school from a neoliberal perspective is valid, and staff data collected during the study validates this aspect of the conceptual framework.

To a great extent, the college functions to make money for the university by ensuring that full-fee paying students are able to engage – with varying degrees of success – in academic life. Their potential to do so is simply judged by their ability to meet the language standards set by individual university faculties. Many students who learn English at the centre, especially those who must sit an IELTS exam, do so because it is a prerequisite for further study, and they are motivated to study for a degree so that they find well-paid jobs once they graduate. The language of capital is noticeable in the data. People are not learning English because of a personal interest, or for instance, because they wish to integrate themselves more fully into English-speaking academic communities. Many see a university education as a pathway to a higher quality of life through better opportunities for work.

6.2.1 Teachers, teaching and technology

The college also provides the university with economic capital, and it seems that in order to do so as effectively as possible, most teaching-staff are employed on casual contracts. Moreover, course content/delivery is becoming standardised so as to manage this flexible workforce. These themes, evident in data captured during staff interviews, connect with an outcomes-based teaching philosophy – referred to as competency-based language teaching (CBLT) in the literature review. A counterpoint to this approach was

communicative language teaching (CLT), and this theme (namely, that this is the type of teaching that occurs, or that should occur at the college) appeared in interviews with staff.

In other words, there are two distinct traditions identified in the literature as having an impact on the ELICOS sector in Australia more generally, and these approaches are reflected in comments about the school. CBLT correlates to course-standardisation, mostly regarded as ensuring there are "no major deficiencies"(Robert_ELICOS_Teacher), and that language courses are "clear and doable for everybody, so that minimum standard is across the board" (Lucien_ELICOS_Teacher). I make this claim on the basis that CBLT and course-standardisation are both reductionist, and do not fully account for the complexity of L2 acquisition. Conversely, all staff members considered CLT best practice L2 teaching, and they added that it was an approach that is either adhered to by ELICOS teachers, or that ought to have been practiced by these teachers.

In these interviews, the uses of educational technology at the school were described as varied. The organisation engages with new media, or appears to engage with technology, because it must. The company "wants to be seen as innovative and up-to-date, and wants to be seen as having the latest technologies" (Abigail_ELICOS_Manager). Some teachers work with new media because they want to, "many people in the company have a genuine opinion that it is highly relevant and useful" (Robert_ELICOS_Teacher), others because they have to, "I'm employed, this is not my hobby, this is a job, but to be really happy about doing it [using new media], I would need further convincing" (Lucien_ELICOS_Teacher), and some teachers tend to avoid it as much as possible.

Even though educational technology is considered useful for L2 teaching/learning, and teachers are quite positive about the possible uses of computer technology, the general day-to-day use of new media at the college is considered poor. No vision, inadequate resources and little support, as well as resistance from teachers are among the reasons given for a lack of any genuine engagement with edu-tech. Ironically, the organisation believes that having computers in the classroom is essential. It appears the college needs to be seen as having media-rich classrooms simply because other providers have media-rich classrooms. It is a common feature of modern L2 education. In practice however, computer technology does not support teaching/learning meaningfully, nor is this a priority for the school. For instance, Moodle (the officially sanctioned online platform), which is in itself an object of the centre's drive towards standardisation, is described as substandard by Abigail, "look at Moodle, it's a disgusting scrappy mess, it's an embarrassment... and that's been there for four years"

(ELICOS_Manager). What is more, Lucien noted that the centre does not adequately justify the use of new media on theoretical grounds, he has "never seen it spelt out in a way that particularly references research or theory" (ELICOS_Teacher).

Nevertheless, this characterisation of the school must be contrasted with individual teaching-practices. Some teachers use new media effectively and creatively. Yet these practices seem far less common, and the culture of the school does not nurture them. Media rich classrooms are not "supported by the school and [the centre is not] encouraging a culture of doing this kind of thing... unless it's your passion, people don't do it [use new media] and don't go looking for it" (Abigail_ELICOS_Manager). In some respects, the college can even be described as delusive. Technology-rich classrooms are promised to potential students, but the quality is low, "the equipment is bad; we never have enough computers" (Jane_ELICOS_Coordinator), and its availability is sporadic, "it was a regular problem: no laptops left" (EDR_Cycle_1_Student_iv). Individual exceptions aside, general practices with new media were described as messy at the college, and often mediocre.

6.2.2 Issues and possibilities with edu-tech

Selwyn (2014) characterises "the academic study of educational technology... as an essentially 'positive project'. Most people working in this area are driven by an underlying belief that digital technologies are – in some way – capable of improving education" (p. 11-12). He challenges such researchers to disenthrall themselves from the notion that new media automatically enhances learning/teaching. Rather, the use of technology in education cannot be separated from "profoundly political processes and practices that are best described in terms of issues of power, control, conflict and resistance" (Selwyn, 2012, March, p. 14). I believe that some of these *processes and practices* have been captured through the work done to situate the study in a real classroom. The problematic and moderately complex status of educational media at the centre has been framed through the literature review and via data generated from staff interviews.

However, there is also the promise and positive potential of new media in higher education. Much of the literature review cited the potential affordances of educational media, and how it can enhance L2 teaching/learning. The classroom and online work I had engaged in during this study was inspired by and fuelled by a belief in these ideals. The EDR website, and the interventions, were sincere attempts to improve educational practice through collaborative student-to-student/students-to-teacher exchanges mediated via new media. Whilst the study was conducted in a broader site that can be described as *political*, it was also

relatively unencumbered by organisational pressures because of steps I had taken to ensure that I maintained control of the project, and because of luck.

6.2.3   The needs of IELTS students and flaws with the IELTS program

Ethically, EDR interventions must attempt to improve educational practices, and thus they must be driven by the belief that technology (if indeed new media is an aspect of the intervention, for it need not be) improves education. In contrast, the theoretical understanding(s) gained through this process has to be an attempt to describe the situation as it truly is, and not how one would like it to be. If educational technology improved teaching/learning practices then that's all well and good. If it did not, then one must acknowledge this fact too, no matter how much effort went into developing an educational product or into creating a process that attempted to improve educational outcomes.

Before any EDR interventions are conducted, the exact educational shortcomings to be fixed should be identified. The second research question sought to clarify these problems/needs:

> **Research Question 2.**   What are the exact educational needs/problems of students in the IELTS program that might benefit from interventions with new media?

In response to this question, a number of issues were identified in the data chapters. Firstly, new media was used poorly or not at all, and the structure of the IELTS course was problematic. The syllabus was not thematic, it did not provide enough guidance, it was not designed to build language proficiency nor was it designed to encourage deep engagement with course content. Secondly, many IELTS students were narrowly focussed on passing the IELTS test, rather than on improving their linguistic and critical faculties.

The EDR interventions I designed, and the flexible learning ecologies that emerged as a result of these designs, were created to address the educational problems summarised above. Did these interventions work? Stage 2 of the study was concerned with the impact on practice.

6.3   The EDR Interventions: A Discussion About Stage 2 of the Study

In contrast to the negative views expressed by students and staff concerning the use of educational technology at the college and in IELTS programs, my own use of new media in these research cycles was of a higher standard. The EDR website was underpinned by a

rationale synthesised from findings in relevant literature, and it therefore had theoretical justifications for its inclusion in the program.

Table 6.1 and Table 6.2 overleaf list instances where theories of learning and web-design, as well as principles related to the educational use of technology influenced the design of the EDR website described in this thesis. While the face-to-face component of the program was also influenced by SLA theory and by approaches to CLT, only the online instantiation of relevant theories, elements and principles have been listed here. The theoretical underpinnings of CLT, and my own approach to teaching English in this tradition have already been described in some detail in Section 2.3 and Section 4.4 respectively.

Major design element(s)/principle(s)	Instantiation online through:
• Educational technologies must "be used as cognitive tools for learning rather than as simply alternative delivery platforms" (Herrington, Reeves & Oliver, 2010, p. 3)	• The close relationship between uploaded content and material used in class with a view to extending the content of face-to-face sessions
• Learners should drive what occurs in an L2 classroom; teachers should respond accordingly (Widdowson, 2003)	• The co-creation of the site (i.e. learner feedback influenced the site design) • To a degree, the choice of materials was responsive to student needs

• Learner choice is key (e.g. how to interact, when to interact), and students must be given manageable options in flexible courses (Collis & Moonen, 2002)	• All elements of the website:
	
	  - students could use the site for independent study, or engage in collaborative activity
	
	  - manageable options were mainly instantiated via clear directions to students, succinct text, and through visual elements (e.g. users could collapse and expand panels to hide or reveal information)

• Salmon (2013) has articulated an interesting, although rather prescriptive, five-stage model for stimulating student engagement online. These stages are:
 	
  1) Access and motivation
 	
  2) Online socialisation
 	
  3) Information exchange
 	
  4) Knowledge construction
 	
  5) Development (i.e. application of learning to personal and professional contexts)
	• **Stage 1:** Immediate access to the site for all students (i.e. full control and small student numbers allowed me to solve technical problems as they occurred)
	
	• **Stage 2:** Attempts at 'online socialisation' are seen in the Classmates page and the Forum
	
	• **Stages 3 & 4:** The exchange of information and the construction of knowledge is perhaps most clearly seen in the Forum, and perhaps to a lesser degree in other areas of the site where information and links are made available
	
	• **Stage 5:** Development (of English/of academic competence) was the central aim these interventions

• Courses ought to be built around "student contributions"(Collis & Moonen, 2005, p. 70)	• Student contributions on the Forum; examples of student work in the Activities area
• It is preferable for students to be engaged in authentic tasks that "provide opportunities for complex collaborative activities" (Herrington, Reeves, Oliver, 2010, p. 1)	• Discussions on the Forum focussed on developing higher order thinking skills via the formulation of opinions on various social issues
• Aim and design for activity (Collis & Moonen, 2002)	• The Forum; tasks designed for the Activities areas

Table 6.1: Learning theories/web-design conventions underpinning the EDR website (Part A).

Major design element(s)/principle(s)	Instantiation online through:
• Learning is a social activity mediated via more knowledgeable others and through one's environment (Vygotsky 1930/1978)	• The Forum; links to other sites in the Self-study area
• Establishing rapport is important; L2 learning happens best in a low-anxiety environment (Krashen & Terrell, 1992)	• The Classmates page (e.g. students were given an opportunity to get to know one another)
• The use of authentic materials is beneficial in L2 learning (Nunan, 1999)	• The Course texts pages; content uploaded online mostly consisted of real IELTS test papers, leading to high situational authenticity
• Scaffolding language and learning is desirable (Gibbons, 2002)	• Uploaded content, which was supported via language-learning activities (e.g. comprehension questions, vocabulary building, collaborative tasks)
• Learning is promoted when language is used for genuine communication, and when language/tasks are meaningful for the learner (Richards & Rodgers, 2001)	• Topics on the Forum, which were closely aligned to student needs and interests; forum tasks were designed to prompt genuine engagement with potentially complex issues
• Language should be contextualised in the sense that texts are purposeful; texts exist in social and cultural contexts (Joyce & Feez, 2012)	• The online linguistic context(s) that exploited whole texts; language was purposeful in the type of instructions given, via the discussions generated, and through the use of *whole texts* (e.g. authentic IELTS reading passages; complete listening tests)

• Web design should foreground simplicity and usability (Nielsen, 2000). Aspects of this overarching principle pertaining to the EDR website are:
 	
  - consistency and continuity across pages;
  - learnability (i.e. navigation should be simple and intuitive);
  - readability (e.g. text should be scannable with font sizes large enough for standard displays);
  - aesthetic and minimalist design (Nielsen, 2005; Tognazzini, 2014)
	• The website as a whole, especially the use of white-space, collapsible panels and clear navigation bars

Table 6.2: Learning theories/web-design conventions underpinning the EDR website (Part B).

Many elements online were informed by teaching/learning theory, and to some degree, insights from Web and visual design. For instance, embedding a custom-made website into the program was inspired by the promise of flexible learning and the need for an "individualisation of learning experiences" (Collis & Moonen, 2002, p. 229). Elements of Vygotsky's (1930/1978) cultural-historical theory prompted the development of the Forum, and informed online activities designed to create opportunities for interaction with more knowledgeable others in varied online socio-cultural contexts. Key principles from CLT (such as contextualising language, encouraging meaningful interaction, responding to student needs, scaffolding learning) were central to tasks done in class and on the Internet. For example, the value of establishing good rapport is a core precept of CLT, and the Classmates page illustrates how this concept was operationalised online.

Piaget's (1926/1997) contributions to learning theory – that intellectual growth develops as a result of individual activity through an internal creative process of organising and reorganising schemata – informed the design of the Course-texts pages. As a social-constructivist, I do not consider teaching to be the transmission of information, rather a teacher's role is to "limit lecturing and explaining as much as possible and move toward activities that put students in cognitively active roles" (Eggen & Kauchak, 2010, p. 49). It is crucial to provide learners with opportunities to validate or abandon mental schemes, in other words, to (re)construct their knowledge.

As a practitioner, I claim that new media was used very well during the two courses that I was in charge of, and this view has support from students who experienced these interventions. Perhaps the EDR website worked since its design was underpinned by insights from second language acquisition (SLA) theory, and learning theory more generally, and because I systematically reflected upon its utility as an educational tool. Critical reflective practices aim to create more autonomy by fostering the capacity to assign "an equal value to the practical insights of teachers and practitioners [with the insights of research]. The purpose of reflection, in other words, is not rejection of theory, but promotion of practical knowledge to the level of theory" (Akbari, 2007, p. 202). Critical reflective practices are systematic, formalised, and can result in the construction of theory. As Lowe, Prout and Murcia (2013) point out, "reflecting upon the past and present as well as the personal and professional, contribute to building a personal theory of teaching" (p. 3). Whilst these practices have been recommended in the context of developing better teachers, critical reflection is crucial in EDR since design research demands the creation of theory.

Other problems concerned the IELTS course more specifically. The IELTS syllabus was not thematic and there was a view amongst staff that it should be, and it lacked coherence, which is to say that it was not designed to scaffold input or to systematically build language proficiency. The EDR website was built to address these issues, and to promote deeper engagement with the program of study.

My IELTS-Preparation programs were purposefully designed to be semi-thematic and I was conscious of the need for scaffolding and personalisation of content. The course was given a thematic structure through the Course-texts pages online[21]. Since I have been trained in CLT, my approach to L2 teaching is student-centred and responsive. In my teaching-practice, student needs are continually and regularly gauged. Language input is either remedial, where student-errors are fixed, or expansive – where student L2 output is nudged toward greater complexity. These practices are simply part of my work as an L2 teacher. The intensive nature of L2 education personalises content, and builds on what students bring to class. Thus, language proficiency was predominately built during face-to-face sessions on an individual and collective basis. Whenever I noticed common errors or a common linguistic level in student output, I created lessons that targeted these mistakes or features. In short, much work went into the instructional design of traditional classes, and into designing the EDR website. Major topics were initially introduced in class and then extended online to deepen my students' capacity to engage (just a little more) in critical thought. And students responded enthusiastically to these efforts.

The course/student artefacts online are evidence of a considered process underlying the design of the site. The texts that were used in class were logically linked to other texts for use outside of class. In the main, these links were either thematic or linguistic, and various activities around this content extended engagement, as described in Chapter 5. There is evidence of students following models that I created so as to guide the form of posted content. From my own experience of being a practitioner during the two EDR cycles, I found that students produced high quality work both in-class and on the Internet; it was relevant – the target language was often used in online posts – and there was a lot of it. I doubt that these kinds of outputs would have happened if students were not engaged with the program.

Finally, the goal of these interventions was to improve student learning. Many IELTS students were described as test-focussed, whereas they had to be more concerned with

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[21] How the program was designed to systematically build language ability has not been captured in the data, as this was beyond the scope of this Master's thesis.

developing their L2 proficiency and with their capacity to engage in critical thought. The development of language proficiency was part of the rationale for constructing flexible learning environments that extended learning beyond the hours of normal tuition. The EDR website was designed to engage students with the program for longer, so that they would use English more. It is based on the commonsense concept of immersion; L2 proficiency develops when learners are immersed in the language that they are learning.

Secondly, critical thinking is not a new concept in education, and definitions as to what it is are contested although it "has been long viewed as a skill for a lifetime of complicated choices which individuals have to make in their personal, academic and social lives" (Hashemi & Ghanizadeh, 2012, p. 37). I agree that thinking critically does not merely pertain to formal learning; it is an essential life-skill, and it includes the abilities to reason, to question, to draw inferences, to make complex decisions and to appreciate complex perspectives. Critical thought has been described as a skill-set (such as the ability to identify bias in a text or to assess whether conclusions are warranted) and a disposition. Meaning, students have to be willing to think critically about topics. Frijters, Dam and Rijlaarsdam (2008) express this view when they state, "critical thinking involves both skills and dispositions... [adding that] instructional designs aimed at critical thinking stress the importance of interaction between students" (p. 67). Opportunities to interact online and in-person were frequent during both EDR cycles, and these opportunities were in the learning design/teaching approach partly to develop the capacity for critical thought. Obviously, there were other elements of the design and in my teaching that targeted this skill, as improving my students' ability to engage in critical thought was important. This was also a problem/need identified during explorations for the study.

I do not claim that students developed advanced critical thinking abilities as a result of these interventions, but these skills were touched upon, and it was definitely an important aspect of the program. Intermediate and upper-intermediate L2 students still need to expand their vocabulary and grammar before they can engage in deeper levels of critical analysis in English. Nevertheless, students were constantly invited to question and analyse views throughout the program – to probe a little deeper – and many students did just that.

6.3.1 Reflections on the student-experience

Student voices are most important because I am ultimately only answerable to them as a practitioner, as are all teachers. The success or failure of these EDR interventions should be judged by whether L2 learners benefitted from the flexible learning environment that I

seeded, and that was co-created with my class. I believe that this is an important point. There are many distractions in education, there are many pressures, and there are circumstances that may not be ideal. In the end, teaching is about being in the classroom with one's students; and they do not care about the syllabus, about the politics, or the educational philosophy of the school, or the many administrative hurdles that teachers often have to deal with. They care about what happens in class, about how well or conversely how poorly, a teacher is able to connect with them, understand their learning needs, and address these needs. Practitioners should be concerned with this, and only with this.

My questions about the student-experience of the program were concerned with whether students enjoyed the course, and if they learnt anything. Students experienced the program as a whole; in their comments, the student-body did not divide the program into its face-to-face components and online components.

The feedback was positive, and students agreed that the IELTS-Preparation program was enjoyable, which is no small feat given the subject matter: preparing for a test. They reported that their English language proficiency developed and different aspects of instructional practice were cited as fine. These included the teachers and the teaching approach, the rapport, the materials/tasks, and the EDR website. There were one or two negative comments about different aspects of the course, but the vast majority of responses about the course-content, the teachers and the blended environment were very positive.

With regards to learning, different skills improved for different people. Speaking ability however was highlighted by a number of students as having developed because of circumstances – they had to speak when in class. When asked to explain why their English had improved, students stressed individual practice, frequent and intensive teacher feedback, and independent work. The significance of these comments is the quality of the teaching and the quality of the relationship between teachers and students were cited, or student-agency was credited. Even though people benefitted from engaging with the EDR website, students did not present it as a reason for any gains in English proficiency. Students benefitted from engaging with the site, but to what extent is debateable, as they would have undoubtedly benefitted from being immersed in English by virtue of being in Australia as well, which was incidentally mentioned by one participant.

There is value in questioning whether the use of new media is actually necessary for improving a language program. Using new media in education, even if done far less intensively than how it was done for this research project, takes time and energy. Thus, it

seems reasonable to ask whether the educational use of new media is in fact the best option for improving teaching/learning. If it is not, then why bother using these technologies? During staff-interviews, the justifications for investing in educational technologies were characterised by the need to conform. Juliet said, "it's fashionable in learning circles. I think the idea of blended learning is very big all throughout the industry" (ELICOS_Coordinator), and Jane stated that "we want to be seen as progressive" (ELICOS_Coordinator). These were typical responses. And I believe that they are poor motivations for engaging with new media, if indeed, the goal is to improve teaching and learning practices. These motivations seem driven more by commercial interests than with truly developing best teaching practices in L2 education.

With regards to the claim that learning can improve through the effective integration of new media in a high-stakes L2 program, there is limited support for some English gains as a result of student use of the EDR site, and for some improvement in critical thought. Many students explained that the EDR website was effectively integrated into the course and that it helped to develop language proficiency, "we use technology in this program in good way that improve our skills" (EDR_Cycle_1_Student_ix). Equally importantly, students explained that opportunities to engage in critical thought were present online, and they valued those affordances. The EDR site was used "to share idea about topic with classmate [*sic*]... because it is useful to improve my writing skill" (EDR_Cycle_1_Student_vii), it provided learners with "so many ideas" (EDR_Cycle_2_Student_iii), and it allowed learners to engage with course content more, "maybe we can see other idea about that topic that before we didn't think about" (Mary_EDR_Cycle_2_Student). In short, the site – and the Forum in particular – was used for the purposes I had intended: to immerse students in English, and to provide tasks designed to improve critical thought. As Billo explained when discussing the Forum, "I looked [at] what my classmates wrote and from that I learnt some new opinions, some new vocabulary, new expressions, some grammar that I didn't know" (EDR_Cycle_2_Student).

To sum up, I was working in an educational environment where, by and large, new media was being used ineffectively. This view was reflected in both student and staff comments. In contrast, apart from one or two exceptions, student-data revealed that I had developed a program in which new media was employed well. Furthermore, the EDR website improved my own teaching practices, and hence created a much better program for my pupils. Also, I believe that new media was used to good effect because my choices had coherent theoretical justifications, and were supported by critical reflective practices.

However, the question of whether the use of educational technology had a discernable impact upon my students' learning, and their language gains, is inconclusive. The students themselves credited their own independent work, individualised feedback and opportunities for practice rather than the technology. Some said that they found the website worthwhile, but did not immediately credit it with any language gains.

Design research attempts to fix problems in educational practice. In this study, a number of problems with the IELTS program were identified, as were student needs that were not being fully met. These failings have already been discussed at length, as have my efforts to remedy them. Thus, were the two interventions successful in addressing the needs/problems that were identified in Stage 1 of the research? Yes, I believe that they were. The needs/problems clarified in Stage 1 were targeted, and they were progressively dealt with. The educational product/tool has been successful in this respect. Whether this was the only way, or the best way, to address these issues are interesting concerns, and could form the basis of another discussion. However, the focus of this chapter now turns to exploring what can be learnt from implementing these EDR cycles and from the college itself.

6.4 EDR Principles

A major purpose of this chapter is to draw out theory from the act of doing this study. As this is one of the two outputs of EDR, the last research question was concerned with generating theory:

Research Question 3. What can be learnt from the context (the college), and from implementing these EDR interventions there?

The first series of principles are the result of conducting two cycles of design research. They are concerned with what to consider when creating media rich L2 classrooms, and these ideas have already been discussed in this chapter. Table 6.3 articulates each EDR principle in turn.

I. **Question whether educational media is the best option for achieving teaching/learning excellence in an L2 program.** Creating a media rich classroom that works is difficult and time-consuming. It requires considerable investment of time and resources if it is to be done well. If a program of study can be improved *without* the use of computer technology, then new media should be avoided.

II. **Educational use of new media must begin and end with teaching/learning.** The focus for using educational technology has to be on teaching and learning; new media has to support teachers, and strive to improve learning. Other motivations for using new media, such as following trends or creating *a modern classroom* are distractions. New media has to be embedded into courses so as to support teaching and create positive change. It should never be, nor should it be seen as being, an additional burden.

III. **Decentralisation of control.** Best practices with educational technology honour diversity and professional agency. Standardising how educators engage with online tools should be avoided. In order to facilitate creative, state-of-the-art designs, it is important to invest in people, to trust in their creativity and professional judgement, and to support their work. Teachers should be provided with an environment where they are able to experiment and explore, and their creation of surprising and unique educational products, and flexible learning environments should be applauded rather than feared, controlled, or pre-determined.

IV. **Flexible learning environments are co-created and they exist in an ephemeral collaborative space.** You will never get a perfect system, or design, just one that is more robust. Flexible learning environments are a blend of teacher, students, course, new media, research, and so on. These learning ecologies should never become rigid, and if computer technology is used, it should always be open to change – just as the dynamics are different between the same teacher and different cohorts of learners. New media should support the pedagogical relationship between students and their teacher(s), it ought not to demarcate or determine it.

V. **Educational use of new media should experiment with teaching/learning theory, and it should be underpinned by critical reflective practices.** New media can be used to explore some of the *grand theories* of teaching and learning. That is to say, the seminal ideas and models found in educational literature can be used as bases for design and experimentation in the classroom (and they often are). Equally important however, is the development of a personal theory of teaching, which arises through reflecting critically on the process of using new media to support teaching/learning practices.

Table 6.3: EDR principles I to V.

The second set of EDR Principles is a result of critical reflections upon the college. I argue that the college *did not provide* an educational environment where best practices with new media are nurtured. In research into technological expertise, Johnson (2007) found that technological expertise is developed by providing the necessary tools – the hardware and the software – and by ensuring that there are "unlimited opportunities to explore and to 'do'" (p. 191). I believe that this finding can logically be extended to instructional design expertise.

The EDR Principles in Table 6.4 consider, more generally, the type of conditions necessary for expertise to flourish within the context of learning and teaching with educational technology. Having the equipment is assumed; I am more concerned with practices that create the right kind of classroom and organisational culture.

VI. Teachers cannot be forced to use educational media. Well they can, but many will do what they can minimally get away with. Using edu-tech, integrating it into practice is hard work, and teachers must be supported. Any work done with new media (uploading files, answering forum posts) must be paid work; otherwise all that can be hoped for is mediocrity or avoidance. There will always be *inspired use* because of personal passions or motivations. If such uses are to be the rule, rather than the exception, rewards must be given for the work that proper engagement with educational media entails.

VII. Students cannot be forced to engage with online content/activities. Students cannot be forced to learn either, but they often are. Some students take to an online environment, others do not; if there is a demand that they must participate, then some may simply *go through the motions*. Good teachers establish rapport through which they share knowledge, and maintaining rapport extends to activities online. There are additional challenges since this environment is invariably accessed outside of school hours; if students do not feel like participating, they will not log on. Educational designers need to get creative with motivating students, and this is an exciting challenge.

VIII. Course developers/designers must teach, and teachers must develop/design courses. In some organisations a split exists between those who design, and those who teach. This also seems to be of concern in educational research, where academia defines best practices/methods, and teachers implement the findings/programs. EDR was developed to bridge this chasm between theory and practice, and perhaps the gap may be traversed if educational researchers get good at teaching, and teachers become skilled at research. This does not mean that instructional designers/educational researchers spend much time teaching, but they must spend *some* time in the classroom. Similarly, teachers should have some understanding of educational research methods, and an appreciation of how theory enriches practice.

IX. Trust and invest in teaching staff, and value their work. If you want to see really innovative uses of educational technology, teachers interested in this style of teaching need the training, the job-security, the incentives (financial or otherwise) and the creative freedom to experiment with computer technology. Teachers need to be trusted. In short, the right kinds of people are needed, and the right kind of culture has to be created for expertise to flourish.

Table 6.4: EDR principles VI to IX.

6.5 Limitations

Educational media has two key affordances. It can be used to connect people across time – students can work asynchronously online; they can access content whenever they wish – and it can be used to connect people over distance. In this study, computer technology was used to extend the amount of time students spent on the course. It hardly connected learners over any distance because these students met up in class, in person, on a daily basis. This resulted in new media being *supplementary* to the program, rather than essential. It would have been interesting to see how students engaged with computer technology if this were the only way they had access to the program, if for instance, some students were in Australia and others were spread around the world. I believe that such a context would have resulted in a stronger justification for the use of educational technology.

In many respects the EDR website is prototypal. Much of my focus went into ensuring that content was scanned and uploaded, into ensuring that all elements of the site worked, that people had access and reasons to engage. I think that there were many positive aspects to the site, but I also feel that it was not exploited as fully as it might have been. This is solely due to the fact that the website has only now reached a point where the foundations have been established, and more experimentation can occur.

EDR seeks theoretical understanding(s) that can be generalised, yet the methodology is context-bound and site-specific. Take Reeves' (2006) comment on this issue, "educational research is so contextualised, so linked to the particular stakeholders that are involved, the particular situation, the particular content, the particular assessment measures and so forth that it is really difficult to generalise" (1:23 min). In this study, the sample sizes were small, for this is the nature of purposeful sampling, of selecting participants who are information-rich. Thus, even though theoretical insights have been articulated as a result of the study, I tend to agree that any generalisation is difficult. As Patton (2002) has pointed out, "studying information-rich cases yields insights and in-depth understanding rather than empirical generalisations" (p. 230). Nevertheless, the study was situated in a college that is greatly influenced by neoliberal capitalism, and the EDR principles that I have articulated can be generalised in so far that they are broad enough to apply to similar contexts. As neoliberalism seems pervasive in education in Australia, similar contexts may well exist for this reason alone. Similarities between the college and other providers were also noted in Section 1.1.

The research relied on small sample sizes to describe the research context and the efficacy of the EDR interventions. Whilst this is a limitation in a sense, it is also a strength.

The small-scale nature of the research resulted in frank and honest comments, as the participants trusted me, and trusted that their details/comments would be confidential and that they would be de-identified. I doubt that I would have gained the same data had I opted for focus groups. I also doubt that the interviewees would have been as candid with their views had I been, for example, their employer. Since I had a professional and respectful relationship with staff (and students) that participated in this study, I also had privileged access. This means the data included in the thesis should be valued, and it should not be easily dismissed.

That being said, the research context may perhaps have been more richly described if I had invited newer teachers to participate, or senior managers/directors, and employees from Human Resources, who were responsible for articulating the centre's social media policies. These possibilities however must be balanced with what is practical, and with what helps to focus the study. This project was focussed on L2 teaching/learning with new media, and the participants were chosen because they could provide insights into this area. Furthermore, as far as staff data was concerned, a point of saturation was reached, and I felt that I would not have gotten anything more or different if I continued to interview more ELICOS staff.

I cannot say the same for student participants. Whilst I had a satisfactory number of questionnaire respondents, I was only able to interview two former students. This was mainly due to logistics. Ethically, these students had to cease being my pupils before they could volunteer their participation, which meant that the courses had concluded and many had moved on to other programs, or exited the college.

However, since an ethical process was in place for all students (e.g. they knew that they had no obligation to take part if they chose not to), this had an effect on the quality of the data. Many students appreciated the work that had gone into designing the course, and I had established good relationships with most of them by the time the IELTS programs concluded. Therefore, the responses given on questionnaires were (I believe) considered and sincere. These students knew that I valued truthful answers rather than *pleasing* answers, and I believe that this is the type of data that was collected. Furthermore, the agency of both students who were interviewed is evident in their comments; they are confident, self-aware individuals. I also believe they were in a position to both accurately judge their own progress as language learners, and to provide insightful feedback about the design of the IELTS course. Perhaps additional measures could have been in place to assess whether student L2 production had in fact improved (e.g. text analysis), but asking them whether they thought that their English had developed was a valid method of data collection.

Finally, McKenney and Reeves (2012) stress the idea of implementation and *spread* in their generic model. The educational product, the EDR site, created as a result of this work has not been implemented more widely than for the purposes of this study. I have, in fact, held a small seminar about my research at the college (in March 2014). This presentation was given to approximately half-a-dozen people, and it was only held because some colleagues expressed interest in my work. The audience included managers responsible for teaching and learning quality.

To date, there has not been any interest in implementing this tool (or one like it) across more programs at the centre, despite responses on the day being quite positive. I have also not pursued the idea of implementing this product more widely for I have not spoken to senior directors who may more easily effect change, or be more partial towards effecting change. In the end, large-scale changes in education require the support of those empowered to sign off on and fund innovations.

6.6 Future Directions

Future directions for this research concern the two outputs of EDR: a maturing intervention, and theoretical understanding. As mentioned before, the EDR website could be further exploited as a learning/teaching tool. For instance, I am drawn to withholding access to the Course-texts units unless students complete quizzes. This would result in collaborative, game-based practices; students would need to work together to find answers to unlock new content. The mobile component of this site was largely ignored, and many interesting tasks can be designed to take advantage of the fact that the Internet can be accessed *on the road*. More feedback from students who have already used the site could be incorporated into future iterations of the course. The site ought to "have other exercise to practice, not just what we did in the class" (Mary_EDR_Cycle_2_Student), and perhaps a question/answer page might even be worthwhile.

The EDR website has reached a level where it is now possible to more fully experiment with learning theories and models; to research and write about how various theories and models affect online L2 learning. My own skills as a web-designer are adequate for rendering some of these concepts online, and the fact that the EDR site works like a *home base* where links to other websites can be embedded allows for some degree of flexibility with exploring how educational theory relates to educational practice. Nevertheless, I would need to greatly deepen my understanding of code, or work with an expert web-designer, in

order to create a much more vibrant and interesting site – the kind of learning platform that I imagine.

The EDR Principles that have been articulated in this chapter are by no means the only findings that this research could have potentially elicited. For example, the importance of having control and ownership of a site when using copyrighted materials could well be articulated as an EDR Principle, or the many mini-lessons learnt from the strategies I used to encourage participation online could form bases for other EDR principles. I chose to look at the use of new media in L2 instruction more broadly, and to define principles that express the kinds of conditions necessary for best practices with educational media to emerge. I have chosen *not* to describe specific frameworks for others to follow if they wish to create similar flexible learning environments.

The nine EDR Principles are perhaps, at this stage, better described as conjectures. These principles have all gone through a critical process of refinement and reflection; some have also been instrumental in impacting practice positively, at least in this instance, and as a result they are worthy of merit.

I propose that future researchers experiment with these principles if it helps them frame studies into how various institutions relate to and use new media. If the EDR Principles proposed in this thesis are valid indicators/guidelines for good practice with educational technology, then with enough empirical support, these principles may evolve into standards. Such standards would most certainly have an impact on L2 practice. They could be used as measures to assess whether schools were fostering an environment where best practices with educational technology could flourish. Or, more encouragingly, they could serve as guidelines that organisations refer to in order to create an educational culture that allows for excellence and innovation with the educational use of new media.

6.7 Concluding Comments

The research done in the thesis has resulted in the creation of an educational product that was successfully used to anchor two flexible learning environments. The EDR site remains a flexible, responsive tool, but it also has the potential to be much more. Some of the educational promise of new media was realised through this study, and therefore the research serves as an example of the effective use of new media in a CLT context. This study exemplifies how CLT can be operationalised online and how educational media can add value to an L2 course.

Whilst the EDR principles proposed in the thesis are not the only ones that could have been proposed, their value is that they help clarify the conditions necessary for expert practices with educational technology. The nature of design research *with* new media is such that the educational context to be studied is created/designed. In this study, the flexible learning environments were rich, and future cycles can easily be conducted; these cycles will undoubtedly result in much more to write about. For the time being, it is interesting to consider whether the EDR principles articulated thus far are valid in other contexts. If these principles can be used to judge – as I believe they can – the quality of engagement with new media in educational organisations, then perhaps students and parents, or agents, would not be so easily mesmerised by glossy brochures of students in modern classrooms with new iPads. Perhaps more probing questions would be asked. Alternatively, these EDR principles could well guide the kind of choices that schools must make if they aspire towards excellence with the educational use of new media.

Lastly, it seems that for EDR to become a robust methodology, there is a need for some type of consensus around the logic of argumentation behind the warrants that are made (Cobb, 2006; Kelly, 2004), and there seems to be a need for agreed upon processes. This study has positively impacted practice, it may yet contribute to theoretical understanding, and my alignment with McKenney and Reeves' (2012) model is an attempt to add to EDR methodology, and answer the call for "more high-quality examples of [EDR] work" (p. 211). I hope that I have been somewhat successful.

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Appendix A: Script read by a third-party to invite student-research participants

English Language Instruction Online: Co-creating Flexible Learning Environments

- During this program, in addition to teaching you face-to-face, your teacher was piloting an online site to see if Internet tools helped you with learning English.

- As you know, this site is part of a study that Zbych Trofimiuk is doing for his Master's degree. He is required to write a 40,000-word thesis in order to complete his studies.

- In order to meet ethical standards, Zbych needs your permission to use any data that you have generated during this program.

- I am here on his behalf to invite you to participate in this study, but you do not have to participate if you choose not to.

- Your grades have been finalised, and you have now been given your reports; so you will not be advantaged in any way, or disadvantaged in any way.

- Your participation is voluntary.

- If you do choose to participate, or to allow your data to be used – then you will need to sign this consent form.

- IMPORTANT – you can choose to participate IN PART. For instance you may allow Zbych to use your forum data, but decline an interview. This is quite important, because he needs approval from you if he is to use any of your postings in the write up of his thesis.

- Furthermore, you will not be identified in any way. Your name and your image (if you posted one) will not be used and you will remain anonymous.

- You are also invited to complete a questionnaire that asks about your experience of the course. If you decide to fill this in and to sign the consent form, then these should be placed in a box in the Library.

- Zbych will open this box on Thursday after he has finished being your teacher.

- As far as interviews are concerned, only 3 people are needed as interviewing everybody is impractical. If you choose to be interviewed then please make sure you check your email so that a time can be arranged.

- If you decline an interview, then permission for any online data created by you, and your responses on this questionnaire would be appreciated.

- Here is an explanatory statement that describes the project in more detail.

Appendix B: Explanatory statement & consent form for staff at the College

Explanatory Statement for Staff

Explanatory Statement for Staff at ███████████████████████████████████

English Language Instruction Online: Co-creating Flexible Learning Environments

<u>This information sheet is for you to keep.</u>

My name is Zbych Trofimiuk and I am conducting a research project with Dr Nicola Johnson and Dr Jill Brown, who are my supervisors at the Faculty of Education, as part of a Master's Degree in Education by Research at Monash University. This means that I will be writing a thesis of 40,000 words about using web-based communication technologies in second language classrooms. This invitation has been sent to you using contact details provided by ███████

You have been invited to participate in this research project because you are experienced in delivering our programs and/or overseeing procedures for English language courses at the Centre. You have also been invited because of your insights into the students we teach, the technologies we use and your understanding of the educational philosophy we practice.

Background

My research involves students enrolled in our 10-week intensive IELTS preparation programs. Part of this study includes the creation of a flexible learning environment with the aid of online and mobile technologies. The assumptions underpinning this intervention are that students will be:

- more engaged in language lessons
- more confident when using English in Australia, and have greater fluency overall
- better prepared for future examinations and/or studies
- empowered as English language learners/users

Purpose of the research

The aim of this part of the study is to investigate how this intervention is situated in, and influenced by, the educational practices defined by the company. I am interested in exploring how syllabus requirements (e.g. student outcomes or assessment procedures), and strategic goals affect the use of educational technology.

Possible benefits

The possible benefits of this study include the creation of short-course flexible learning environments for English language students. The use of mobile and Internet technologies, as adjuncts to face-to-face lessons, can create more personalised learning experiences for students. These tools can also expand learning activities beyond the spatial and temporal confines of the classroom.

Your feedback is important because it will help me understand how such an environment fits into the practices already established by ███████

What does the research involve?

The study involves participating in one semi-structured interview that will be audio-taped. One further interview may be necessary in order to clarify any questions which arise as a result of the initial conversation.

All interviews will be held at ▮▮▮▮▮ either at ▮▮▮▮▮▮▮▮▮▮▮▮▮▮ whichever is more convenient. You will also be given transcripts of each interview to keep, and to amend should you wish to do so.

How much time will the research take?

The interview will be conducted by me (Zbych Trofimiuk), and it will take approximately 30 to 45 minutes. If you are invited to a follow up interview, I expect that this will only take 30 minutes of your time.

Inconvenience/discomfort

The risk of inconvenience and/or discomfort to you is low. You will be discussing the Centre's educational philosophy, the use of technology and the practices here, and sharing your thoughts about how all of these help our students learn English. Your personal details will be kept private so that others will not be able to identify you.

Participation is voluntary

Being in this study is voluntary and you are under no obligation to consent to participate.

Can I withdraw from the research?

If you do consent to participate, you may only withdraw prior to having approved the interview transcript(s).

Confidentiality

If you choose to participate, in order to help manage confidentiality you will be asked on the consent form to provide a first name pseudonym by which you would like to be identified. Your chosen pseudonym will be used to identify your responses during the interview.

The results of this study will principally be used for the completion of my thesis. I may also wish to publish some of these results. In the thesis, and in any publication, information will be presented in such a way that you cannot be identified.

Although pseudonyms will be used in the research, due to the limited number of institutions that offer English language programs to non-English speakers, your confidentiality cannot be guaranteed in this research.

MONASH University

Storage of data

Storage of the data collected will adhere to University regulations and kept on University premises in a locked cupboard/filing cabinet for 5 years. A report of the study may be submitted for publication, but individual participants will not be identifiable in such a report.

Results

If you would like to be informed about the research results, please contact: Zbych Trofimiuk on ▮▮ ▮▮▮▮▮▮ or email ▮▮▮▮▮▮▮▮▮▮▮▮▮

The findings are accessible for five years.

If you would like to contact the researchers about any aspect of this study, please contact the Student Researcher and/or the Supervisor:	If you have a complaint concerning the manner in which this research (CF11/2240-2011001239) is being conducted, please contact:
Student Researcher: Zbych Trofimiuk ▮▮▮▮▮▮▮▮ ▮▮▮▮▮▮▮▮ ▮▮▮▮▮▮▮▮ **Supervisors:** Dr Nicola F. Johnson, PhD, MEd, BEd Senior Lecturer Monash University, Faculty of Education, 2S214, Gippsland, Northways Rd, Churchill, VIC, 3842, Australia ▮▮▮▮▮▮▮▮ Dr Jill Brown Senior Lecturer Faculty of Education, Room 127, Building 6, Clayton ▮▮▮▮▮▮▮▮	**Executive Officer, Human Research Ethics** **Monash University Human Research Ethics** **Committee (MUHREC)** **Building 3e Room 111** **Research Office** **Monash University VIC 3800** ▮▮▮▮▮▮▮▮

Thank you. **Zbych Trofimiuk**

▮▮▮▮▮▮▮▮

Consent Form

Consent Form for Staff at ████████████████████████

English Language Instruction Online: Co-creating Flexible Learning Environments

<u>NOTE: This consent form will remain with the Monash University researcher for their records</u>

I agree to take part in the Monash University research project specified above. I have had the project explained to me, and I have read the Explanatory Statement, which I keep for my records. I understand that agreeing to participation means that:

I agree to be interviewed by the researcher	☐ Yes	☐ No
I agree to allow the interview to be audio-taped	☐ Yes	☐ No
I agree to make myself available for a further interview if required	☐ Yes	☐ No

I understand that my participation is voluntary, that I can choose not to participate in this project. I also understand that I can withdraw from the project before having approved the interview transcript(s).

I understand that any data that the researcher extracts from the interview(s) for use in reports or published findings will not, under any circumstances, contain names or identifying characteristics.

I understand that I will be given a transcript of the interview(s) containing data concerning me for my approval before it is included in the write up of the research.

I understand that any information I provide is confidential, and that no information that could lead to the identification of any individual will be disclosed in any reports on the project, or to any other party.

I understand that data from the interview(s) will be kept in a secure storage cabinet and will be accessible to the research team. I also understand that the data will be destroyed after a 5-year period unless I consent to it being used in future research.

Participant's name: _____

Participant's email address: _____

Participant's mobile phone number: _____

Participant's preferred pseudonym: _____

Participant's signature: _____

Date: _____

Appendix C: Explanatory statement & consent form for students at the College

Explanatory Statement for Students

Explanatory Statement for Students at █████████████████████████

English Language Instruction Online: Co-creating Flexible Learning Environments

<u>This information sheet is for you to keep.</u>

My name is Zbych Trofimiuk and I am conducting a research project with Dr Nicola Johnson and Dr Jill Brown, who are my supervisors at the Faculty of Education, as part of a Masters Degree in Education by Research at Monash University. This means that I will be writing a thesis of 40,000 words about using web-based communication technologies in second language classrooms.

You have been invited to participate in this research project because you have completed an IELTS Preparation program(s) in ██████.

Purpose of the research

The aim of this study is to ask you about the online learning environment we jointly created in class. The study will investigate if these additions to the course have:

- engaged you more in language lessons
- improved your English and made you more confident when using English in Australia
- helped you better prepare for future examinations and/or studies
- empowered you as a language learner

Possible benefits

The possible benefits of this study include the creation of short-course flexible learning environments for English language students. A flexible learning environment describes the course you were part of, where the Internet was used to supplement the input you received face-to-face in class.

Your feedback is important because it will help me understand what worked and what did not work, and it will inform future course design, and more generally; add to current language learning theory.

What does the research involve?

The study involves participating in one semi-structured interview that will be audio-taped. One further interview may be necessary for some (not all) participants in order to clarify any questions which arise as a result of the initial conversation.

You will also be asked to complete a questionnaire about your experience of the course, and you will be asked for permission to use some of the material you created in class. Examples of the work we did during the course, such as your forum posts or your text/audio messages to other students, will be analysed by me so that I can discover how you engaged with the program.

How much time will the research take?

The interview will be conducted by me (Zbych Trofimiuk) and it will take approximately 30 minutes. If you are invited to a follow up interview, I expect that this will also take 30 minutes of your time.

All interviews will be held in ██████████████████████████████ and you will be given transcripts of each interview to keep, and also to amend should you wish to do so.

The questionnaire should take 10 minutes to complete

The collection of artefacts will not take any of your time.

You may also choose to participate in all, or part of this project. For instance, if you do not wish to complete a questionnaire or attend an interview, you may still give permission for your classroom work to be used.

Inconvenience/discomfort

The risk of inconvenience and/or discomfort to you is low. You will be reflecting on the work we have done in class and sharing your thoughts about how this has helped you learn English. Your personal details will be kept private so that others will not be able to identify you.

In the unlikely event that you do experience any discomfort; free, private and confidential counselling is available for ▮▮▮▮▮▮ students on ▮▮▮▮▮▮▮▮▮▮

Participation is voluntary

Being in this study is voluntary and you are under no obligation to consent to participate. Participating or withdrawing from this study will not influence your grades at ▮▮▮▮▮▮ This invitation to take part has been sent to you after you have been provided with your end-of-term results.

I will not know who has decided to participate in this study until after you have completed this course and received your grades.

Can I withdraw from the research?

If you do consent to participate, you may withdraw from the research at any time.

Confidentiality

If you choose to participate, in order to help manage confidentiality you will be asked on the consent form to provide a first name pseudonym by which you would like to be identified. Your chosen pseudonym will be used to identify your responses during the interview or on the questionnaire, and to label material you produced in class.

The results of this study will principally be used for the completion of my thesis. I may also wish to publish some of these results. In the thesis, and in any publication, information will be presented in such a way that you cannot be identified.

Although pseudonyms will be used in the research, due to the small numbers of students in this course and the limited number of institutions that offer English language programs to non-English speakers, your confidentiality cannot be guaranteed in this research.

Exclusion criteria

I will endeavour to be rostered on classes where you will no longer be my student in the future. Since this cannot be guaranteed and the possibility that I will be your teacher on future courses exists, then you, and any data provided by you, will be excluded from this study.

This is to ensure that your participation is entirely voluntary, and that you do not feel under any pressure to participate.

![Monash University logo] MONASH University

Storage of data

Storage of the data collected will adhere to the University regulations and kept on University premises in a locked cupboard/filing cabinet for 5 years. A report of the study may be submitted for publication, but individual participants will not be identifiable in such a report.

Results

If you would like to be informed about the research results, please contact: Zbych Trofimiuk on ███ ██████ or the main reception at ████████████████████ or email ████████████████████████████

The findings are accessible for five years.

If you would like to contact the researchers about any aspect of this study, please contact the Student Researcher and/or the Supervisor:	If you have a complaint concerning the manner in which this research **<insert your project number here>** is being conducted, please contact:
Student Researcher: Zbych Trofimiuk ████████████████ ████████████████ ████████████████ **Supervisors:** Dr Nicola F. Johnson, PhD, MEd, BEd Senior Lecturer Monash University, Faculty of Education, 2S214, Gippsland, Northways Rd, Churchill, VIC, 3842, Australia ████████████████ Dr Jill Brown Senior Lecturer Faculty of Education, Room 127, Building 6, Clayton ████████████████	**Executive Officer, Human Research Ethics** **Monash University Human Research Ethics** **Committee (MUHREC)** **Building 3e Room 111** **Research Office** **Monash University VIC 3800** ████████████████ ████████████████

████████████████

Thank you.

Zbych Trofimiuk

Consent Form

Consent Form for Students at ████████████████████████████████

English Language Instruction Online: Co-creating Flexible Learning Environments

<u>NOTE: This consent form will remain with the Monash University researcher for their records</u>

I agree to take part in the Monash University research project specified above. I have had the project explained to me, and I have read the Explanatory Statement, which I keep for my records.

I understand that agreeing to participation means that I agree to all, **or part**, of the following:

I agree to be interviewed by the researcher	☐ Yes	☐ No
I agree to allow the interview to be audio-taped	☐ Yes	☐ No
I agree to make myself available for a further interview if required	☐ Yes	☐ No
I agree to the researcher using material I created in class/online	☐ Yes	☐ No

I understand that my participation is voluntary, that I can choose not to participate in all or part of the project. I also understand that I can withdraw from the project at any time.

I understand that any data that the researcher extracts from the interview, questionnaire or artefacts for use in reports or published findings will not, under any circumstances, contain names or identifying characteristics.

I understand that I will be given a transcript of the interview(s) containing data concerning me for my approval before it is included in the write up of the research.

I understand that any information I provide is confidential, and that no information that could lead to the identification of any individual will be disclosed in any reports on the project, or to any other party.

I understand that data from the interview(s), questionnaire and classroom work will be kept in a secure storage cabinet and will be accessible to the research team.

I also understand that the data will be destroyed after a 5-year period unless I consent to it being used in future research.

Participant's name: _____

Participant's email address: _____

Participant's preferred pseudonym: _____

Participant's signature: _____

Date: _____

Appendix D: Interview questions for staff-members

Staff Interview Questions

Good morning / afternoon.

I appreciate that you have spared time to meet with me to discuss your experience of working at █████████ ████████████████████████. You have been given the explanatory statement about my research and I have received your consent form.

Before we begin, do you have any questions about this research?

I would like to record this interview. This recording will only be accessed by me, or by my supervisors for the purpose of completing my thesis.

Do you mind if I turn the recorder on now?

The Company
- What are the courses that ██████ provides, how would you describe them to an outsider?
- What is the relationship between ████████████████████

Technology
- Do you think technology is important for language learning, or not? Does it benefit students?
- Why do you think technology is considered important from the company's perspective?
- How about from a teaching perspective, how can technology benefit students?
- Looking at the IELTS program, do you think new media is used effectively in these programs?
- How about Moodle, how is this platform integrated?
- Is it used as well as it could be? Why / why not?
- Does it need to be a part of these programs?

IELTS Preparation Courses
- Let's look at the IELTS program in more detail – How would you describe our IELTS students? What motivates them to learn English?
- What is your opinion of the course structure?
- Does the program work? Why or why not?

Teaching
- How would you describe the current cohort of teachers here?
- In a typical year, how many courses would a teacher teach?
- What teaching approach underpins the practices at ██████
- How do you understand the idea of streamlining and standardising courses?
- Do you think that that is happening at the centre?
- Do you think that there is much room for innovation or experimentation here?

Appendix E: Interview questions for IELTS students

Student Interview Questions

Good morning / afternoon. Before we begin, do you have any questions about this research?

In my thesis, you will not be identified in any way. A fake name will be used when writing up this interview, so please feel free to share your honest opinion about the course.

I would like to record this interview. This recording will only be accessed by me, or by my supervisors for the purpose of completing my thesis. Do you mind if I turn the recorder on now?

Learning English
- How long have you been learning English for?
- How long have you been studying at █████████
- Why are you learning English?
- Do you like learning English?

Teaching
- How would you compare teaching English here to education in your own culture? Are there any differences?
- Are there any similarities?

IELTS Preparation
- Why did you enrol in the IELTS course?
- What is your opinion of the IELTS test?
- What is your general opinion of the IELTS course you did with me?
- What did you like about it?
- What did you dislike about it?
- What did you think of the weekly schedule?
- What about the general classroom atmosphere, what was your opinion of that?
- What did you think about the materials that were used in class?
- Is there anything that you would change, or that you would do differently?

Technology
- Do you think technology is important for language learning, or not?
- How did (or do) you use technology to improve your English?
- In the course you did with me, you had the option to use a website outside of class. Did you use this site?
- How often did you use this site?
- What did you do on the website?
- Were the Course-text pages useful? How did you use them?
- Did you use the Self-study area? How, which sites did you visit?
- Did you read about other students in the Classmates area? What is your opinion of this area - was it helpful or useful in some way?
- Did you use the Forum? What did you do there?
- Is there anything that you would change or improve on the site?
- Do you think that this website improved the IELTS program?
- Do you think that this website deepened your learning, or do you think that it helped you learn English better? If so, how?
- Have you used any other technologies (for instance: Moodle) in other courses here?
- How often were these technologies, or programs used?
- What is your opinion of Moodle?

Miscellaneous
- Do have any other comments or questions?