A Project-Based Syllabus Design Innovative Pedagogy in Translation Studies

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Abstract

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This thesis presents a project-based syllabus as an innovative approach to translator training in higher education. The learner-centred syllabus raises the awareness of translation skills and competences among trainee translators and can provide an enhanced all-round translator training in higher education, from an academic as well as a vocational perspective.

The project-based syllabus was trialled in the module Translation and Technology of the Master's degree in Translation Studies at Durham University (UK), which aims to familiarise students with internet-based and computer-aided translation tools. A three-year study conducted between 2009 and 2012 was an inquiry into the impact of the syllabus on students' translation competences and skills.

The quality and quantity of literature since the 1980s have shown that Translation Studies has become an independent discipline, partly thanks to scholars who have mapped the discipline, such as Holmes (1988) and Toury (1995, 2012), and others who have directed the spotlights on didactics, such as Kiraly (1995) and Pym (1993 - present) among others. The discussion of didactics and pedagogy, particularly in relation to translation technology, is to be found mainly in articles, chapters in collected volumes, or in conference papers. Against this background, the project-based syllabus is put forward as a suitable and complementary teaching method which helps students meet academic as well as professional requirements. In the thesis, I will place the project-based syllabus in context, describe its origin, discuss the rationale for its implementation, and the outcomes of the study.

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Abbreviations

AR	action research
CAA	computer-aided analysis
CADAD	Council of Australian Directors of Academic Development
CAT	computer-aided translation
CIoL	Chartered Institute of Linguists
CLL	communicative language learning
CLT	communicative language teaching
CMC	computer-mediated communication
CPD	corporate professional development
CRITT	centre for research and innovation in translation and translation technology
DGT	Directorate-General for Translation
DTS	descriptive translation studies
DUW	Durham University website
ELT	English language teaching
EMT	European Master's in Translation
ESL	English as a second language
ESP	English for specific purposes
EST	European Society for Translation Studies
EU	European Union
FG	focus group
FL	foreign language
HE	higher education
IIQ	In Itinere questionnaire
IIQ2	In Itinere questionnaire – year two of study
IIQ2a	In Itinere questionnaire – year two of study term/module one
IIQ2b	In Itinere questionnaire – year two of study term/module two

IIQ3	In Itinere questionnaire – year three of study
IIQ3a	In Itinere questionnaire – year three of study term/module one
IIQ3b	In Itinere questionnaire – year three of study term/module two
IIQ-PS	In Itinere questionnaire – pilot study
ITI	Institute of Translation and Interpreting
L1	first language
L2	second language
LSP	language service provider
MATS	Master of Arts degree in Translation Studies
MFL	modern foreign languages
MT	machine translation
NNS	non-native speaker
OR	online resources
PACTE	process in the acquisition of translation competence and evaluation
PB	project-based
PBL	project-based learning
PBT	project-based teaching
PEMT	post-edited machine translation
PM	project management
PPP	presentation-practice-performance
QA	quality assurance (in CAT tools)
QAA	Quality Assurance Agency
SDL	self-directed learning
SL	source language
ST	source text
T&T	translation and technology
TAP	think aloud protocol
TAUS	Translation Automation User Society
TB	task-based
TBL	task-based learning
TBT	task-based teaching

TEnt	translation environment tools
TL	target language
TM	translation memory
TNP	Thematic Network Project
TQA	translation quality assurance
TS	Translation Studies
TT	target text
VLE	virtual learning environment

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Introduction

This thesis presents the results of a three-year study, which was set up to collect sufficient data which suggest that a project-based syllabus underpins a suitable and comprehensive method to train students of translation and to prepare them for an increasingly technical and fragmented translation industry. The setting for the data collection of this study was the MA course in Translation Studies at Durham University. All data were collected between 2009 and 2012, and the participants, students of the Translation and Technology module, were taught by the researcher. The study was conducted with by means of action research, and the data collection tools consisted of surveys (questionnaires), interviews and focus group discussions. The overall data analysis aims to provide answers as to the effectiveness of the project-based syllabus in translator training. The results support the outcome and value of a project-based syllabus in practice.

Rationale for a project-based syllabus

An argument in favour of studying the qualities of a project-based syllabus, its design, and its impact on pedagogy (teaching) and teaching methodology (framework) is to create a better understanding of its potential (see Creswell 2007:35–52). The literature on syllabus design and teaching methodology in Translation Studies is sparse (see O'Hagan 2013; Pym 1993, 2009). The literature review therefore discusses the project-based syllabus in relation to what *has* been produced concerning teaching methodologies in Translation Studies, and integrates these works with publications in cognate disciplines such as education and modern languages. Furthermore, the literature review focuses on the transition from generic teacher-centred syllabuses to learner-centred syllabuses and on the shift from project-oriented translation studies to a process-oriented pedagogy. The project-based syllabus is set against the background of current changes in didactics, curricula and methodologies in translation studies. The pedagogy that supports the syllabus is tried and tested in the translation and technology classroom. The purpose of the study is to understand the impact of the project-based

syllabus on the enhancement of translator competences and skills – the research was conducted in a specific context, the learning environment of students attending an MA degree course in Translation Studies at Durham University, however it is hoped some of its findings could be relevant to other MA programmes in translation. At this stage in the research, the project-based syllabus will be defined as a learner-centred process-oriented framework in translator training, and as it is applied to the module Translation and Technology.

Definition of the problem: the student translator and the practitioner teacher

The study is set in the context of a postgraduate programme of Translation Studies, a taught programme at master's level that equips students to continue with a research career and prepares them to deal with the incumbencies of professional life. This model drives us to equip our graduates with the skills to identify their training needs for a life-long career in the translation industry. It focuses on a set of common issues of learning and teaching arising from this postgraduate learning context. The issues refer to teaching delivered by a qualified teacher in higher education who is a practitioner of the discipline, a professional freelance translator with knowledge of translation studies, as well as the learning practices of students.

Aims and objectives

The study in this thesis assumes that a project-based syllabus acts as an interface between theory and practice; this section explains the working hypothesis and the aims of the thesis, it is followed by a discussion of the research methods and ends with a brief overview of each of the main chapters.

The aim of this research is to present and test an appropriate teaching methodology in Translation Studies at post-graduate level to enhance vocational translator training. The anticipated outcome is for students to achieve a level of translation skills and

competences that enables them to operate as critical, reflective and creative practitioners of translation after they have completed their training. The teaching is research-based, which means that students learn the course content as researchers and meet the academic requirements of the course. The objectives are to measure the effectiveness of the syllabus that underpins the teaching method and to constitute the steps students need to take to reach the goal of independent professionalism. In this study 'competency' is understood to refer to the 'ability' or the 'potential' to perform, while 'competencies' indicate the actual performance. Competence is a quality, whereas 'skill' is a proficiency that is learnt or acquired through training. Although the teaching method aims to address individual competence and competencies, it will do so through teaching and practising new skills. At this point it should be noted that in a product-focused framework, knowledge, skills and learning behaviour would be categorised in this order of importance, whereas in a project-based and process-oriented framework learning behaviour and skills take precedence over knowledge. Knowledge in the process-oriented approach is acquired through appropriate learning skills. Further aims are to devise some suggestions for improvement and to see how effective these improvements are.

Methods

The results of the research can be used to improve relevant academic theories as well as to modify current or existing translator training or to create a new model. Emerging variables from the investigation are measured and subsequent questions are asked and answered (Oppenheim 1992:150–173). Therefore, the conceptualization of the methodology, its planning and design were carried out in a pilot study survey in the first year, followed by interviews, leading to revised conceptualization and revised objectives in the following two years. There are four chapters in the thesis: Chapter 1 contains the literature review, Chapter 2 offers a discussion of the project-based syllabus, Chapter 3 explains the research methodology, and Chapter 4 constitutes the data analysis. They cover a significant part of the research and explain the strengths and potential of the project-based syllabus. Reference is made to activities that involve

e-learning such as the use of blogs and wiki websites, and blended learning. Although e-learning and blended learning are present in this research, they are treated as tools. They were not objectives of the study.

In the pilot study year a questionnaire was administered to a cohort of fifteen students to collect and analyse their responses to the syllabus. Several interviews followed the pilot study questionnaire in order to probe further. In the second and third year of the study the questionnaires were administered twice a year and included the annual cohort of students, divided into two groups of approximately 15 students each. Questions were modified in accordance with changes in the curriculum, associated changes in the syllabus, new activities in the university's virtual learning environment, and preliminary conclusions from previous questionnaires, or to improve clarity. In the second year, focus group discussions were set up to hear the students' views on certain aspects that had emerged from the questionnaires, or that had not been fully covered in the questions. Focus group discussions were held primarily with members of small project management teams in class, who were responsible for the coordination of activities necessary for the completion of translation portfolios. Methods of inquiry grounded on action research, which is a form of inquiry that allows all parties to be involved, the teacher/researcher as well as students, were adopted after the pilot study. Such an approach helped the teacher to make informed decisions when changes to the syllabus were required. Within that framework, a new set of structured interviews was held in 2012–2013, one year after completion of the study, to study the students' learning approach in line with the learner-centred project-based syllabus. The interviews have been included in the study for reflective consideration and a deeper understanding of the data.

Action research is a recurrent theme in the thesis. It is not a method, but an eclectic process of inquiry, with many theories and practices. The researcher, a professional translator and modern foreign language teacher has witnessed the development from teacher-centred practice in the 1970s, communicative language teaching in the 1980s to competence-based, inquiry-based and reflective teaching practices in more recent years. Although action research is well represented in the literature, it is not necessarily

an approach that suits all. In *Teachers and Youing Learners: Research in our Classrooms* (eds Mitchell-Schuitevoerder *et al.* 2006:97), Rixon, one of the contributors, observes that not all researchers and educators are comfortable with detailed methods of data collection, or are confident that they can observe the classes they are teaching. Rixon continues that others would prefer to concentrate on the teaching and leave the data collection to interviews or focus groups. And some do not wish to observe their own practice, but would rather investigate what others do and learn from it. Yet there are also educators 'carry out research in order to stimulate a larger "audience" to think about more general issues', such as the syllabus (and wider curriculum), as well as the students' perceptions of the project-based syllabus in respect to their own needs and ambitions. The researcher would place herself among the latter.

The project-based syllabus is based on social constructivist principles of pedagogy, which in effect give the students control of their learning. In this perspective, objectives needed to be made clear and visible for the project-based syllabus to be successful. A task-based structure, frequently used in communicative language teaching, was applied to the syllabus, which created a clear framework for the students. A variety of theories and teaching methodologies that support the project-based syllabus, such as social constructivism, and task-based and problem-based teaching, are discussed in Chapter 2, while the literature review in Chapter 1 gives the context of theories and teaching methodologies.

Modularity and the phased task-based structure of the project in the syllabus were essential to achieve the objectives of the project-based syllabus and to make students more aware of their potential in the field of competence and skills. During the study, translation revision became a key area in which students needed to learn how to progress from a trainee translator's approach to a professional approach. Self-assessment qualities and peer review were incorporated in the learning and practice of technological tools as essential components of professionalism. The syllabus of the module relied on a project, a 2,500-word translation portfolio, for which the students selected their own range of web pages for translation from the university website. The

translation process within the project consisted of a series of comprehensive tasks in line with the task-based approach. The tasks covered the use of translation memory programmes and internet-based resources, and were supported by the reading and understanding of relevant academic sources. In the pilot-study year the module consisted of 72 contact hours and was taught over two terms. Each week consisted of a two-hour seminar and a two-hour practical session in which the students were introduced to the practice of identifying, selecting, and using fundamental internet-based resources for translation activities in the first term and computer-aided tools in the second term. The summative assessments (one per term) consisted of the students' critical assessments of the internet-based or computer-aided tools which they had tried out on the translations in their portfolios. The results of the summative assessments were translated into credits; according to the programme specifications and Durham University regulations the students need 180 credits (90 ECTS credits) to qualify for the MA degree. The translation portfolios which were established as part of the Translation and Technology module were excluded from the summative assessment, although they were reviewed to give the students feedback. As part of the research in the study, the portfolios were subjected to a continuous process of self-revision and peer-revision in the second and third year of data collection.

The project-based syllabus trialled as part of this study aspires to offer a comprehensive programme of learning and teaching. Hence, the project-based methodology is presented as a suitable method to combine various classroom and independent-learning activities, thus ultimately enhancing translation competence and skills in a learner-centred and process-oriented approach. The project-based syllabus creates an environment in which vocational and academic training merge seamlessly. It allows for an innovative pedagogy in the classroom, which can be cross-modular and can benefit from theoretical modules as well as offering support to other translation modules, such as specialised translation.

Structure of thesis

The literature review in Chapter 1 explains the background to the project-based syllabus and places it in the context of Translation Studies. It gives a thematic overview of syllabuses and curricula; views on assessment of translation, technology for translation; reflective activities, and the impact of studies and experiments on the pedagogy in Translation Studies. Chapter 2 explores the qualities of the project-based syllabus, its implementation and the benchmarking process which will assure that its objective to improve translator competences during training is achieved. Chapter 3 describes the eclectic research methodology that had to integrate methods from different approaches: surveys in the pilot study contain quantitative and qualitative data which are complemented by interviews. Focus group discussions and more surveys in the second and third year aim to validate findings in the pilot study, and reflective interviews after completion of the three-year study complement the inquiry. The mixed-method design is explained in Chapter 4, which exemplifies and illustrates the data from the different methods. Special focus is given to the revision task and project management task, performed by the students in accordance with the project-based syllabus during the study, and to emergent outcomes after the study (Mitchell-Schuitevoerder 2013:129–231). Criteria adopted in the syllabus should be understood in relation to the competences for translators, which are recommended for the European Masters in Translation.

For illustrative purposes, appendices are included with the questionnaires that were administered as well as the transcripts of the focus group discussions held during the three-year study; samples of the developing project-based syllabus; a copy of interview questions; and forms containing ethical approval and a student's project management timesheet. In the interest of rigour of completeness, the actual responses to the questionnaires are collected and stored in the DVD support appended to the thesis.

Chapter 1

1 Literature Review

1.1 Objectives in the literature review

The literature review sketches the conditions in which a project-based (hereafter PB) syllabus can benefit translator training. Firstly, it clarifies the rationale for this study by identifying the research gap and how and where current teaching methodologies in translator training fall short. Secondly, the review is theoretical in that it presents the theories underpinning specific aspects of translator training. Some of the theories have emerged from primary research when, for instance, action research (hereafter AR) in the classroom has taken place (1.4.1). Thirdly, one of the objectives of this study is to determine how students actively engage with the construction of their knowledge and skills and fourthly, how they interact with the syllabus. Therefore, the review will include a proportion of literature that has emerged from experiments with process-oriented training in order to establish if and where the PB methodology could be included. Fourthly, the scope of the review also takes account of product-oriented theories and methodologies when and where they relate to or include some aspects of process-oriented training. And finally, the discussion of theories, primary research and handbooks in translator training takes a thematic approach, ranging from didactics, such as teaching methodology to reflective teaching and learning procedures and assessment. The research synthesis will draw conclusions from early research, before the advent of technology, and research after technology became part of the translation process in order to underpin the validity of the proposed project-based teaching methodology in translator training.

1.2 Thematic overview

1.2.1 *Didactics in the last quarter of the twentieth century*

Research in translator training in the last two decades of the twentieth century revolves round the concept of didactics, which is the practice of teaching. Towards the end of the century pedagogical aspects enter the discussion, which expands to include the role of the teacher and the needs of the student. In the 1980s when Holmes (1988:77) discusses didactics, he grounds it in a theory which recognizes translation as a technique to learn a language and to test proficiency. The teaching of translation skills to trainee translators is a new development, which requires changes in methodology, testing techniques, and a curriculum. Holmes (ibid.) therefore categorises translator training as a branch of applied TS. Furthermore, he not only considers the trainee translator, but also the professional translator in his assessment of needs and types of translation aids, such as lexicographical and terminological tools, and grammars. He also recognizes the importance of establishing a translation policy which should give translators informed advice on translating and translations in society. It should cover what needs to be translated in certain social cultural environments, what the position of the translator should be in whatever climate or environment, and the role of translation in language teaching and learning.

Holmes observes the poor level of objective translation criticism at the time of writing. He believes that more contact between scholars and translators might raise the level to an acceptable one. Scholars and professional translators continue to review criteria for 'quality assessment', revision and assurance. The process of revising translation is an important component of the PB syllabus in this study. Particularly quality assessment of their own work is an extremely accessible tool for students in translator training and their increased awareness leads to enhanced competence (1.2.5).

Holmes was pivotal in the foundation of TS as a discipline. His ideas remain valid and have become the foundation of translator training and to some extent of this study as well. So what does Holmes' proposed policy mean for this study? The reflective

aspect of the PB approach fits well within Holmes' process-oriented descriptive translator studies (hereafter DTS) which is concerned with the psychology and process of translation. In many respects the PB approach continues from Holmes' observation that the quality of objective translation criticism needs to be raised, particularly in the revision of translations, which is a substantial part of the PB syllabus. Furthermore, the PB methodology is theory grounded and requires full cooperation of the student translator, and between the student translator and the teacher. And finally, there are many of Kiraly's constructivist ideas that shape the PB syllabus. Kiraly (2000) argues that students are more likely to retain what they have learnt if they have been able to discover and practise their own goals and materials. His constructivist ideas encourage interaction between what is learnt and what is taught. They are embedded in the project-based methodology and seek a balance between professional activity and academic reflection (Mitchell-Schuitevoerder 2013:127–142).

1.2.1.1 From didactics to methodologies

Holmes mentions the didactics of translation, but he does not define a methodology. A few years later Pym (1993:13) looks critically at the methods, scope and validity of knowledge in relation to teaching translation. He is not prescriptive; his systematic approach aims for wholeness and completeness. It adds new perspectives to early research in TS (see Holmes 1988). Pym argues that the translation process requires consideration by not only the teacher, but also the students. In 'Principles for the teaching of translation' (1993:100–116), Pym suggests that we start from the process of translation, which he calls induction. The teaching of theory should follow, and not precede translation. We should begin with an analysis of problems rather than turn to the theory and we should not look a priori for its potential application in the translation. Teaching itself should not be rule-bound but based on choices which can be illocutionary or extra-linguistic. Students need to discuss translational errors, which lack fixed boundaries between right and wrong. Ironically, Pym becomes semi-prescriptive when he states what should *not* be contained by rules. In comparison his later works (see 2003, 2009, 2010) exemplify his shift into a new and positive direction, which is that of reflective thinking in translation learning. In

Epistemological Problems in Translations and its Teaching (1993) Pym explores new pedagogical solutions and methods, but it is not until after the start of this century that his works become distinctive models of process-oriented teaching and learning in TS.

1.2.1.2 From methodologies to pedagogy

Kiraly continues the increased focus on translation practice. In his foreword to *Pathways to Translation - Pedagogy and Process* (1995), he highlights a translation pedagogy based on descriptive (not prescriptive) translation theories. His theories find their origin in his own translation practice. Kiraly (1995) identifies a gap of clear objectives, curricular materials, and teaching methods. He refines his observation by recommending more empirical study of new and different curricula, methods, objectives as well as syllabuses (1995:11). In his discussion of the state of affairs in 1995, he states that *translator* competence over and above *translation* competence (see 2.6.1) should be crucial to pedagogy. Kiraly believes that innate translation competence (often associated with bilingual competences) does *not* include situational contexts and strategies, and that translation processes need to be taught and learnt. Kiraly's emphasis on the situational context (a broad term which would now be deconstructed and subdivided into areas such as localisation, (inter)culturalisation, teamwork or project management) is linked with cognitive activity, namely processes in the mind. Kiraly argues that translation theories, traditionally linguistic and later including the transfer of meaning, are not sufficiently comprehensive in translator training. Clear, realistic learning objectives cannot be set without a full understanding of mental processes involved. The arrival of technology in translation and translator training has put Kiraly's reliance on psycholinguistic top-down training into a different light. It requires a modification of Kiraly's proposed pathways. Although the latter present valid requirements, they no longer provide a complete route for the pedagogy that is needed today. The PB approach complements Kiraly's pathways and provides natural progression by bringing the situational context into the classroom and connecting it with cognitive activities appropriate to the translation profession.

Kussmaul's *Training the Translator* was published in 1995, in the same year as Kiraly's *Pathways to Translation - Pedagogy and Process.* Whereas Kiraly embraces

the process-oriented approach and the Thinking Alloud Protocol (hereafter TAP), Kussmaul merely refers to them as 'helpful'. What he shares with Kiraly is the search for a pedagogical approach to translator training and a discussion with professionals (Kussmaul 1995:1). In the Introduction he states that his book is based on the method-oriented translation process. He therefore prescribes how teachers should teach: '[t]he book is aimed at teachers of translation who are interested in explaining translation in a rational way' (1995:3). Consequently his reservations about TAP studies stem from the lack of its methodological basis. Kussmaul supports the functional approach, which takes it half-way to the PB methodology, but only halfway: the PB syllabus is learner-centred, whereas Kussmaul's approach to translator training is teacher-centred.

The aforementioned titles include words and phrases such as 'training the translator', 'pathways', and 'pedagogy', which are terms that refer to translation courses, curricula and teaching. They represent the literature that shows an interest in teaching translator skills and competences. The following section pursues this progression and follows the development from didactics to methodology and pedagogy through to the translator and their profession, which is one of the goals of translator training.

1.2.1.3 From theory to practice

Unlike Holmes who speaks as a theorist, Bell (1991) approaches the pedagogical principles as a practitioner. Theories may be time related, but they are not necessarily outdated, while handbooks, textbooks and manuals can be out of date soon after publication. Bell's handbook *Translation and Translating: Theory and Practice* (1991) was published when technology began to enter the field of translation through hardware and software, the internet and technological tools, although they were not yet as sophisticated, or as extensively used by translators, as they are today. An example of obsolescence can be found in Part 3, 'Memory', where Bell discusses the neurological aspects of live translation memory. Human memory will be considered less relevant today since Translation Memory (hereafter TM), a computer-aided translation (hereafter CAT) tool, has become the translator's extended, back-up

memory. In the parts ‘Model’ and ‘Focus’, Bell looks at standards for process and competence, which will continue to be relevant, even though standards evolve and change. His standards on Quality Assessment in Section X remain under review, even today. Bell claims that the link between practice and theory needs to be established. He objects to translation theory being presented as a set of rules, because it would defy process. Bell aims to define which skills and knowledge underlie the translator’s practical abilities. Furthermore, he questions the relationship between translation theory and practice in a positive sense. His proposed model of translation, although product-focused, introduces the awareness of a translation process and the potentiality of process learning. It cannot be denied that Bell’s training remains in the classroom, and does not quite bridge the gap between translating as a trainee and translating as a professional, but it is a step forward.

1.2.1.4 A new dawn in translator training

Developing Translation Competence (eds Schäffner and Adab 2000) and *Translation and Interpreting: Training, Talent and Experience* (eds Dollerup and Loddegaard 1992) were ground-breaking works for translator teachers in their time. Schäffner and Adab (2000:218) state that it is [their] belief that the task of the translation teacher/trainer is to enable students to develop greater levels of competence which requires a little more than competence in translating into L2. Dollerup and Loddegaard’s work is a collection of papers from the First Language International Conference in Denmark 1991 in which Snell-Hornby’s (1992:9–22) paper, ‘[t]he professional translator of tomorrow: language specialist or all-round expert’ was forward-looking and acquainted the translator teacher of the 1990s with new pedagogies. It was a real break-through. Snell-Hornby’s views are based on the curriculum in her university department in Vienna and yet her presentation of historical perspectives gives a sense of emergence into a new era. Ingo’s paper, entitled ‘Translation Theory: Four Fundamental Aspects’ (1992:49–56) intends to give the teacher practical suggestions. He recognizes the necessity of theory to the student as it helps to analyse and recognize problems. Ingo (1992:49) defines four areas; grammatical structure, linguistic variety (style), semantics, and pragmatics. This

division into form (language and style-specific) and meaning (traditional and situational semantics) is important for the assessment of the translated text. Ingo claims his division is relevant to all types of texts and that it takes us beyond the concept of equivalence. Thus Ingo tries to define the next generation of translation theories, while Snell-Hornby considers translator training for the next generation of students.

A revival in scholarly research into translator training around the millennium is obvious in titles, such as *Teaching and Researching Translation* (Hatim 2000), *Translating as a Purposeful Activity: Functionalist Approaches Explained* (Nord 1991), *Basic Concepts and Models for Interpreter and Translator Training* (Gile 1995). Furthermore, there is a generation of scholars, such as Nord (1991), Kiraly (1995), and Hansen (1997) who are aware of translation as a process and as a product in a new and changing environment. The focus shift from translation as an evolving product, to translating as a developing process takes shape after the millennium.

1.2.2 *Research after 2000*

An uncomfortable relationship between translation theories and the profession continues after the start of the twenty-first century, but on a different level, as the emphasis on the profession itself increases. Robinson discusses self-training in *Becoming a Translator* (see 1.3.1). In the Preface of *Managing Translation Services: Making the Transition from Working as a Sole Practitioner to Developing a Successful Translation Organisation,* Samuelsson-Brown (2006) describes moving from being a single practitioner to running a business, and using additional (human resources) as a natural process. He only makes fleeting reference to the education of translators: 'educational bodies who teach languages and translation are beginning to offer translation services to a limited degree but few have yet to make a significant impact on the provision of commercial translation services' (2006:xi). In the fifth edition (2010:1) Samuelsson-Brown mentions training without much detail; his discussion remains inconclusive. Nevertheless, he highlights the importance of portfolios during

academic training, he refers to memberships of professional organisations and recommends continuous personal development (CPD), offered by these bodies.

Such references to professional practice are innovative and typify post-2000 literature. Indeed, it is a major shift from translation theory to the practice of translation and the translator, which is present in the works of many scholars who have shown a profound interest in translator training (see Cronin 2003; Englund Dimitrova 2005; Gambier and Van Doorslaer 2010; Gile 2001; González Davies 2004, 2005; Gouadec 2007; Hansen 2013; Hubscher-Davison 2008; Hung 2012; Kelly 2005, 2008; Malmkjær 2011; Mileto and Muzii 2010; Mossop 2007; Munday 2012; Olohan 2004; Pym 2003, 2009; Schäffner 2004; Shlesinger 2009). The great variety of views on translator training is very welcome to the TS community and to researchers of translator training. Kiraly's work has undoubtedly set the tone for dedicated translator training and it will be interesting to see which of the aforementioned will join his ranks.

1.2.3 *A constructivist teaching method for effective learning*

Kiraly's first chapter, 'Translation and Translator Education – Fields in Flux' in *A Social Constructivist Approach to Translator Education: Empowerment from Theory to Practice* (2000), adds a practical perspective to translator training. His approach requires learner-centred activities in which students set their own objectives within a framework that is built by the teacher and is driven by the teacher's needs analysis. In this study a needs analysis was unintentionally performed in the questionnaires (see 3). Kiraly's publication in 2000 is an excellent continuation of *Pathways to Translation* (1995), and of course it complements the first steps towards a better understanding of translator training, as expressed in Dollerup and Loddegaard (1992). Kiraly confirms that after being a cognitivist who believes in models extracted from mental processes (for instance, through Thinking Aloud Protocols), he has become a social constructivist who recognizes that mental translation involves dynamic processes. His approach to teaching is now based on all the processes of comprehension, meaning and knowledge, involving the mind as part of collaborative

learning. He rejects the two-track cognitive/social approach (2000:7) in *Pathways*. It should be noted that Kiraly quotes many theorists in the field of second language acquisition, education and psycholinguistics, including Krashen and Vygotsky, which might explain his strong interest in the mind and education. Kiraly, a fulltime lecturer and freelance translator, also refers to the practitioner in the twenty-first century. The emergence of technology requires not only translation, but also translator competence (2000:13), as well as the ability to assess tools, membership of communities, and the capability to deal with a great diversity of texts (see PB syllabus 2.4.2).

Kiraly's argument for the constructivist approach in translator training is a response to the extreme diversity within a profession that requires the translator to adapt and change models and meanings. Ongoing learner independence should be initiated during the training process and continue independently afterwards. Kiraly calls this process 'learner empowerment' (2000:17) as opposed to 'transmissionism', (a teacher-centred approach). Kiraly presents 'scaffolding' (2000:45) as a flexible support service offered by the teacher to the student. It will help them perform tasks competently, as well as acquire learner independence. The term 'scaffolding' is crucial in social constructivist approaches in general as well as specifically in second language learning/teaching. The 'task' as described by Kiraly is also practised in L2 learning, but more comprehensively. The quality of Kiraly's task in translator training is not defined, which allows this study to define and structure the 'task' and its place in a PB syllabus (2.2.2).

In his conclusion Kiraly gives some profound observations, for instance that there are 'only a handful of academic programmes worldwide that purport to train translator teachers themselves' (2002:193). TS in universities in the UK is a discipline that often functions under the auspices of departments of linguistics or modern languages. The vocational quality of the discipline offers scope for innovation in the fields of a) practice-oriented work for students, b) a fusion of theory and practice, and c) academic and professional collaboration towards translator competence and authenticity. The keywords for Kiraly's approach are 'collaborative', 'constructivist' and 'empowering', and it should involve teachers, students and administrators to make it

work (2000:194). Finally, Kiraly proposes that investigative research be welcomed into the programme of TS by all, teachers and students alike.

A good research culture would certainly enhance the development of suitable educational approaches. The twenty-first century has seen a rise particularly in small-scale research, such as primary (action) research in the classroom, for example by Chen (2010), Hubscher-Davidson (2008), M.A. Kenny (2010) and Kelly (2005, 2008). The studies are small-scale because they often only involve small groups or single cohorts of students for limited periods of time. Nevertheless their findings are valuable. Action research (see 3), reflective diary writing, and collaborative group work are relatively new to the student translator classroom. Particularly Kelly's findings are discussed and analysed in the following section in relation to the AR methodology in this study.

1.2.4 *Syllabus and curriculum in academic translator training*

A Handbook for Translator Trainers (Kelly 2005) aims to provide a planning tool for teachers in translator training. Kelly states that it should not be treated as a prescriptive model followed by mandatory activities and tasks, but as an encouragement to teachers to reflect on activities designed for their own specific courses in higher education (hereafter HE). The author infers that because TS is a relatively young discipline with self-imposed boundaries, it would be helpful to look for solutions in the field of education. In her proposed curricular design process, the teacher's approach must be systematic (see Gabr 2001), and should include:

- identifying the social and institutional context,
- progressing towards objectives or designed outcomes through the different stages of needs assessment, followed by the identification of available resources in order to design teaching and learning activities, and finally,
- completing the process with evaluation and quality enhancement (2005:30).

Kelly discusses curricular design and syllabus design as if they were a combined concept; her chapters only refer to curricular and course design. White (1988:1–6) gives a very clear overview of the differences between 'curriculum' and 'syllabus': '"syllabus" in its British usage refers to the content or subject matter of an individual subject, whereas "curriculum" refers to the totality of content to be taught within one school or educational system'. Thus, a curriculum subsumes a syllabus. White's (ibid.) further definition that curricular guidelines include the programme's educational philosophy, that they specify purposes and course content, and that they identify environmental constraints on the programme, and establish criteria for the assessment of learning, confirms the impression that Kelly is referring to curriculum design in her handbook. A syllabus in White's (ibid.) words will consider content, order and grading of an individual course. It is classified on the grounds of 'what' and 'how' to teach, strictly referring to methodological procedures. The latter do not feature in a finite form in Kelly's discussion, possibly because as she explains in the preface, she does not want her handbook to be a prescriptive manual. So, what then is her framework for teacher training?

Kelly's presentation of methodological approaches is comprehensive and objective. She contrasts her preferred 'learner-centred' methodological approaches with traditional approaches (see section 2.3.1 for Gile's (2009:5–24) process-centred approach, and section 2.6 for Kiraly's cognitivist and social-constructive approach). Particularly Hurtado Albir and González Davies' TB approach is relevant (Kelly 2010:394), as it is embedded in the PB methodology at the centre of this research. TB learning, as explained in section 2.2.2 is a methodology applied to second language learning. It has been adopted for translator training by Hurtado Albir and González Davies (Kelly 2005:16–17) in recent years and consists of a series of tasks which lead to learning outcomes that are not predefined. The important part of this methodology is its use and exploration of procedural (knowing how) and declarative (knowing that) knowledge. Kelly's presentation of the TB approach promotes a comprehensive curricular design based on learning outcomes, in accordance with Biggs' systematic approach and aligned curricular design (2005:17). Kelly (2005:133) describes the alignment of outcomes as a curricular process in which students are monitored and

assessed regularly to check if they will achieve their intended outcomes. The PB syllabus in this study implements such a methodology in the formative assessment of translation portfolios. Kelly's example of a portfolio is given in her chapter on assessment (2005:139). It consists of a series of tasks, which can be chosen by the student to demonstrate their learning. Kelly admits that there are difficulties attached to this learning process as students are not always used to this level of personal decision making. Kelly's discussion of translation portfolios is about the implementation of a syllabus and yet she does not seem to equate her portfolio model with syllabus design.

Two important factors emerge from the analysis of Kelly's (2005:7–60) syllabus design: firstly, syllabus and curricular design are not necessarily clearly defined, either juxtaposed or subsumed, and secondly the syllabus in translator training is often discussed by implication. This lack of explicitness is prevalent in many discussions of translation training. However, Kelly in 'Curriculum' (2010:87–88) gives a very clear overview of the Bologna Process which has taken translator training in HE from 'a teacher/teaching-centred approach to a student/learning-approach to education-based on learning outcomes or competences'. Kelly indicates that in line with the Bologna process universities should incorporate present, future and market needs in their curricular design, which is highly relevant to the PB syllabus. Gouadec's (2003, 2007) position with regard to the translator teacher profile in the European Master's in Translation which was an outcome of the Bologna agreement is discussed in 2.5.

1.2.5 *Assessment*

Syllabus and assessment are inseparable. Students as well as teachers will undoubtedly agree that assessment provides licence to proceed, and improves student learning (Brown *et al*. 1997:10). Kiraly's (2000) constructivist theory underlies a qualitative approach to the teaching methodology. His theory distinguishes three steps: firstly, content in the syllabus needs to be given meaning, secondly, the student must undergo a progressive learning process, and thirdly, the student must take responsibility for the outcomes of the learning constructions at all stages. Kiraly's (2000:17) argument for

his constructivist approach in translator training is related to the enormous diversity of roles and tasks within the profession, which requires the translator to adapt continually to changing conditions. He suggests that on-going learner autonomy should be initiated during the translator training process. It continues after training is completed, but then takes on a new quality, when the professional translator is held fully accountable for the translations they deliver. Student translators must be in control of each stage in the transfer process.

How do Kiraly's constructivist ideas translate into the PB syllabus and how does the literature contribute? Revision is the crucial final stage in the translation process; in the industry it generates and confirms the client's required quality assurance. Learner autonomy is crucial to satisfactory revision and the PB syllabus encourages students to take ownership and responsibility for their own work.

Since Kiraly first expressed his constructivist ideas, professional translation has been affected by technology. Translation assessment has acquired an entirely new set of terms such as 'fit for purpose', QA (hereafter quality assurance, referring to software correction procedures), external views for revision by non-TM users, and specific jargon for errors in TM programmes. A stream of articles has found its way into journals, such as 'Quality assessment and economic sustainability of translation' by Muzii (2006) and 'Translation and learner performance: professionally-oriented translation quality assessment with three translation technologies' (Barbin *et al.* 2014). House (2013:534–547) takes the issue of assessment back to the crucial question, how do we decide whether a translation is good or bad. And then, how we go about quality assessment depends on our theoretical viewpoint on which we base the criteria and perform quality control. House discusses the different viewpoints comprehensively, but does not include technological aids and their impact on quality and assessment.

Technological assessment of translations is well documented in current journals, such as JoSTrans, Babel, Meta, and Machine Translation. However, the assessment of translation in the academic environment and in the translation industry is moving further apart. Collaborative revision and the use of technological functions, are they acceptable forms of academic assessment? The PB syllabus includes two modes of

assessment to meet academic and professional criteria, but the literature does not discuss the widening gap between the two translation worlds, that of the student translator and that of the professional translator. For instance, would the 'fit for purpose' criterion meet the requirements of either? O'Brien (2012) researches dominant current methods for the evaluation of translation quality that are benchmarked in collaboration with the Translation Automation User Society (TAUS). Could we use evaluation models for translation in the industry in the academic environment? There are still many questions that need to be addressed and answered (see Drugan 2013).

1.3 Research gaps in the literature

Section 1.2 has defined the progression in the literature from discussions on training theories to translator training models and syllabus design. Section 1.4 locates recent works, articles, abstract and papers in relation to the objectives of the PB methodology in this study. First section 1.3.1 will review the literature on translator training in the higher education classroom in which Munday's (2012) and Gile's (2009) contributions to translator training are given special focus.

1.3.1 *Towards a new pedagogy in translator training*

A comparison between Munday's and Bell's approaches (1.2.1.3) to translation theory and application in TS not only reflects a time-gap of twenty-one years (1991–2012), but also shows that TS has come of age and can combine both in its training. In *Introducing Translation Studies* (2012), Munday does the discipline a great service. Its subtitle *Theories and Applications* is particularly relevant to students who often find it difficult to relate translation theory to translation practice. Munday's volume addresses the problem by offering clear instructions to both teacher and student on how to take ownership of the theories in translations. The book is an informative resource that explains, synthesises, and defines the theories and shows how to apply them in well-presented discussion and research points at the end of each chapter. The questions elicit opinions and original analyses of case studies and applied theories.

Munday places the third edition of his Handbook (2012) firmly within the academic translator training environment: he emphasizes the importance of raising students' awareness of skills and competences during their studies of translation. In respect to 'skills and competences' numerous scholars have attempted to define the concepts in relation to translation. Gouadec (2007) makes many references to skills and competence, particularly concerning the translator. Gouadec (2007:123) describes how job descriptions centre on what the translator can *do*: the translator is expected to have specific skills either as a subtitler, or as a reviser, and a localiser, and to be able to manage projects, quality, and teams. In the industry competence is assumed rather than named in job descriptions. In translator training he suggests the course be subdivided into 'core domains', which include a variety of translation skills, and that each course component should be viewed from three different viewpoints, which include skills, competences, techniques; instruments and tools; and best practice and ethics (2007:345).

In regard to translation competences, Gouadec does not give a clear definition; he suggests there should be a consensual definition, set up by employers, training institutions and public authorities. Hurtado Albir (2010:55–56) devotes a chapter to 'competence', which she places within cognitive psychology, where it is defined as 'expert knowledge': it can solve problems, it requires a high level of metacognition, and expertise is an acquired competence. Her explanation is not conclusive. She makes references to research by Bell (1991:43) in which translation competence is defined as 'the knowledge and skills the translator must possess in order to carry it [the translation process] out'. In comparison the PACTE group subcategorises competence, the expert knowledge, into subcompetences, while Pym's (2003) minimalist concept presents competence as an ability to generate and select. In short, the concept of translation competence can be multi-interpretable (see 2.6.1).

Munday's three handbooks (2001, 2008, 2012) show a steady development towards the inclusion of technology, which becomes more prominent, and the questions on technology are more pressing. In comparison, Robinson takes a different perspective. In his third edition of *Becoming a Translator* (2012), he introduces the

professional translator's competencies in the classroom and puts them to the student, instead of raising the students' awareness and stimulating the exploring mind. Although his subtitle *An Introduction to the Theory and Practice of Translation* echoes Munday's subtitle *Theories and Applications*, the main title *Becoming a Translator* points to another direction. The structure of both works is similar: they follow a pattern of theory, discussion, activities (Munday 2012), or exercises (Robinson 2012). Robinson's why (not) questions at the end of each chapter are restrictive rather than explorative, and relate mainly to information in the chapters. Furthermore, the activities are teacher-directed and the exercises are expressed in the imperative: for instance, 'perform the follow operation'. Many of the exercises involve hypothetical situations, which are difficult to achieve in a classroom or with students who have not yet had any real work experience. Robinson's practical suggestions which aim to bring the translator's world into the classroom are not necessarily learner-centred, nor do they encourage learner independence. In comparison, Munday's activities and discussion points are thought provoking and encourage a critical exploration of the professional world outside the classroom.

While TS in the twentieth century concentrated on discourse and the relationship between Source Text (hereafter ST) and Target Text (hereafter TT), Katan (2009) shows a change of direction by focusing on the translator, in addition to languages and texts. For instance, he discusses the meaning of the word 'culture' which bears on the way a translator operates, either as a mediator within a 'context of culture' or within a 'context of meaning'. The translator applies a 'culture filter' to the ST and negotiates meaning on behalf of the reader of the TT (2009:75). Katan raises pertinent questions about the role of the translator, but without addressing their potential impact on translator training. Nevertheless, it is a new move towards a higher level of vocational input in translator training, which finds much resonance in TAP and studies of reflective approaches to learning.

The current century has seen a change of form (style and structure) and content (with some reference to didactics) in translator training. Gile's *Basic Concepts and Models for Interpreter and Translator Training* (2009) demonstrates a similar shift

towards an awareness of pedagogy and learner-centredness compared with the 1995 edition. Gile (1995:185) initially discusses the question 'why are theoretical components useful, while so much time needs to be devoted to drills and linguistic activities in translator training?' He suggests a number of criteria and designs four appropriate models, similar to Ingo's model (1992:49–56), which will help students make appropriate decisions about translation difficulties and processes. The models can give them the correct strategies to cope with market pressures in the professional context: training methodology should consider the usefulness of theoretical components, the trainee translator's moment of awareness, their logic and ease of comprehension, the reduction of content, and clarity of practical implications (Gile 1995:186). Pedagogy is not discussed by Gile, nor does learner independence versus teacher-centredness enter the equation. Although the implications of his presentation point towards learner independence, he does not expand. Nevertheless, it is clear that the students' needs are his main concern. This matches the underlying principle of the PB syllabus in which the 'moment of awareness', also called 'post-awareness', is pivotal. Awareness is inherent to reflective thinking. It is a process that encourages and develops learner independence.

Gile, in his revised edition (2009) of *Basic Concepts and Models for Interpreter and Translator Training*, studies models and concepts which can be used in training. He states that 'in order to plan a syllabus and/or assess the value of a training programme, it is necessary to analyse what knowledge and technical skills are required for interpreting and translation' (2009:5–24). Gile gives the reader a series of processes in translation and interpreting that could be applied to training. He includes difficulties students might encounter in the learning process. For instance, he describes the kind of declarative knowledge the translator possesses about translation, such as the marketplace, clients, translator–client relations (behavioural norms) and between translators, knowledge about information sources, tools used in translation, and translators' expectations of each assignment. Procedural knowledge is defined as the ability to actually perform actions – it refers to technical skills, using techniques for problem-solving and special formats (2009:5–24). These skills are also embedded in the PB syllabus. In the early stages of training, teachers should not focus on the end

product. Instead they need to identify problems, raise awareness and suggest good translation principles, methods and procedures. These aspects and optimisation are good reasons for adopting a process-oriented approach such as the PB method. Gile suggests the following advantages: students are more likely to implement translation strategies (action plans) and tactics (decisions made encountering difficulties). This methodology allows the teacher to be more flexible. The author insists that it is not the recipe for a carte blanche – raising awareness among the students is not enough, and needs to be followed up by a period of fine-tuning. Similarly, the project-based syllabus in this study obviates the potential lack of structure in the early stages of the process-oriented approach by introducing check-points in the formative assessment of the translation portfolios. The author (2009:122) refers to his long experience of many years with Integrated Problem and Decision Reports. The reports represent a form of mutual feedback on translations by teacher and student, similar to TAP and similar methods which are currently used (see Fox 2000; Hansen 1999; Schäffner and Adab 2000:215–228). In the PB methodology the requirement to report is met in the students' blogs in the VLE (2.3.4.1).

The chapters in Gile's revised edition (2009) conclude with summaries of emerging views as well as advice on problems that may arise during the process of teaching and learning how to translate. Furthermore, Gile discusses didactics according to current changes, which makes his revised edition an invaluable reference work to teachers and students. Gile is one of the current scholars that have embraced the evolution in translation. Moreover, his principles underpin the PB syllabus and could be taken as a model for a syllabus and the creation of a methodology in TS.

1.4 A critical assessment of proposed methodologies

1.4.1 *Different pedagogical approaches in translator training*

Pedagogy is an overarching concept that covers the art and science of teaching. It includes the underpinning theories of teaching. Its main components are the curriculum and syllabus (what is taught) and the methodology (how it is taught). The

success of PB teaching will depend largely on the teacher's pedagogical skills and implementation of the PB syllabus. 'Minding the process, improving the product' suggests that a good pedagogy with a suitable methodology will deliver skilled translators (González Davies 2005:67–82). In her chapter González Davies asks pertinent questions as to how many translator teachers are suitably trained overall, and whether translator teachers are academics or professional translators. This particular question about translator teacher training was a topic of discussion at the TS-Doc conference in Vienna in 2008, where it was suggested that doctoral programmes are very likely to be the place where the translator teachers of the future will be taught. Furthermore, González Davies queries the appropriacy of translator training in an academic establishment: should an academically or a professionally-oriented syllabus be planned in the university classroom (2005:67)? González Davies believes in optimising the classroom in terms of real-life tasks, interaction, and communication with professional translators both within the classroom and without. The syllabus should be designed with specific aims that have been considered beforehand and that sequence the material (2005:71).

The PB syllabus in this study aims to bring opposite ends of the spectrum together. It seeks to be both academic and vocational: its goal is to deliver training which fulfils academic criteria, and is based on the translation profession. González Davies (2005:67–82) raises suitable questions but does not answer them with specificity. Nevertheless, they encourage awareness in higher education of the changes that are needed. González Davies proposes a mix of pedagogical approaches depending on the nature of the activity, academic or professional, or the level of the student, undergraduate or postgraduate. Although she does not supply any detail, her observations are important and invaluable in a discipline where methodology and educating the teacher are developing.

Finally, a few words about reflective teaching (1.4.8), which González Davies (2005:67–82) suggests might be helpful to the TS teacher of today. Reflective teaching, that is observing one's own teaching methods, as well as implementing AR in the classroom have been catch-phrases in English language teaching (ELT) for some time. It raises the awareness of what is happening in the classroom with regard to

pedagogy (the teacher) and the methodology (the syllabus) (González Davies in Tennent 2005:73). González Davies (ibid.) points to the resulting benefits: the adaptation and improvement of teaching methods. It is a positive development in the classroom which she shares with other theoreticians (Beigy *et al*. 2010; Biggs & Tang 2007; Boud 1998; Chen 2009; 2001; Dewey 1933; Hubscher-Davidson 2008; M.A. Kenny 2010; Schön 1983). Many data for the three-year study in this thesis (3; 3.6.2) have been collected through AR and reflective teaching.

1.4.2 *The task-based syllabus in translator training*

In secondary and primary education in the UK, reflective teaching and process-oriented teaching are well-established in pedagogy. Combined with AR, they share a common denominator in that they are tools to reflect on the teacher teaching and the learner learning. They are well-founded in foreign language (hereafter FL) teaching, which adopted the TB approach in communicative language teaching in the 1990s. González Davies (2005:67–82) turns to FL methodologies for her ideas and refers to Nunan (1989:1–21) and Ur (1996) in relation to the 'task' in a syllabus. Furthermore she presents Nord as the author of function-based teaching in translator training, which means that translation is treated as a purposeful activity (2005:74). The functional and TB approach share some common ground in that their objectives include training through authentic activities, and the introduction of professional competences in an academic setting. The TB approach differs in its pedagogical style: it is a method which follows a three-phased format (2.2.2) and its content is not necessarily theory grounded. Ur (1996) is an ELT (English Language Teaching) theoretician who promotes the task as a learning method. The task consists of a chain of related activities, which require a suitable thinking process and should lead to tangible results. Nunan (1989:1–21) focuses on the importance of authenticity in the task and presents the task as a real life experience that should assist the learning process. The task and its features as described by Ur (ibid.) and Nunan (ibid.) are crucial in the PB syllabus. In line with their claims, Nord observes that function-based process-oriented teaching makes the student aware of the why, where and when of the assignment (or task). This

kind of pedagogy has moved away from the product-based approach in which the focus is entirely on the achievement, in other words the final translation.

With regard to syllabus design, González Davies (2005:67–82) offers the teacher some points for consideration prior to designing the syllabus. (Note that she does not speak of 'syllabus', but refers to 'translation activities' (2005:75)). She observes that the teacher needs to consider the level of the student, the translation aim, the direction (L2-L1, or vice versa), non-linguistic aims, approach to the task – bottom up, or top down, student grouping (individual, pair/group work), timing and sequencing of the tasks in the syllabus. Interestingly, she does refer to the notion of syllabus in her final point. All her points are particularly relevant to the PB syllabus. Furthermore, González Davies (ibid.) indicates that teaching materials need to be both pedagogical and professional. Kelly (2005) follows a similar line of thought in *A Handbook for Translator Trainers: a Guide to Reflective Practice* where she discusses appropriate materials for technology (see 1.4.7.2). In respect to evaluation, González Davies cites Kiraly (1995 cited in Tennent 2005: 77), who emphasizes that a positive pedagogical approach encourages critical reflective learning and will thus build the translator's 'self-concept as a translator'. González Davies (2005:67–82) stresses that evaluation should be part of the entire learning process, and that it involves both parties, students as well as teachers. Initially, there will be more focus on pedagogical aspects, with a gradual move towards the teaching of professional competences. González Davies (2005:67–82) concludes with the profound observation that translator training needs a good understanding between theorists, practitioners and teachers on the one hand and more empirical research with respect to the teaching and learning process on the other hand. In essence, her conclusion is a suitable argument for the introduction of the TB approach in a PB syllabus: the sequence of activities within the task can embrace these aspects (2.2.2).

1.4.3 *The use of corpora in translator training*

Corpus linguistics is not only a firmly established research area, but it also provides a suitable methodology in translator training. Corpora can be used both at a descriptive

and at a practical level, based on the assumption that an in-depth understanding of corpora at either level will help students become better translation professionals. In *Corpora in Translator Education* (Zanettin *et al*. 2003) the chapters touch on many components, such as corpus-based TS, and specifically corpora in CAT tools, where the translator has to learn how to manage terminology in CAT tools. In spite of clear topical distinctions between most articles, a definition of their didactic functions is less evident: do corpora in TS serve language learning, the learning of terminology, or searches for equivalence, and are the methods descriptive, analytical or prescriptive? Olohan's *Introducing Corpora in Translation Studies* (2004) operates as a comprehensive source of information on corpora which the teacher can use to introduce students to the topic, but also for students to use independently. The benefit is that it is cross-modular and can be used in a variety of contexts, in Translation and Technology as well as in a specialised translation module. In regard to corpora, Johns (1991:4) proposes a style of PB teaching in the form of data-driven learning, a corpus-inspired approach to language pedagogy where the students make their own discoveries. Malmkjær (2003:119) is pertinent in what she calls the pseudo-subversive use of corpora in translator training. She claims that the use of corpora has been a new turn since Toury expressed his views on equivalence, but that corpora do not necessarily help a translator solve certain problems and could even hinder creativity. Today we might take this concept a step further by diagnosing the management of corpora as one of the challenges associated with the use of Translation Memory tools (TM). The question that needs to be answered is whether the use of corpora, parallel or comparable, helps students develop a critical mind and whether it enhances their actual translation skills. Is the use of corpora a translation skill, or is it only another position within the teacher-centred spectrum? If it is a skill, then its success will depend on the way in which students manage their newly acquired skills, and how they are taught and how they have learnt.

Tymoczko's (2002:10–25) discussion continues this line of thought by focusing on the translation itself and on translation skills. As stated in the Introduction competence is a quality, and 'skill' is a proficiency that is learnt or acquired through training (see 2.6.1). Tymoczko is emphatic that the linguistic and cultural analyses of

product-oriented translations should not be isolated. Our increased knowledge of linguistic segmentation could lead to an extreme microscopic analysis, which is far removed from a cultural macroscopic view of the same translation and this order could be reversed: a macroscopic discourse analysis in terms of linguistics and a microscopic cultural ethnographic analysis. Furthermore, she gives the concrete example of genre transformation for an intercultural translation process, in which it might be possible to record cultural and linguistic data of any given text. This potential of multiple translations at either end of the spectrum leads to interesting parallels between linguistic and cultural analysis, in line with observations by other theorists, such as Katan (2009) who wishes to see the translator as the mediator. Although Tymoczko (2002:24) is primarily interested in translation and research than the translator, she does recognize that the (student) translator is the agent of the translations that are central to her research. Her empirical research which includes focus on the translator is not necessarily objective or setting new standards, because the student translator is not standard, and defining the quality and standards of their translations is not a straightforward process either. Nonetheless, Tymoczko presents a self-reflexive process of practice and learning, which is helpful to the student in order to help contextualize their translation products and processes. Self-analysis would, for instance, give the student an understanding of the cultural implications of their translation choices. This learning approach would be highly suited to the study of parallel corpora in translator training, which is a selective process within the spectrum of reflective learning.

Whatever the benefits of corpora in translator training, their presence is pertinent in CAT tools. They cannot be ignored in the teaching of CAT tools, where initially the focus tends to be microscopic and text-oriented. The PB syllabus takes a holistic approach in which corpora constitute a valuable component. A successful implementation of corpus-based training depends on its overriding pedagogical approach. A good balance between academic TS and the professional side of translation training relies on the teaching methods used to bring the profession into the classroom. The following sections 1.4.4 and 1.4.5 will discuss and analyse literature about the student's and the teacher's ideas of what should be taught.

1.4.4 *Academic training from the industry's perspective*

In his paper entitled 'Translation Curriculum and Pedagogy' (2007:105–133), Li discusses curriculum and pedagogy from the perspective of administrators of translation services. He believes that the students' training must be market-focused, particularly seen from the students' perspective. Therefore his research focuses on the administrators of services and their a) primary considerations in recruitment, b) their overall assessment of the local translation programmes and graduates, c) how to bring translator training closer to the real world experience, and d) the administrators' views on in-service professional translator training (2007:107). Li observes that the requirement by language service providers (hereafter LSP) for students to have up to two years of translation experience can only be achieved by means of an internship. Internships of one year would need to be incorporated in a four-year programme, which is not an easy requirement as it is difficult to find places for all students. Li concludes that although the curricula need to take more account of social and market needs, the agents should be more open to the fact that students cannot be ready the moment they enter the market (see Conclusion). The gap between university translator training and professional translators can never be entirely closed. It does not come as a surprise that in his research professional translators as well as administrators of translation agencies (LSPs) doubt the usefulness of translation theories. Li's conclusion is that translation theory should be included in the curriculum (his students claim it will help them be better translators) but that the ways in which it is taught should be modified. It is regrettable that Li does not develop this notion by offering comments on syllabus design.

In his summary Li emphasizes the need for a larger knowledge base and field expertise, which is a prerequisite set by professional translators and administrators, rather than students. Li's study tends to highlight the perpetuation of opposing views between the translation world and the academic training world. He does not suggest practical changes or raise expectations that the two worlds can be brought together by adequately modifying translator training. Li rightly concludes that it is impossible to spend too much time on, or even comprehensively address the enhancement of

language skills and field knowledge, although high standards are a valid request by administrators. His study is predominantly product-focused, while the PB approach supports the idea that process training might provide a better preparation for the students who choose to be employed by LSPs. The conclusions in Li's study do not address curriculum or pedagogy in the classroom from the perspective of student or teacher.

The conflict between process and product-oriented approaches (1.2.1) is recognized by Kussmaul (1995). He tentatively discusses TAPs as a suitable mode of process learning, and although at the time he dispels their factual reliability, he rates raised awareness as one of the main qualities of good professionalism (1995:32). In his paper 'Observing and Interpreting the human translation process' (2014), he has clearly moved further into process-oriented studies. He shows a number of cognitive semantic models to describe what is happening in the translator's mind. However, his process-oriented approach to research relates more to text analysis and corpora in translator training, while Li (2002:513–531) presents a more holistic view of translator training, also from the student's perspective which is discussed in 1.4.5.

1.4.5 *Academic training from the student's perspective*

Li (2002:513–531) has conducted some invaluable research among students, albeit exclusively within the Hong Kong context. While his later study (2006) compares LSP requirements with the way in which the training courses at universities in Hong Kong match them, his 2002 study is based on the premise of the students' needs.

The 2002 study reviews some major aspects of translation teaching: the students' reasons and attitudes for studying translation, theory-oriented courses versus practice-oriented courses, market needs in translation teaching, and measures to improve translator training. An observation made by one of Li's students that they would like their translator training to reflect market needs in translation, might well echo a universal sentiment. More research into its level of importance to European and non-European students during their training at university might be useful. Li (2002:513–531) points out how this target-focused line of teaching would require consistent

updates of teaching materials. He suggests that a training programme might need more practical translation courses, but without adding any details or suggestions. Li is aware of concerns about the validity of his students' perceptions into their own learning needs and curriculum design, and he expresses his view that a student-centred curriculum can only be achieved if students are involved in developing their own learning objectives and programmes according to their needs. Li's approach therefore revolves round discussion with the students and emerging implications. His study is profoundly student-centred.

Furthermore, Li addresses the perennial issue of the role of translation theory in translation teaching. In his study the students themselves criticized translation theory as 'much more a craft than a science, which could be learnt through ample repeated practice' and secondly, many students found it 'impossible to naturally apply translation theory in practice' (2002:526). Li draws the conclusion that a connection needs to be made between theory and practice in application, although his study does not conclude whether translation theory should be taught in translation programmes. In order to do so, theory-oriented courses would need suitable course materials and better teaching methodology. The question arises why Li suggests that courses should be theory-oriented, having previously aptly stated that a connection needs to be made between theory and practice in the *application* of either. He is clear about the importance of needs assessment in the planning and development of a curriculum, although he does not discuss syllabus design or clarify his concept of curriculum. Nevertheless his study is relevant to the PB syllabus, as he supports a student-centred syllabus in which the students should be involved, and in which the teacher should listen to the students' views and act on them (cf. AR). Additionally he stresses the importance of needs assessment, suitable course materials and an improved methodology, which are key factors to the PB syllabus. So, the question that arises is how the PB methodology fits in with higher education in the UK.

1.4.6 *A project-based teaching methodology in higher education*

1.4.6.1 Didactics

TS has become a recognized discipline in which theorists and practitioners meet, and where they show not only their awareness that research, practice and teaching need to be improved, but also that there should be modular interdependencies within TS as well as a dependency on other academic disciplines. Kirsten Malmkjær (ed.) in *Translation in the Undergraduate Degree Programmes* (2004) claims that a one-year MA is not long enough, hence her decision to give a variety of examples from the three-year undergraduate degree course. In 'A didactic approach' Wilss (2004:9–14) explains why the student should be introduced to variety, which he terms 'plurality'. He suggests that from the methodological point of view an empirical approach is preferred over and above a high level of abstraction. He is pragmatic in his approach, after all, how can the translator know the mind of the originator and that of the target reader? Translation, he states, is characterised by its combination of knowledge and skills. Although Wilss' arguments for pluriformity could be considered supportive of the PB approach, he gives little detail and no specification of syllabus and curriculum design. In contrast Beeby offers more detail in 'Language learning for translators – Designing a syllabus' (2004:39–66). She makes an interesting distinction between the pre-syllabus with learning objectives for trainee translators, which is followed by a syllabus with specific objectives at a later stage. She identifies several suitable syllabuses for translator training: a translation-based student-oriented pre-syllabus, or a discourse-based translation-oriented pre-syllabus. The PB syllabus, in comparison, matches the former. However, although it is translation-based (portfolio-based) and student-oriented, the tasks in the syllabus raise it from a pre-syllabus level to a syllabus with specific objectives. Some sub-questions that arise from these findings, for instance, how independent learning and TB learning combine, and how the student's progress within a TB learning approach can be measured as objectively as possible, will be addressed respectively in section 3.2. The following section considers the literature which discusses the nature of translator training in an academic setting and subsequent implications for the syllabus.

1.4.6.2 Translator training or translator education

English language teaching (hereafter ELT) is a discipline with much detailed literature on methodology (see White 1988 in section 1.2.4). ELT literature is highly relevant to TS. Widdowson (2000:3–25), for instance, is cited by Bernandini (2004:17–29). Widdowson states that training is subject-specific, for instance, English for specific purposes (hereafter ESP) or English as a second language (hereafter ESL), whereas education prepares for unknown professional situations. Moreover education is a generative rather than a cumulative process. In '[t]he theory behind the practice – translator training or translator education?' (2004:17–29), Bernandini contrasts training and education in TS along Widdowson's line of thinking: she suggests the educated student can go out and learn the rest, contrary to a trained student who can only do what they are trained to do. Translators are not merely transcoders but constructors of meaning, and mediators of culture. Bernandini becomes more specific when she exemplifies awareness, reflectiveness and resourcefulness (core ingredients of PB methodology) in the education of translation students. She considers strategies, procedures and text analysis at a basic level, and project management and group work on a higher plane. In regards to competencies and capacities, her argument is that the goal should be to foster capacities, rather than competencies, which need to be gained (2004:21). Her distinction between capacities and competencies should be understood as inherent abilities (a capacity to learn something) and potential abilities that still need to be acquired (competencies) (see 2.6.1). Similarly, in the PB syllabus, translation technology is more than the learning of competencies: it encourages the development of strategies to manage any other tool in the future. Furthermore, she is specific about the pedagogical approach: mastering the tool can be done in a month, but knowing when to use it, for what purpose and to what effects, and what to use if technology cannot help, cannot be learnt in a month. She objects to 'replication activities' because even an authentic learning activity may not have the desired effect if students do not have the maturity or experience. Maybe they cannot carry them out, or they may not learn from them what the teacher expects. Bernandini wants the teacher to treat students as learners (2004:24). Here her ideas conflict with the PB methodology in some aspects. Although the tasks in the PB syllabus may appear like 'replication

activities', their success does indeed depend on the students' maturity, their level of learner independence (2.2.2; 2.4.2).

Raising awareness of learner independence or independent learning is inherent to the PB methodology and essential for it to be successful. Later in Bernandini's discussion her ideas merge with those of PB teaching in which there is a focus on processes and on developing capacity. Mossop, in a position paper, 'What should be taught at translation school? Innovation in Translator and Interpreter training' (see Pym *et al*. 2003:20–22), would agree with Bernandini's distinction between training and education, particularly at undergraduate level. Students should be taught general abilities in the art of translation, which take a long time to learn. The use of tools can be learnt in a practicum but without overtaking the skills of translating: text analysis, drafting, checking and correcting should take priority. Mossop (see Pym *et al*. 2003:20–22) concurs and believes that the distinction between education and training is crucial to classroom technology. The classroom should not become a poor reflection of the real world; the classroom should be the place where students learn how to cope with issues in the real world when they actually confront them.

1.4.6.3 Competencies and capacities

Beeby (2004:42) finds Mossop's distinction (see Pym *et al*. 2003:20–22) between education and training rather extreme: she considers education a coping mechanism and training a mere skill training machine. Beeby refers to the PACTE translation competence model in process studies which tries to find out how the translator's mind works. Students' competencies are expected to vary according to situations. Acquiring translation competence is part of a process, so it cannot be an objective. The PB methodology does not replicate, but offers a microcosm with authentic situations where students can learn how to solve problems, develop abilities, and demonstrate their competencies and capacities. It does not conflict with Mossop's (see Pym *et al*. 2003:20–22) ideas, but merely creates an environment in which students can develop their personal real-world translation skills. While Bernandini focuses on capacities in preference to competencies, Mackenzie concentrates on the latter in '[t]he competencies required by the translator's roles as a professional' (2004:31–38).

Competencies in this study refer to the ability to perform. Many of the competencies Mackenzie considers crucial to the translator are fostered in the PB syllabus, such as linguistic-cultural competencies, IT, management with regard to the client, time, resources, and information. She believes translation should be taught as a cooperative model involving translator, reviser, terminologist, post editor, and proofreader. The project manager plays a crucial role in multilingual collaboration, a situation which arose naturally in the classrooms in this study and which expressed itself in student project management teams (2.4.4).

1.4.6.4 Towards a project-based style of teaching

González Davies (2004:68–81) discusses the issues of competencies and capacities, but from a different perspective. Her premise is that the teacher should ask some fundamental questions about the content and style of training in order to assess the students' needs, the aims and expectations in both undergraduate and postgraduate translation degrees. Depending on the outcome of the needs analysis the teacher should determine how and when various skills such as translation, resourcing, self-evaluation and peer evaluation should be offered and enhanced in TS. TS should not become a degree course without a vocational focus. González Davies (2004:68–81) argues that '[i]f […] students learn to understand the process of translating, to evaluate products after reflective learning, they can talk about their work and move away from intuitive explanations by developing their critical skills' (2004:78). In a nutshell, González Davies (ibid.) sums up the aims that also provide the framework for the PB methodology. Skills, competencies, capacities cannot be considered in isolation; they are part of the learning process and need to be nourished.

K. and E. Dunne's focus on collective skills (2011: 1–14) would follow on naturally from González Davies' set of more individual skills. The Dunnes observe that while TS has established itself in the 'pure' branch (the Dunnes position their ideas in the applied branch on Holmes' map (see Toury 1995:10)), the translation profession has expanded and caused an evolution in all kinds of applications and tools. Consequently, they argue, project management training should be included in the HE curriculum in addition to the teaching of relevant tools (2011:3). There are two reasons

behind their argument that well-structured project management training is an indispensable component: firstly, commercial translation is increasingly outsourced to cross-border teams and has to be managed, and secondly, project management expertise should be a response to the complexity of technologies and the sequential components that constitute translation projects (2011:3). The Dunnes claim that assessment criteria need to be set by team members themselves in order to prepare students for the translation job (2011:6). González Davies similarly prioritises evaluation skills in translator training. Furthermore, the Dunnes set their suggestions for training firmly within a theoretical context: '[i]gnoring existing scholarship and well-established principles of pedagogy and translation training can and often does lead to re-inventing the wheel (2011:7). They suggest that agent-grounded research, which analyses translation as a practice from the viewpoint of those who are engaged in it (Gambier and Van Doorslaer 2011:8), has become an integral part of TS (2011:11). In line with the Dunnes' ideas, the PB syllabus aims to bridge the gap between 'pure' and 'applied' translation within process-oriented TS.

González Davies and the Dunnes' views are two salient examples of the discussion on technology and pedagogy in translator training, which could easily feed into the PB syllabus. The following section 1.4.7 aims to give more detail of what the literature addresses in both areas, and how.

1.4.7 *Technology and the syllabus*

Technology and technological environments in and for translation have been well highlighted by many scholars. O'Hagan (2013:508) refers to D. Kenny (2007) and Secară *et al.* (2009) who discuss how the translator's work and training have been affected by technology, but O'Hagan continues that their contribution has not theorised technology or enabled it to be accepted in the 'pure' branch of TS. O'Hagan's observation that there is no two-way flow of technological topics between the 'pure' and the 'applied' branch on Holmes' map is quite pertinent. The impact of technology on the profession, and on training, cannot be ignored. In MA degree courses a mutual flow of practical technological subjects and theoretical subjects should be a general requirement. Technology is included in UK TS degree courses,

yet its status (mandatory or optional) in the curriculum varies. Mossop makes some critical statements about inclusion of technology in the curriculum:

> Nowadays one constantly hears that what students really need are skills in document management, software localization, desktop publishing and the like. I say, nonsense. If you can't translate with pencil and paper, then you can't translate with the latest information technology…
>
> (Cited in Pym *et al*. 2003:20)

And immediately after this he states that '[i]nformation technology can be an expensive waste of time. There is no point learning something like HTML unless you are immediately (the next day or week) going to start translating webpages on a fairly regular basis' (see Pym *et al*. 2003:21). Mossop's (ibid.) views on translation technology are largely at variance with the findings in this study borne out in the PB syllabus (see Appendix 14). Nor do they concur with positive observations made by students in interviews and focus group discussions (4.2.3). Gambier in his comments on responses to questionnaires (see Pym *et al.* 2003:32) notes how Mossop and Gouadec (1.4.7.4.2) diverge on methodological and pedagogical approaches to teaching, as well as on the roles and qualifications of specialist teachers, and even the inclusion of the subject in the curriculum. Kelly (2008:99–125) underlines the lack of pedagogical clarity in the paper in which she states '[t]he little that TS literature says about teacher profiles is mostly centred on the need for them to have professional translator competence'. Kelly concedes that there is a 'relative' wealth of TS literature on translator training but that it often concentrates on impersonal aspects such as processes, content or activities. Kelly considers the human factor and proposes a competence-based profile. Olohan (2011:342–357) studies the human factor from the sociological perspective and in a sense in reverse, that is how technology affects translators in their decisions. Olohan concurs that TS studies has paid little attention to the interaction between technology and translation practice, while a good assessment of the potential impact should lead to its consideration in translator training.

The literature on technology for translation may not be prolific in collective volumes, yet it is well-represented in articles and papers, and in journals and online (1.4.7.4). There are handbooks, themed books and edited volumes on technology, which are well-researched. Themed publications can be suitable textbooks for students because of their wealth of information, but their number is limited (see Austermühl 2001; Dunne 2011; Esselink *et al*. 2000; Quah 2006; Somers 2003). One reason for the apparent scarcity of volumes might be the continuous need for updates in line with the relentless pace of technological developments. Translation technology receives more attention in the literature than didactics and methodology in TS in general, as well as particularly in respect of the pedagogical challenges of teaching technology for translation. This observation which will be given special attention in the following sections 1.4.7.1–1.4.7.3.

1.4.7.1 Specific literature on translation technology

*A Practical Guide to Localization (*Esselink *et al.* 2000*)* and *Computers and Translation* (Somers 2003) are two examples of important pieces of work, but although they contain sound and indispensable technological information for translator teachers as well as students, they do not make any reference to methodology, syllabuses or curricula. Somers (2003:2), author and editor, states in his introduction to this collected volume that the book is about computers and translators, not about computer science and not much 'about translation theory' either. The articles in *Computers and Translation* are written by academic researchers and professional translators for translators or potential translators. Somers divides his target audience into three groups: trainee translators, language learners and end-users of MT. Although the contents of the book are profound, serious, and well-researched, the collective articles lack a well-defined focus in terms of subject matter and readership. In his introductory summary, Somers mentions that the use of MT and CAT tools, as documented in the articles, is considered in the teaching of translation, but there is no reference to the methodology. Somers would like trainee translators to understand what translation software can do, but particularly what it can*not* do. Somers suggests small-scale evaluation activities of a particular software programme by students. He

recommends that post-editing be practised as part of the evaluation. He touches on didactics when he suggests that students could evaluate how a change in attributes within the terminology bank affects the outcome. He calls this 'reverse engineering', 'a useful methodological practice to increase awareness' (2003:1–49). In terms of methodology, when he discusses the simulation of workflow (2003:324–5), he is at variance with researchers such as Mossop, who rejects 'replication activities' (1.4.6.2). Somers has edited invaluable articles on MT, but his intended target audience is by no means clearly defined. The collection of articles offers excellent reference material, but from the pedagogical perspective it lacks a methodological context.

Electronic Tools for Translators (Austermühl 2001) and *Translation and Technology* (Quah 2006) are presented as textbooks. The Preface to *Translation and Technology* states that the three aims of the book in this series written for MATS students are to highlight contemporary issues, to give an introduction to vocational issues in translation and interpreting, and to provide informed updates to practising professionals (see Quah 2006:xii–xiii). It is a carefully written textbook on translation technology, but translator teachers have to apply their own methodological framework. In comparison, Austermühl's text book (2001) includes case studies, tasks and sections for further reading. Each of the tasks consists of approximately ten questions that require activities, searches, or answers based on preceding discussions. The tasks help students to consolidate their knowledge, although there is no recommended teaching or learning methodology to support the students' transition into the translator's real-time world.

In Somers' *Computers and Translation,* Bowker (2003:49–65) is the only scholar who touches on didactics: she identifies that not all translator training responds to current market needs. Furthermore, Bowker (2007 cited in Olohan 2011:342–357) examines the productivity of users and non-users of TM, and its impact on the quality of their translations. Olohan (2011) refers to the findings of other scholars who have raised a number of issues that that are important to translator training with regards to translation technology: D. Kenny (1999:65–82) investigates how students use features

in TM to save time without considering consequences for quality and selection, O'Brien (2006 cited in Olohan 2011:355) examines the translator's cognitive load when using TM, and Alves and Liparini Campos (2009 cited in Olohan 2011:355) research how translators choose proposed but unedited TM solutions when under time pressure. Olohan observes that their research is restricted to the relationship between, for instance, TM and output, and that further study is required. Her paper discusses the interaction between the translator and TM software, which is fundamental to topic selection in the PB syllabus. She also stresses the importance of reliable research methods in addition to personal accounts, such as diaries or eye-tracking in relation to technological features. It is an area in which new research is emerging. Ehrensberger-Dow's (2013:1) research concerns translation processes, the technical competence of the translator, the relationship between translation competence and process, and interdisciplinarity between translation and interpreting.

This section has covered literature dedicated to translation technology. The following section considers how translation technology is included in TS handbooks.

1.4.7.2 Handbooks and translation technology

Handbooks often have themed sections and are well suited to the inclusion of shorter articles on translation technology. This section will observe and analyse potential links between translation technology and aspects of teacher training in the respective articles.

In the Introduction to *New Vistas in Translator and Interpreter Training*, Kearns (2006:xiii–xv) makes several salient points about the current trend in translator training. He praises Kelly for her plan to 'offer substantial food for thought to trainees in order to facilitate the complex task of curricular and syllabus design' (Kelly cited in Kearns 2006:205). He also welcomes the value Kelly attributes to the teacher who will be responsible for the syllabus, the curriculum, the training of the teacher, the choice of resources, or the lack of resources. Kearns commends Kelly's […] *Handbook for Translator Teachers: a Guide to Reflective Practice* (2005) encouraging reflection, but he claims that it also raises some questions that remain unanswered. For

instance, Kearns (2006:205) comments on the terms 'curriculum' and 'syllabus' which are suggested as crucial to the translator teacher, yet they are not defined or exemplified. In the handbook, Kelly discusses translation technology under the heading 'Instrumental competence' (2005:74–5). However, the emphasis is on the pressure by universities to teach certain expensive packages of software, rather than on the need for students to understand what they will need in their profession. Nevertheless, Kearns welcomes Kelly's Handbook (2005) as translator training in situ, which as Kelly herself observes is far from perfect in its preparation of students for the profession. The Handbook offers many suggestions for further research on the use of resources and technology.

The Oxford Handbook of Translation Studies (eds Malmkjær and Windle 2011) contains two sections on technology - part V: Mixed-Mode and Multi-Media, and part VI: Information Technology. In D. Kenny's (2011:455–472) chapters 'Electronic Tools and Resources for Translators', she discusses how translators should use tools, but makes little mention of teaching methodology. D. Kenny's approach in the Handbook is nonetheless critical and she infers that it is important to raise the student's awareness during training. For instance, the author refers to the danger of uncritical usage of TM where there is a shift from individual control to group control and when a TM is shared with others via the web. Hutchins takes a similar critical stance in 'Recent Applications of Machine Translation' (2011:441–454). He observes that online MT is difficult to control because we do not know who uses it.

This section on literature in Handbooks concludes with a brief overview of translation and technology, and training methodologies in the Handbooks of Translation Studies (1.2.4). Handbook 2 (Gambier and Van Doorslaer 2011) covers translation technology in the fields of localisation, machine translation, subtitling, voiceovers and the web, but without any specific reference to teaching methodologies. The focus in all the articles is on translation as a product and on the profession, with some reference to pedagogy in general. In Handbook 2, in 'Methodology in Translation Studies', Flynn and Gambier (2012:88–96) cover the growing interest in socio-cultural contexts where technical and technological translations, scientific as

well as audio-visual, are required. There is also reference to quantitative (such as key-logging) and qualitative research methods (such as TAP), which are used to qualify 'translatorship'. Although their discussion concentrates on processes, there is no specific reference to translator training. Handbook 4 (Gambier and Van Doorslaer 2013) contains technological chapters on multimodality, and audio-visual translation and subtitling. Interpreter teaching and training is given special focus, but translator training is not included.

In summary, translation and technology (including translator training) are not prominent themes in the handbooks. A wider discussion of these topics tends to be in articles, conference proceedings and journals (1.4.7.4).

1.4.7.3 Translation technology and translator training

The objective of this section is to assess how the literature presents translation technology within translator training. Munday (2009) observes in his introduction to *The Routledge Companion to Translation Studies* that Hartley's overview of technology is much needed. Munday continues that translation theories, so far, have neglected the discussion of technology and stresses the importance of, for instance, web potential and storage on servers to the translator. These developments require teamwork supported by technological tools. In his evaluation of technology Hartley considers which technical tools should be used to enhance productivity, performance and cost-efficiency. He encourages practitioners to evaluate and assess tools, instead of allowing software developers to rule the roost. Hartley's overview (2009:106–127) is indeed comprehensive and indispensable to students in terms of declarative knowledge, yet it does not answer the question to what degree technology is essential to the translator, or how it can be managed and controlled, and if and how it could be addressed in translator training.

In comparison, *Translation and Technology* (Quah 2006) was written as a full textbook, specifically for students of translation in higher education, but it would also be suitable for professional translators as the chapters discuss relevant 'issues'. The overview of technology and technological aids is comprehensive, objective, generic

and well referenced. Quah suggests that degree courses will deliver a new generation of translators. Subsequently, the general mood of her overview is one of raising the awareness of technological aids. As was stated in 1.4.7.1, Quah does not discuss teaching methodology.

Pym holds a different view in *Exploring Translation Theories* (2010): he has both student and teacher in mind. His approach is holistic. In the chapter on localisation (2010:120–142) he presents the technology in context and against the background of translation theories. His exposition is in line with Hartley's and Quah's overview; it is detailed, precise and explicit. The difference is the internal layout of the chapters: Pym has a teaching methodology in view and does not merely suggest tasks and questions (see Austermühl 2001; Quah 2006; also see 1.4.7.2). Each chapter contains a section 'Frequently had arguments' to raise the students' awareness of prevailing issues or counterarguments, and the sections 'Suggested projects and activities' encourage students to explore. Pym observes that courses on 'localisation' often only instruct students *how* to use relevant tools. He stresses that students need to realize that localisation is only part of the process of translation and that the technology reaches beyond the classroom (2010:120–142). This is in line with one of the objectives of the PB methodology at the core of this study.

In general collective volumes are not dedicated to translation technology in relation to translator training. There are some obvious reasons for the absence of technology, namely that technological facts are soon outdated, such as references to Microsoft programmes, translation software programmes and hardware, and URL addresses (see Austermühl 2001; Quah 2006; Somers 2003). There does not seem to be a clear reason why teaching methodologies are not overtly discussed in relation to translation technology.

'Challenges in training and technology', the third part in *Across Boundaries: International Perspectives on Translation Studies* (D. Kenny 2007) most certainly lives up to its title and gives the translator teacher food for thought. Kenny's (2007:192–208) contribution 'Translation memories and parallel corpora' is one of the few discussions that is most comprehensive and does not ignore educational matters.

It considers the challenge of technology in translator training in respect to the curriculum, the syllabus, the teacher, the student, the academic establishment, and the translation industry. It queries the contribution of technology to translator competence: it questions whether technology is a new competence, or whether it deflects from established or recognized competences, and again the challenge is viewed from inside and outside the training establishment. The alignment of this chapter with the PB syllabus is remarkable too: D. Kenny (2007:192–208) comments on the need for authenticity in the classroom and its challenge to the teacher, and potential cross-modular benefits or the inclusion of different skills and/or activities to prevent the student from becoming pre-occupied with technical expertise at the expense of translation skills. The chapter balances advantages and disadvantages and points to areas for further research. It does not shirk the risk that some of its data might be obsolete before they are published. It asks valid questions, which are founded in Kiraly's theories as well as current theories and may transcend the demise of particular TM software programmes.

The following section considers the literature on technology and methodology in shorter publications, such as articles, conference papers, journals and case-studies.

1.4.7.4 Specific literature on translation technology and translator training

1.4.7.4.1 Methodologies in higher education

Pym gives a (historical) overview of the state of affairs in 'Translator training', a pre-print text written for the *Oxford Companion to Translation Studies* (2009). Pym concurs that discussions of translator training are frequently found in major journals and in collective volumes on the subject. In his overview, he enumerates 'ideas for class activities', 'syllabus design' and 'curriculum development' as the major ingredients of profound research. Pym's critique of various methods is balanced. For instance, in regard to Mossop's perceived incompatibility between technology and the quality of translation, Pym observes that while Mossop's negative statement (1.4.7) contains an element of truth, 'translation' by means of pencil and paper should not be compared to automated 'translation', because they are two different entities.

Furthermore, Pym observes that the curriculum in translator training depends on the views held in the respective educational establishments. For instance, does the training serve the needs of the market or its own internal academic requirements? Should teachers in HE be professional translators themselves? Pym concurs that the invitation of professionals into the classroom and 'real-world translations tasks' as well as 'modelling competencies and skills' are serious steps in the right direction (2009). Additionally, he refers to the apparent opposition between different methodologies, for instance, competence-based methods and social constructivism, where the former is focused on the enhancement of competencies and skills, while the latter assumes that all will happen through social interaction in class. Pym explains that in practice the dividing lines between the different methods are not as clear as they seem: a learner-centred approach does not mean that syllabus and activities will *not* be set by the teacher. The fact that in their publications Nord and House do not refer directly to technology in translator training does in no way detract from their valuable pedagogical input: for instance, Nord (1996 cited in Pym 2009) proposes diversification in the teaching of translation, and House (1986; 2000 cited in Pym 2009) points out the benefits of translation in 'interaction', in pairs or group work. Pym prefers a process-oriented teaching style to the product-based methodology that is advocated by Hatim and Munday (2004:3–10). For instance, while Pym gives much prominence to technology in translator training, Hatim and Munday discuss translation and information technology at the end of each section as if it were a postscript (2004:112–120; 213–218; 321–328). The lack of focus on technology does not quite correlate with their claim that 'we have found [the topic of MT] sufficiently interesting to spend most of our professional lives investigating [it]' (2004:213). Nonetheless, Pym rates their methodology as equal to others. His view is that changes in the market require continual and serious rethinking of curricula. In other words, methodologies in the classroom need to be mixed and eclectic.

1.4.7.4.2 Journals and didactics in translation studies

In education, the literature on didactics, methodology and pedagogy is prolific, which in many ways can be applied to TS. However, the literature on technology in TS needs

to be specific and it is not cross-disciplinary. In recent years, it has kept pace with the increase and acceleration in technology, and it is generally found in journals and online. This section will concentrate on didactics for TS in journals and online forums, including references to the teaching of translation technology.

A recurrent theme, also addressed in the PB methodology in this study, is the relationship between research competences and translation competences. In comparison, the PB syllabus aims to achieve a balance between both types of competence and to make the students' learning research-based. In *Babel* 59/2 Vandepitte (2013:125–148) investigates the links between competences in either field from a heuristic perspective in 'Research competences in Translation Studies'. Kiraly's (2012:82–95) discussion in *Meta*: *Translators' Journal,* 57/1 of a PB pedagogy endorses Vandepitte's heuristic and learning-centred values. His article 'Growing a project-based translation pedagogy: a fractal perspective', is in effect a progression of his proclaimed social constructivist approach. He tries to paint a broader picture of the synergies within translator training and the emerging 'holistic experience'. Kiraly includes complementary methods of knowledge transfer which he believes will encourage a 'learning-centred approach' to translator expertise among students. His crucial point is that it is not the project that gives shape to the pedagogy but rather the quality of the teacher's educational epistemology that will make the project a success: the teacher's understanding of the learner's mind, how teams function, how learning happens, and of translation processes. Kiraly believes that if the project is managed well, it 'grows' a curriculum. The project is like a tree and one of its branches is translation practice. Declarative knowledge provides a backdrop and procedural knowledge grows as a fruit on the tree, in line with greater translator competence.

In 'Toward a model approach to translation curriculum development' in the *Translation Journal,* Gabr (2001) makes some pertinent observations about curriculum design. His emphasis on the identification of student and market needs would not conflict with any of Vandepitte's or Kiraly's aforementioned recommendations. The PB syllabus follows a similar line in that 'instructional

objectives' (Gabr 2001) should not be defined before their rationale has been established. And then, the objectives can serve as a basis to bring materials and delivery together. Gabr's discussion is both detailed and comprehensive, and his observations are fundamental to curriculum and syllabus design, be it that his design falls under a product-oriented approach. Nevertheless, he states the obvious facts which any translation teacher needs to know: designing a curriculum is a creative task that needs to be done systematically, and which requires teamwork, intensive research and a good academic as well as a professional background in pedagogy, training methodology, translating and course design and delivery. His recommendations cover all these aspects and deserve to be foregrounded.

1.4.7.4.3 Journals and didactics in translation technology

The didactics of translation technology in translator training receives little coverage in academic journals and papers. In themed journals, the topics are generally weighted toward either methodology or technology with a few notable exceptions. For instance, in 'Translator training tools: Moving towards blended learning', Galán-Mañas and Pearson (2011:414–429) demonstrate how translation technology and methodology work together. The article reviews the introduction of the VLE in the translation classroom in Spanish HE, where the students are encouraged to use discussion threads and forums and blogs to discuss their translations. In the PB syllabus of this study, such modes of electronic communication have been found to support AR: they involve student and teacher, and incorporate reflective learning (2.3.4.2).

The *Journal of Specialised Translation (JoSTrans),* which is freely available online, invariably includes translation teaching methodology and technology in most issues, even those with special themes outside technology or methodology. JoSTrans as a journal stands out through its pragmatic, bottom-up approach to translator training. The first issue 01 was launched in 2004 with articles by Durban, Newmark, Bogucki and Pym, many of whom continue to contribute.

Pym deserves special mention for his generous contribution to translator training and technology in journals. He has managed a successful combination of the didactics

and technology in and for translation in 'Innovation and e-learning' (Pym *et al*. 2003), which was set up as an online forum. It addresses many gaps in the literature on methodology and technology in translator training. The online forum attracted 330 participants; in addition a set of basic questions had been sent to five translator teachers: Mayoral (Spain), Gouadec (France), Nord (Germany), Mossop (Canada) and Kiraly (Germany/US). Their responses are based on experience and experiments and give an excellent overview of what can happen and is happening in the translation classroom. Interesting comparisons are made between what the respective teachers actually do in class, whether there should be separate theory and practice classes, whether textbooks should be used (honoured with an unanimous negative response on the forum), to what extent students are taught to work with CAT tools and ideas on major shortcoming in current translator-training. Positive comments are made about group learning, teamwork, project management and process learning, the need for good tuition of CAT tools and revision, inclusion of professional practice, a well-structured learner-centred and learning centred classroom. The topic of technology in the classroom raises pertinent questions (2003:59), such as who will teach technology and what should be taught (see Kelly in 1.4.7). Furthermore, it is questioned why the impact of technology on our teaching methods and curriculum design is not considered (see D. Kenny 1999). In sum, the forum complements journals, and it connects didactics and technology in such a way that its findings offer scope for PB curriculum design in translator training.

1.4.7.4.4 Research groups and conferences

Research groups such as PACTE (Process in the Acquisition of Translation Competence and Evaluation) and the Copenhagen Business School, are paramount in the dissemination of new ideas and developments in translator training. The PACTE Group's second conference is about the didactics of translation (Universitat Autònoma de Barcelona 2014). PACTE have conducted considerable research on the acquisition of translation competence. The 'Results of PACTE's experimental research on Translation Competence Acquisition: Knowledge of Translation and Translation Project' were presented by Fox, Kuznik and Rodriguez-Inés at the conference

'Methodological Challenges for Contemporary Translator Educators' in Krakow (Poland) in 2013. Their research considered the amount of pedagogical intervention during the four-year-learning-process, an aspect that will be discussed in 4.3 with reference to the PB syllabus. PACTE's first conference on didactics was held in 2012. The topics at both conferences cover empirical and experimental research in TS, translator training, curricular design and the teaching of technologies.

The Centre for Research and Innovation in Translation and Translation Technology (CRITT) was launched in 2005 and is part of the Copenhagen Business School (CBS). It has been a base for technological innovation, such as eye-tracking research methods in translation. Its recent conference Translation in Transition: Between Cognition, Computation and Technology (2014) at CBS gives what is probably the most up-to-date evidence of the technological shift in professional translation. The conference booklet includes abstracts on translation process research from post-editing to intelligent machine translation, computational modelling, and speech recognition in translation. Didactics and technology are combined in presentations such as 'Translation technology and learner performance: professionally-oriented translation quality assessment with three translation technologies' (Barbin *et al*. 2014), while the majority of the papers consider the impact the translation environment tool (hereafter TEnt, which is another term for CAT tool) has on the translation process in automated translations, with or without translation memory or speech recognition.

Whereas the Copenhagen Business School pays much attention to translation technology in CRITT, there is less concentrated focus on technological issues in other initiatives. For instance, the School hosted the third congress of the European Society for Translation Studies (EST) in Copenhagen in 2001. EST represents the Translation Studies Community and its congresses enable scholars to meet and present their work. The proceedings are diverse and eclectic. A volume with proceedings from an EST congress such as *Claims, Changes and Challenges in Translation Studies* (eds Hansen *et al*. 2001) covers a wide range of topics, covering methodologies and technical communication in both translation and interpreting. *Tracks and Treks in Translation*

Studies (eds Way *et al*. 2013), an EST publication after its sixth conference in Leuven in 2010, comprises a similar range of topics with the inclusion of several technological topics on TEnt, and eye tracking in translation. Both volumes clearly have an objective which is to present a wide range of topics, and not to specialise in any specific area.

The following sections will highlight the literature on specialist and major areas in the PB syllabus: reflective learning and a suitable presentation of (applied) translation theory and practice.

1.4.8 *Reflective activities*

A reflective approach is embedded in the PB method and this section will review how the literature discusses the application of reflective activities in education in general and in translator training. Beigy *et al*. (1999:187) describe the reflective approach as an active, persistent and careful consideration of any belief or theory. This approach takes a middle position between the theoretical grounds that support it and the further conclusions it will lead to (see Dewey 1916; 1933). It means that in AR the researcher is not bound to theories, but that (a) new one(s) is/are created by the researcher, who is both practitioner and researcher. Thinking and doing go together and decisions become actions (Beigy *et al*. 1999:24).

In reflective teaching each success and failure is viewed as a learning experience. As in AR, didactics is changed in response to previous outcomes: reflection is transformative. Students benefit from a reflective approach to their learning. However, depending on the prior educational backgrounds of students, it is a learning style that might need to be taught and learnt. Two supportive tools to achieve a reflective learning style, used in the PB method in this research, were blogs in the VLE and teamwork or group learning. The blogs may be compared to the diaries as discussed by Fox in 'The use of translation diaries in a process-oriented translation teaching methodology' (2000:115–130). Fox claims that translation pedagogy has changed from a prescriptive and product-focused methodology to a more process-oriented approach in translator training. Important features in her process syllabus are peer conferencing, diary writing, protocols and questionnaires. It is notable that Fox

considers protocols important, which confirms that reflective activities are not random. They need to be organised and learnt by the students. She explains how communication, learning and group interaction are three processes that constitute a reflective approach. However, reflective activities can also be individual, such as in blogs.

Revision is undeniably one of many major reflective activities in the translation process. There has been a significant increase in the literature on revision, regardless of its label: revision or quality assurance (in TM) or otherwise (see Gouadec 2007; Martin 2007; Mossop 2006; Muzii 2006). Very often the focus remains on the translation as a product and its procedure (Hansen 2013), or its procedure and benchmarking (Robert 2013; Muzii 2006), and it is not directed towards the classroom (see Fraser 2000 in 1.4.9). Muzii (2006:33) believes that the teacher's role should be to help the students devise a strategy, but he makes little reference to the students' learning approaches. Nicol (2013) has led several research projects on peer review in higher education, which show interesting parallels with peer revision in this study. His rationale is that students learn more from providing feedback than receiving feedback. During the peer review process students establish and modify their own criteria, they learn from each other and they are engaged in such a way that what might have begun as transmission by the teacher develops into construction (or constructivism). Students construct their own knowledge and develop their evaluative judgement. This approach to revision would undoubtedly enhance translator competences. Its application in the PB syllabus is discussed in 2.4.3.2.

The following section moves from bottom-up reflective activities to top-down teaching of theory. The PB methodology encourages the application of theory in translation practice so that the students take ownership of their learning of translation theories. The literature on translation theory is extensive, but so are the didactic approaches.

1.4.9 *Theory and practice*

The literature is not homogenous in its presentation of concepts, such as translation theories, the translation itself, assessment, and translator training: indeed the authors range from theoreticians in higher education to professional translators to parties outside academia. None of the parties seem to agree among themselves or with each other. In the literature there is general agreement that translation theories should be taught, but there is less unanimity as to what should be taught and as to the application in translation training. Ingo (1991) suggests four linguistic categories for students to help them in their text analysis, while Gile (1991) describes his own four models for translation/text analysis (1.3.1). Neither discusses the inclusion of existing translation theories in translator training.

In *Exploring Translation Theories* (2010:1), Pym states that the aim of his book is to show how theories can be related to translation practice. He tries to concretise them by relating them to the translator, who, he believes, invariably theorises internal translation processes. The translator's 'model' becomes the translator's own theory. Pym suggests that the starting point for the professional and student translator should be the finer definition of paradigm, rather than the broader hypotheses of translation theories. While theories offer generative and selective choice, Pym claims that paradigms in their plurality show the many modes of translation. He observes that certain forms of translations such as localisation can reduce translation to a particular activity in which translation theories do not even feature (2010:120–142). Similarly, translation memory software can reduce the translation to segmented units. Pym's argument is that translation theories need to be taught to provide coherence.

So, how do Pym's observations relate to the PB syllabus? Theories and context give structure to translator training against the background of a fragmented industry in which the translator might only perform part of the process, in contrast to translation projects in the academic environment which tend to be comprehensive. Furthermore, reflective learning could enhance the theorisation process, which in turn might resolve

a potential tension between translation theory and translation practice in translator training.

1.4.9.1 Academic training and professional practice

Fraser discusses the tension between translation taught at university and translation in the 'real world' in '[t]he broader view: how freelance translators define translation competence' (2000:51–63). In regard to higher education, Kiraly (1990:6) differentiates between two types of translation, that is translation for professional goals and didactic translation for language learning, which, if recognized, might counter Fraser's suggested tension. So, how does HE deal with an apparent dichotomy between translation as an academic process and as professional practice? Fraser's top-down empirical approach to translator training requires a professional translation brief, terminology support by the teacher, good revision practice and feedback. Fraser notes that a good brief enables an improved free translation and fewer errors in the transfer; although her studies have shown that real-time client briefs often lack detail (2010:53). She notes that professional feedback is often either rare or negative and therefore should be given a higher profile during training (1.4.8). Fraser observes that the teacher's aim should be to teach students to revise more effectively and focus on their competence (2010:59). In a longitudinal study of student translators and professional translators, Hansen (2013:49–64) observes that whereas cognitive processes seem to be set early on and are part of the translator's personal make-up, translation styles establish themselves over a period of five to six years. Fraser (2010:59) claims that students tend to focus on solving problems in the source language, rather than on style and text type adequacy. Teachers, therefore, need to make assessment criteria clear. Students need to be well-equipped to manage work in a professional environment where assessment (criteria) may be less clear.

Anderman and Rogers (2000: 63–77) follow a similar line of thought on the progression from academic training to professional practice. In their broad historical overview of translator training in Europe they establish that it remains an issue how to make translator training more responsive to changing market needs (an observation also made in Pym's report of the online forum (2003; see 1.4.7.4.2). They believe there

should be a focus on project management and new genres of translation. And, if competencies, similar to cognitive processes are inherent to personality, academic training should add value to linguistic, cultural and translation competence. Anderman and Rogers' centripetal or integrated approach means that practice is used as the focus for the application for a number of skills (cf. project management in the PB syllabus), while a wider range of subjects presented in an ad hoc manner has a centrifugal effect (2010: 63–77). The translation portfolio in the PB syllabus, for instance, starts from a text, which is a window on a variety of relevant skills.

Fire Ant & Worker Bee (Durban and Seidel 2011) moves into the professional world and views translator training from the freelance translator's perspective. It recognizes three clear target groups, ranging from translators to students and teachers. The value of this work lies predominantly in its honesty about the profession and the attempt to break through taboos such as translation fees, translator client/agent relationships, and professionalism, which should be of high importance to translation graduates who wish to enter the profession. The editors claim that they are making up for areas that are not well-covered in translator training. They are not prescriptive in any way, but describe translation practice from a strongly market-driven perspective.

The PB syllabus can follow up many suggestions from Durban's and Seidel's practical compilation. However, the academic environment within which translator training takes place requires an application of translation theories and strategies in order to meet the academic requirements within the institution, and those expected by external examiners for the purpose of quality assurance. The PB syllabus and methodology therefore lay claim to a thorough practice of skills and competences and the application of a range of translation theories.

1.5 Syllabuses, curricula and pedagogy in translator training

Project-based learning (PBL) is an instructional teaching method that emerged from problem-solving and problem-based approaches in the United States during the second half of the twentieth century. PB approaches originated in the workplace, where adults

in apprenticeships would learn skills on the job. Subsequently the apprentices would have to connect their experiences and their acquired knowledge with the actual context and real world in which they are used (Williams and Hmelo 1998:265–270). Although the authors discuss syllabus design, they do not situate their discussion of a syllabus withint the framework of a curriculum.

Curriculum design specifically for interpreter and translator training is given detailed focus by Niska (2005:35–66). Her premise is that any syllabus will presuppose a curriculum. Therefore it is necessary to consider the variety of curricula globally and their impact on the organisation of courses, as they represent the organisation of content. Niska (ibid.) selects a couple of typical approaches from a vast range of programmes and identifies a similar assortment of models: the continental model, the British/liberal approach, the market-oriented approach, and the Scandinavian/flexible approach. The British/liberal attitude means that it is difficult to define a model: the way in which one-year courses are organised vary greatly (Niska 2005:39). In comparison, Li (2006:513–531) writes extensively about the Hong Kong model, which could be identified as a cross between the continental model and the market-oriented approach. In brief, the continental model follows established traditions and fixed patterns in relation to the duration of the training course and its generality or specificity. The Scandinavian model, which falls under the National Institute for Interpretation and Translation Studies at Stockholm University, is based on community training and has vocational training classes overseen by the Institute (Niska 2005:39-40). It does not have any fixed curricula. The market-oriented approach shares similar features with the Swedish approach in that training is provided by privately funded educational organisations, such as in the Netherlands. The establishments are approved by the respective governments on condition that they meet certain requirements, but they are not overseen by academic institutions (ibid.).

Tennent's (2005:xv–xxv) general comments on pedagogy in translator training are not linked to dedicated curricula and/or syllabuses, nevertheless they are pertinent to the design of the PB syllabus. In her introduction to *Training for the New Millennium - Pedagogies for translation and Interpreting,* the author explains that the collection

of essays is based on papers presented at a Forum on translation pedagogy about major changes in translation practice and the assumptions on which they are founded at the University of Victoria's School of Translation and Interpreting in Australia in 1999. Tennent points out that it became clear during the Forum that the differences and divisions needed to be recognized with appreciation, but without expecting reconciliation. For instance, linguistics and cultural studies as the main fields in TS often find themselves in a situation of opposition. Interestingly, the differences are founded in the act of translation and rarely emerge in the field of pedagogy.

In Tennent's overview (ibid.) the pedagogical strategies are predominantly student-centred. Training should enable students to evaluate their decision-making, raise their level of awareness of their practice and the range of choices available to them. With greater knowledge and awareness, translators can make more responsible choices. The value of academic translator training therefore lies in its theoretical point of departure (Tennent 2005:xxii). Furthermore, the author (2005:47) points to a policy document issued in 1999 by the European Language Council's Thematic Network Project (TNP) on translation and interpreting in which it was recommended that 'T&I training be recognized as a university degree course with the academic underpinnings and research activities traditionally connected to such courses'. The TNP states that the training of translators is a prerequisite for interpreter training. It accepts that translation and interpreting require very different skills, yet it emphasizes that a certain level of translation skills for interpreting is presupposed. For instance, Speech Recognition software used for the development of translation skills would be highly beneficial for any student considering interpreting.

The European Commission's Directorate-General for Translation (hereafter DGT) set up the EMT initiative in 2009 in response to an increasing demand for qualified translators. The partnership project encourages the creation of a quality benchmark for professional translator training, which might eventually lead to a more standardised curriculum in translator training. The requirements set by DGT are highly relevant and applicable to PB syllabus design. They are discussed in detail in 2.5.

Concluding remarks

The research synthesis of this literature review equates to the presentation of a kaleidoscope of views and mini-experiments in translator training. Many experiments and individual studies within the AR context support the argument in this study that awareness raising of professional translation skills and competencies needs to be at the core of translator training. Small-scale studies (for instance Hubscher-Davidson 2008) of collaborative group work and reflective learning in TS are innovative in the sense that they advocate a bottom-up approach: they start where the translation is being created in the mind of the (student) translator. The PB methodology follows a similar approach: it offers a framework to students where their tasks and learning should begin.

Although TS has developed into a mature discipline, syllabus design and teaching methodology have remained in the background of published research on translator training. Overall, the literature covers a range of teaching approaches, but they are not necessarily core topics. The discussion of mini-studies can be extremely valuable, as is demonstrated in the sections of 1.4.7. Small investigations and case-studies are important because they reflect a move from product-focused to more process-focused translator training. The process-oriented PB syllabus does not oppose a product focus, because ultimately, the translation that has to be delivered to a client needs to be a high quality product. However, in translator training students need to learn *how* they can achieve this target, and ideally collaboratively, and the PB syllabus supports this. Collective publications and articles tend to highlight the many different opinions by theoreticians and teachers as to what should be taught/learnt. Subsequently the methodological teaching approaches they discuss are telescopic and lack the holistic approach which is advocated in the PB syllabus. The PB framework aims to meet targets and specific requirements both in academia and in the industry without forgetting the whole picture. A translator training methodology as the driver of a holistic approach is rarely discussed in the literature.

In line with the literature on training translators, technology for translation has attracted an increasing amount of focus since the year 2000, particularly in journals

and online publications, as well as in papers and presentations at international conferences. However, the literature often concentrates on TEnt, rather than on the impact of technology on translator training (O'Hagan 2013; Munday 2009; Pym 2010). This chapter has provided evidence that many scholars consider pedagogy in translator training and their studies cover a wide range of topics: trainee translators and reflective learning (Chen 2009; 2010), AR in translation training (Hubscher-Davidson 2008), translation diaries in translation teaching methodology (Fox 2000); teaching translators self-directed learning (Zhong 2008), and expertise in the translation process (Englund Dimitrova 2005). In respect to topics in the literature concerning translation technology, they range from experiences in the translation technology lab (Doherty and Moorkens 2013), to internet skills and training (Fulford and Granell-Zafra 2003; 2005), to teaching CAT tools in an academic environment (D. Kenny 1999; Mileto and Muzii 2010), and questionnaires with a focus on students, learning and pedagogy (Li 2012; 2006; Pym 2009). The literature thus indicates that a discussion of pedagogy and methodology in respect to the curriculum is developing, and that teamwork and project work in the learning process has become part of translator training.

Chapter 2

2 Towards a project-based syllabus

Pedagogical approaches and the discussion of technology, and how it should be positioned in translator training are clearly part of the current literature. Yet, an overarching methodological conception of how to scaffold translator training has not been established. This chapter places the project-based syllabus (hereafter PB syllabus) adopted in the delivery of the module Translation and Technology (hereafter T&T) at Durham University in its original as well as current contexts, and relates it to teaching methodologies in other disciplines, such as science and second language acquisition (hereafter L2) (2.2.4). The general transition from a teacher-centred syllabus to the PB learner-centred syllabus is described in section 2.3. Section 2.4 establishes a clear distinction between the terms 'curriculum' and 'syllabus'. The PB syllabus is connected with the curriculum design recommendations present in the European Master's in Translation Studies (hereafter EMT). For this purpose three core documents by the EMT Expert Group were used: 'Competences for professional translators, experts in multilingual and multimedia' (2009), 'European Master's in Translation (EMT) Strategy' (2012) and 'The EMT Translator Trainer Profile Competences of the trainer in translation' (2013). A potential benchmarking process of the PB syllabus in relation to EMT is discussed in 2.5. Finally, the chapter mentions the PB syllabus in relation to professional translator competence in 2.6.

2.1 Learner-centredness in translator training

PB syllabuses are commonly used in ELT classrooms, where tasks culminate in the completion of a project at the end of a unit or course. The focus of such syllabuses is

on *how* students achieve the completion of their tasks and ultimate projects (Alan and Stoller 2005:10–21). Tasks are comprehensive and their three-phase structure is described in detail in sections 2.2.2 and 2.4.3. The structure and associated learner-centred approach in the PB syllabus are highly suited to a translation project in a T&T module (for a description of the T&T syllabus and tasks see 2.4.3). In 'Multiple voices' González Davies (2004:11–34) refers to the multiple sources and disciplines on which TS draws for ideas, methods, approaches and syllabuses. The application of the PB syllabus in TS follows an approach that originated in Communicative Language Teaching (hereafter CLT). In the 1990s, CLT theorists and teachers broke with the traditional teacher-centred approach and turned to authentic materials and learner-centred activities (Nunan 1988; Skehan 1998; Willis 1996).

Holmes (1988) and Kiraly (1995) may have been the first to call for the renewal of didactics in TS (1.2). Holmes' map of TS includes Applied TS as one of its branches (1.2), where it would be appropriate to place translation didactics. Kiraly (1995:2) stresses that teachers need to create 'the effective learning environment' to train students (1.2.1.2). Translator training, particularly in the UK, is ever more regularly provided within an academic context. The objective of the PB syllabus is to combine the practical and theoretical strands. There has been much discussion about the place of translation theory in the curriculum (1.4.4–1.4.9). Bell in *Translation and Translating: Theory and Practice* (1991), for instance, already advocates a link between practice and theory in the TS curriculum in the early 1990s. His concern is that when translation theory is presented as a set of rules, it makes translator training product-focused, rather than process-oriented.

The discussion of process-oriented teaching in TS has continued since Bell first raised the issue (2.3.1). Process-oriented teaching relies on collaboration between teacher and student and a handover of control to the students, who manage the process and their own learning. In 'Teaching translation through self-directed learning' (hereafter SDL), Zhong (2008:203–220) describes process-oriented teaching from the learner's perspective. He presents SDL as a process in which students take over control from the teacher to the extent that they assess their own needs and set their own goals,

select tools and strategies and evaluate the learning outcome, whereas in the PB syllabus the framework, objectives, tools and strategies are set by the teacher. Zhong (ibid.) finds in his study of a small sample of learners that his students achieve their personally set learning objectives in the translation course when they take responsibility for their own learning. He adds that the variety of functions of and choices in translation require a curriculum that teaches more than techniques alone: the trainee translator must learn to make independent decisions. His students are positive about the pedagogy, although they regret the lack of teacher input, which might cause students with a reduced level of self-discipline and motivation to experience a lower degree of academic progress.

The process-focused SDL approach shows many similarities with social constructivist ideas (1.2.3; 1.4.7.4.2; 2.4.3), and both approaches can benefit translator training. However, although SDL and the PB teaching methodology are similar in that they share social constructivist ideas, and that they are process-focused and learner-centred, there is a crucial difference between them: the SDL approach is translator-oriented and focuses on the individual, whereas PB teaching focuses on the translation and its achievement in collaboration. The following section 2.2 highlights the PB teaching methodology that underpins the PB syllabus in this study.

2.2 A project-based teaching methodology

Mileto and Muzii (2010) describe a PB approach in the Faculty of Interpreting and Translation at the University of Rome. They argue that PB learning is a constructivist approach to learning in the classroom. It includes long-term, interdisciplinary and student-centred activities in line with Kiraly's (2010) constructivist pedagogical approach. The T&T project at the heart of the PB teaching methodology in this study is defined in the Handbook of the MA in Translation Studies offered at Durham University:

> The coordinator or main tutor will set the students a translation project to work on, which will be developed by the students under guidance of the tutor during the entire length of the course in line with the topics planned for each set of lectures. Using the

English-language only Durham University website the students need to complete a translation project that is ready to become a multilingual website in all the taught languages of the course. Each individual will need to select appropriate sections (2,500 words in total) for translation and although the final product should be faultless, it is the process and management of the translation that are crucial to the project. Collaboration with other students during the process on all kinds of different technological activities surrounding the translation is essential. All these activities need to be recorded personally during the module, in order to provide data for two essays.

(Durham University Handbook, MA Translation Studies 2010)

The process approach is crucial to the project, which once it is set by the teacher is developed by the students. The PB methodology encourages the students' analysis of problems, and requires teaching materials and teaching methods presented by the teacher, as well as additional materials collected by the students. After setting the framework and providing clear objectives, the teacher remains the overall coordinator.

The discussion of teaching methodologies in TS has increased significantly (1.4.6), but it is not always covered in as much detail as in Kiraly's and Pym's works. The PB methodology and syllabus in this study particularly draw on their ideas. In *Principles for the Teaching of Translation,* Pym (1993:100–116) suggests that we start from the translation process, which he calls 'induction', and that we begin with an analysis of problems rather than from a theory. He claims that if we draw on the theory, we will be searching for matching examples and the students will not be encouraged to apply their own critical thinking. The teaching of translation theory should follow practice and not precede it. Students should discuss translational errors, rather than grammatical mistakes. This is in fact also Gile's (2009:14) argument in favour of the process-oriented-approach to translator training (2.3). Pym (1993:100–116) does not propose a particular teaching methodology in his *Principles*. In his more recent works he is more explicit about what should happen in the classroom (see *Exploring Translation Theories* 2010). Kiraly (1995:1–19) suggests there is a lack of clear objectives, curricular materials and teaching methods in translator training. He recommends more empirical study in adapted curricula, methods and objectives, as well as syllabuses (1995:1–19). In his discussion of the translator training classroom in 1995, he states firstly that translator competence rather than translation competence

should be crucial to pedagogy. Secondly, he considers translation processes essential to the development of translation pedagogy. And thirdly, he emphasizes the concept of learner independence, which he calls 'learner empowerment' (2000:17). Kiraly's recommendations in regard to objectives, curriculum and methodology are potentially valid and a good reminder for any teacher at any time. The same applies to learner independence and process learning – they are no longer innovative, but the question is whether they are applied in translator training and to what extent, and whether they are central in the instruction of technological skills in the PB syllabus in this study. Technology can easily and successfully be taught and learnt from the manufacturers' manuals, but such a method does not encourage a critical and analytical mind. Moreover, skills do not add up to competence.

Clear objectives, teaching materials and teaching methods need to be defined in the syllabus. The objective of the PB methodology is to meet the multi-faceted requirements in the handbook through a comprehensive project. The project, which emerges from a framework (set by the teacher), subsequently creates a framework (designed by the student), which allows the student to explore and practise process learning (see Pym 1993). Furthermore, within the framework the student can develop learner independence and become aware of their competences and skills as a translator (see Kiraly 1995). The following section 2.2.1 considers the responsibilities of the teacher in relation to the PB syllabus.

2.2.1 *The Translation and Technology project*

The T&T project has a cumulative approach: the project is subdivided into tasks (2.2.2), which constitute the building blocks of the project. Although the tasks are complete and separate units, they build upon each other. Students work collaboratively towards their own individual end products. In the background there is a team of students, which manages the multilingual project through a wiki website in the university's virtual learning environment (hereafter VLE). González Davies (2004:68–81) also supports projects as a way of linking activities, and as a means to connecting students with the professional world outside the classroom. She conducts

two projects: one to practise resourcing skills and another to explore translation issues via the web. There is a subtle difference between González Davies' (ibid.) projects and the T&T project in that hers concentrate predominantly on translation and collaborative learning, whereas the T&T project aims to integrate translation skills and translator competences (see 1.3.1). Collaborative learning in the T&T project was not a prior objective but was intended as a support mechanism. Similarly, project management was an optional activity (2.4.4). Nonetheless, the projects share the same objective, which is to acquire better translation skills by working through a variety of translation activities collaboratively and coherently.

The T&T project is founded on a PB syllabus which was designed in accordance with a number of theories and methods that gained popularity in the twentieth century. For instance, the tasks in the PB syllabus are based on a teaching method in CLT, which is explained in the following section 2.2.2.

2.2.2 *Task-based teaching*

The task-based (hereafter TB) teaching method was developed in CLT in the 1990s (see Skehan 1998; D. Willis 2006; J. Willis 1996). The teaching methodology seeks authenticity of materials and activities, and insists that the approach and procedures complement each other. Design (meaning syllabus), approach and procedures are components of the TB approach. The format affecting the approach is that of a task comprising three phases: pre-task, main task and post-task (Table 1). The learning objectives of the task address the procedure as well as the completion of the task, because it is in the procedure that a student learns how to learn. According to Skehan (1998) task targets encompass many forms of learning because they are set in a real-world context. When applied to translation, this method implies that a) translation training should be topic-centred, b) the work produced by the student needs to be authentic and original, and c) during the learning process, both procedural and declarative knowledge be practised and explored (see González Davies 2004). The task's focus on learner independence, authenticity and real life situations makes it a very attractive medium for implementing the PB syllabus in manageable steps, so as

to facilitate the development and acquisition of complex professional competences (for instance, project management, problem-solving, selection and optimization of computer-aided translation (hereafter CAT) tools). The application of tasks in the PB syllabus is discussed in detail in section 2.4.3.

2.2.3 *Possible disadvantages of the task-based approach*

It has been suggested that the TB approach has some drawbacks. Klapper (2001) supports the development of learner independence, which is fostered in many ELT methods, yet he considers training issues from a critical perspective. Beyond a doubt, there are many benefits gained from independent learning, it is more than students just working on their own. Independent learning involves self-study, learning without the teacher, and students being able to take charge of their own learning. These skills should ultimately improve students' ability to make informed choices of what and how to learn, as well as to take active responsibility for the learning process itself (Davies *et al.* 2001:163–182). Learner independence is considered to be a capacity to reflect on objectives, to define content, to select appropriate strategies, to monitor and evaluate one's progress (ibid.). Ultimately this approach to learning and translating would support the translator at any time, whether a trainee or a professional. At any time a (student) translator may have to generate solutions and select correct ones without immediate support at hand. Independent learning to develop a critical mind is therefore a key objective and the TB framework provides suitable scaffolding to the PB syllabus.

Klapper (2003:33–42) takes issue with the 'task' as structure. His concern relates to the potential neglect of the cognitive processes that would support the acquisition of knowledge and skills. Although the PB syllabus in this study applies the task structure and takes its learner-centred approach, the syllabus nonetheless expects strong guidance from the teacher. Furthermore, Klapper (ibid.) stresses that there is a tendency, particularly in CLT, to critique the traditional teacher-centred Presentation-Practice-Performance (hereafter PPP) approach. Indeed, a lack of consideration for students whose learning styles were formed in strong teacher-centred educational

backgrounds would not benefit the PB teaching methodology with its learner-centred approach. An example of the students' ambivalent approach to summative and non-summative assessments in the syllabus appertaining to the translation project is given in 4.4.

A comprehensive application of social constructivist ideas in the PB syllabus would give rise to similar concerns. Adjustments in the form of guidance are required. When, or if, social constructivist ideas are applied, it might be necessary to readopt an element of Vygotskyism and bring the translator teacher back into the picture as a supporter and a stretcher of learning (2.3.2). In the study, tasks are designed to be completed per session, which facilitated guidance and a transparency of the objectives. The structure of a task is clarified in the following section.

2.2.4 *Task-based and problem-based teaching compared*

In the second half of the twentieth century, science educationists in the United States developed an approach to authentic learning, which does not conflict with TB learning. They suggested that their students begin with problem-based learning, which then proceeds to TB learning (Williams and Hmelo 1998:265–270; see 2.2.4). Problem-based learning is a learner-centred pedagogy in which they learn about a subject through the experience of problem solving. The rationale for starting with problems is that projects are open-ended, and possibly daunting, while problems are not; problems can be relevant to a project without being infinite. Drawing on these approaches, the tasks in the PB syllabus are similar to problem-based activities: both constitute the scaffolds of the project in the syllabus. Inquiry-based questions as in problem-based activities can be included in the pre-phase to encourage deeper thinking skills. Ultimately, students are more likely to retain what they have learnt if they have been allowed to discover and practise their own goals and materials. This is a key feature in constructivist epistemologies which matches Kiraly's (2000:4) constructivist ideas that encourage interaction between what is learnt and what is taught.

Problem-solving activities help students acquire flexibility of skills and understanding. The main task in the T&T module involves a simulated website

translation, and requires students to organise the management of the multilingual project in class, which involves their translation portfolios (2.4.4). The task sets new requirements for teaching skills, it consists of meaningful problems, scaffolds, it changes the relationship between teacher and students, where the teacher becomes the monitor and coordinator of collaborative student group work. Higher thinking skills, such as analysing, synthesising, and assessing their own work and that of peers will prepare trainee translators for a challenging problem-filled profession.

In sum, problems structured as comprehensive tasks constitute the PB syllabus, which aims to give the student the best workplace experience as possible in an academic environment. More detail of the problem as a teaching concept is given in the following section.

2.2.5 *A rationale for the problem-solving task*

The PB syllabus includes a series of problem-solving tasks, thus familiarising the student with CAT tools and internet-based tools. In order to be effective learning tools, problems are structured as three-phase tasks: such a subdivision allows problem-solving to become an integral part of the many activities in the PB syllabus. In this way the total learning experience moves the student close to the workplace.

Kiraly (2005:1098–1111) suggests that experiential learning means leaving what is to be studied in its authentic environment. A similar direction was established by science teachers and linguists in the US in the second half of the twentieth century. Science teachers observed that listening to teachers' explanations, or studying texts, left students with knowledge that was acquired rather than experiential. The new knowledge was compartmentalised in the learner's mind instead of being comprehended, and it was memorised without the guarantee of being understood (Williams and Hmelo 1998:265–270). Similarly, in language teaching, the traditional approach of PPP in the second language (hereafter L2) was no longer considered adequate. It did not encourage learner independence and without authentic material, it would not replicate a real-life experience. Meanwhile, science teachers wanted more hands-on experience and experimentation in laboratories and computer-supported

environments in order to prepare students for the workplace, and to encourage them to think for themselves and ultimately to be responsible for their own learning process (Williams and Hmelo 1998:265–270). It was well-known that guided apprenticeships would teach trainees to solve problems, connect their experiences and consider acquired knowledge in context.

In the US and the UK, arts subjects, such as modern foreign languages (hereafter MFL), demonstrated a similar approach to problem-based teaching in the form of TB teaching (Willis 1996). Helpful studies and examples of good practice in learner-centred syllabuses in the field of L2 acquisition, especially in secondary education, had already preceded problem-solving methods (Nunan 1988; Tyler 1949; White 1988). Translation Studies is certainly one of the disciplines that might benefit from the problem-based learning techniques. They are increasingly practised in a number of European universities, such as the University of Maastricht in the Netherlands:

> Problem-Based Learning (PBL) clearly illustrates the university's innovative character. This educational model has been at the core of Maastricht University ever since it was founded. UM is the only university that applies this effective and successful system in all its programmes. An increasing number of universities in the Netherlands and abroad have adopted PBL.
>
> (www.universitymaastricht.nl 2014)

As discussed in Chapter 1 (see sections 1.4.6; 1.4.6.1–1.4.6.4), TS still seems to find itself in the diagnostic stage. In TS, Kiraly deserves recognition as one of the theoreticians who has encouraged a change in focus away from subject-centred and teacher-centred methodologies (1.2.1.2; 2.1). A PB syllabus, from the TB perspective, designed for student translators in higher education (hereafter HE), would meet Kiraly's (1994:2) requirement to provide an appropriate learning environment. The task structure as well as problem-solving activities foster critical thinking and help students acquire necessary translator skills and knowledge to enhance translator competence (2.6.1).

2.3 Process learning

Process learning (in which the student's creative learning process is supported by the teacher over a longer period of time), progressive learning (an umbrella concept based on the principle that learning occurs gradually through discovery and experience), reflective learning (see 1.4.8), formative learning (based on activities and supportive assessment), cumulative learning (which is gradual and expansive) and task learning (see 2.2.2) are well-known concepts within ELT and MFL teaching (see Skehan 1998; Willis 1996; Ur 1996). In TS it has both followers, such as González Davies (2004) and theoreticians who prefer a different approach, such as Nord (1997). Nord contrasts the process-oriented approach with function-based teaching, which makes the student aware of the why, where and when of the translation assignment. Obviously, there cannot be a sharp demarcation line between the two approaches and although the PB syllabus encourages process learning with an emphasis on the acquisition of translation skills and competence, the function of the translation is raised in either the pre-task or the post-task phase. González Davies (2005:209–224**)** refers to the reflective element in process learning that requires her as the teacher to observe her own teaching methods, including adaptions and improvements, achieved through action research (hereafter AR) in the classroom (3). González Davies (ibid.) refers to 'pedagogical teaching', because the process creates an awareness of what is happening in the classroom in terms of pedagogy (the teacher), the teaching methodology (the syllabus) and the student who learns by effectuating the syllabus.

Constructivist theories do not conflict with process learning. They suit experiential learning and can be effective theories in translator training (Kiraly 1995; Pym 2009). Kiraly's constructivism has a sociological collaborative focus which contrasts and compares well with the theory of threshold concepts (see Land 2006). The latter theory is more concerned with the individual and the cerebral unknown of the problem, and why some students grasp a concept and others struggle. Yet both theories provide grounds for process learning. Threshold concepts try to define areas that could be 'troublesome' (Land 2006:19–32) to the student, such as transformation and integration of knowledge; constructivism offers a method which helps the student

come to terms with troublesome areas and manage them together with peers and in a suitable environment.

In conclusion, process learning in TS focuses on the way in which students acquire the skills to become competent professionals. For instance, reflective teaching and learning are processes that encourage both the teacher's and students' involvement and contribution in the process of problem-solving or dealing with troublesome concepts. The following sections (2.3.1–2.3.4.3) discuss process learning in relation to this study and how certain aspects have manifested themselves in the PB syllabus. In TS, the approach is referred to as process-oriented, although it does not exclude some of the functionalist product-focused features.

2.3.1 *Process-oriented approach in Translation Studies*

Kelly (2005:7–19) identifies the development from product-oriented to more process-oriented teaching, and a learner-centred approach, as one of the major changes in translator training. She exemplifies product-oriented teaching as the professional translator-cum-teacher setting translations in class with little preparation time for students, followed by the teacher's own model translations for correction, with little reflection on the organisation of teaching and learning.

Gile (1995:92–185) believes that translation training should focus on 'how to go about translation', since the student gradually acquires professional expertise by mastering the complex process of translation. While Gile's (ibid.) process-oriented approach appears to cover mainly the actual translation process, the notion of process in the PB syllabus is concerned with the broad definition of process-oriented learning, which involves all aspects of translator training and not merely the translation. Meanwhile, it is worth noting Gile's (ibid.) reasons for advocating the process-oriented focus. He claims that one of its advantages might be faster progress if students focus on one error at the time in their translations, and if they concentrate on translation strategies, rather than end results. Students should learn to adopt greater flexibility during the early stages of learning how to translate. Gile (1995:92–185) believes that more emphasis on the actual end product should be given towards the

end of the training: '[t]he desirability of optimization is one good reason for adopting a process-oriented approach *in at least the first part* of Translation training'. It is interesting that Gile (1995:14) suggests a shift from a process to a more product-oriented approach during the training period; it is not common to suggest a change of direction mid-stream.

A research group at the Copenhagen Business School has added some very interesting observations in favour of the process-oriented approach, yet originating from a different rationale (Kelly 2005:7–19). While there is a tendency among students to focus on the lexical transfer process, professional translators tend to be more product-focused and interested in stylistic issues and the user's needs. This could be partly explained by automated processing in the professional's mind. It underlines the need to train the student in all aspects of the entire translation process, so that they move on to the macro level where they need to be as professionals. The macro level is especially relevant in post-editing activities or in human-computer interaction (O'Brien 2012), where the translator needs to stand back and observe, deconstruct and synthesise. However, in the process, the students need assistance from the teacher and support from appropriate materials. This element of mediation is discussed in the next sections 2.3.2 and 2.3.3.

2.3.2 *Process-oriented approach and Vygotskyism*

Kiraly's social constructivism is applied to the neo-Vygotskyan form of constructivism. 'Mediation' is a concept in Vygotsky's (1934; 1978) 'zone of proximal development' and focuses on the difference between what the learner can do with and without help. Vygotsky's zone of proximal development is in fact a 'virtual domain' in which optimal learning is made possible. 'Proximal' refers to the level of independent problem-solving, although not excluding assistance. In a PB syllabus, the teacher guides students by showing them how to learn, based on principles of self-awareness and by means of reflective practice. Self-awareness and reflective practice, self-assessment and self-revision are crucial skills for professional translators.

A process-oriented approach exposes students to mediated learning, which addresses the way in which they learn and not merely *what* they learn. However, this does not mean that the PB syllabus distances itself from cognitive education. On the contrary, the PB syllabus moves the students towards skills and competences in a 'socio-cognitive apprenticeship', which in this study teaches students to use cognitive tools, such as CAT and internet-based tools. Kozulin (2003:15–38) considers the psychological tools that are needed to bring about the appropriation of learning. He describes many types of mediation, such as the teacher (whose goals and methods can be diverse), as well as different types and techniques of mediation, for instance, scaffolds as detailed in the following section. The PB syllabus can accommodate any type of mediated learning. Moreover, the application of the PB syllabus in a multicultural classroom means that the shared cultural backgrounds of the students may contribute to enriching their development, as predicted in Vygotsky's sociocultural theory (1978). Practical forms of mediation are discussed in 2.3.3.

2.3.3 *Process-oriented approach and scaffolds*

Scaffolds (or scaffolding) are a flexible support service offered by the teacher to the student to help them complete their tasks competently and to progress towards learner independence (Kiraly 2000:45). Scaffolds work as follows: an idea may originate from the student; it will then be 'scaffolded', for instance, contextualised, modularised or linked to supportive materials or ideas by the teacher to allow the students to further progress. If the scaffold is a project such as the translation portfolio in the PB syllabus, it will benefit the teacher as well as encourage the students. However it may also raise a couple of questions: 'how to integrate the students' real-world knowledge, without letting it [project] take over from lesson plans, and how to push for "principled understanding", rather than allowing interest in the project to dominate' (cited in Williams and Hmelo 1998:276). In other words, should the scaffold be allowed to develop into procedures, or should learner independence be given the green light? The PB syllabus aims to strike a balance by placing learner-centredness at the heart of a process-oriented approach. In practice a scaffold could be a real-time translation issue or a contrasting case which is introduced in the pre-task phase, and is shaped by the

student in the main task. In the post-task phase the teacher becomes part of the scaffolding to conduct analysis and provide feedback. The students and their learning process remain central in the teaching methodology. Certain qualities of learner-centredness and its application in the PB methodology are explained in 2.3.4.

2.3.4 *Learner-centredness*

Most students are undaunted by the prospect of submitting a 2,500-word translation and would prefer to sit down at a computer and complete the translation as fast as possible. However, the T&T module requires that all the tasks in the project be completed on the way to the end product, which is the completed translation. Many students are not accustomed to 'learner empowerment' (Kiraly 2000:15–33), which means that their knowledge and understanding are generated through their activities, and that the more time they spend solving problems and carrying out tasks independently, the more efficient they will become. From focus group (hereafter FG) discussions and email exchanges, it appears that some students embrace the learner-approach with greater ease than others (4.2.3). The following sections (2.3.4.1–2.3.4.3) discuss different thought processes such as critical thinking, reflective, cognitive and non-cognitive learning that encourage and develop the learner-centredness of process learning.

2.3.4.1 Critical thinking

Critical thinking culminates in the post-task phase. During the project it takes place in the students' individual blogs, either in class or afterwards. Blogs equate to 'learner diaries', in which students write about their activities and learning process. The blogs are also teaching tools which help to analyse the learners' needs (Richards 2001:223–255). The following sample (verbatim) of a blog entry is a student's comparison of two Translation Memory (hereafter TM) software programmes after eight weeks of practice; the student gave consent for samples to be used for the purpose of this study (3.7):

CAT tool (A) can give you the word in context - no need to go back and forth - u have a preview - whereas in CAT tool (B) u see the sentence in context but it is not as useful;

In (B) external view allows u to edit but (A) has no external view so u can't re-import the file- how will editing take place? have to find alternatives;

In (B) Quality Assessm. detects mismatches;

(A) and (B) have similar interfaces but (B) is much closer to CAT tool (C) and supports (C) files - more competitive.

(Student 1 2011)

The teacher has access to the blogs and can add comments to guide the student towards a more critical assessment of the TM software programmes. Not all students find blogs helpful or useful. Their use is often determined by individual learner styles, and may also be influenced by age, gender, and cultural background. Richards (2001:223–255) observes that blogs give student and teacher a better perspective of progression in line with syllabus requirements and may possibly offer the teacher unexpected insights. However, blogging requires time commitment and cooperation, and as previously mentioned, not all students see the benefit of the activity. Some students, however, realized that their critical thinking was enhanced by the reflective learning process that took place in the blogs (see home student 4.1). More details about reflective learning are given in the following section.

2.3.4.2 Reflective learning

Blogging is an expression of computer-mediated communication (CMC) (Garrison, Anderson and Archer 2001:7–23). It is a good way to promote higher-order (cognitive) learning. CMC, which is the T&T classroom in this study, should lead to a critical community of inquiry. The inquiry process identified by the aforementioned authors consists of four stages: trigger, exploration, integration, and resolution. In this study, trigger and exploration refine the activity in the pre-task stage, while integration of design and plan take place in the main-task stage. The resolution of the problem, namely the completion of the activity, is also part of the main-task stage. In the post-task stage the students should have a clear idea of what has been accomplished and achieved, and also demonstrate expectations (a new trigger) for the next task in which acquired knowledge can be applied. All these stages can be blogged, which will give

the student and teacher rich data of the learning process that is taking place. The blogs are private and not open to other class members. The students are encouraged to keep their blogs open while they are translating and using new tools, so that they can record discoveries instantaneously and add immediate thoughts and reflections. The teacher can post comments and questions on individual blogs to encourage critical thinking, thus moving the student towards a critical assessment of the technological tools in the T&T module. Most students are familiar with blogs (cf. Facebook) and are very likely to continue using networking tools, such as LinkedIn and portals within the translator community, if they become professional translators. Familiarity with blogs and portals is yet another step on the way to becoming an independent practitioner. The online translator communities are good sources of information and contain many resources for translators (Gouadec 2007:89–152). 'Good' in 'good sources of information' (ibid.) refers to quick and generous, but the quality is not guaranteed and needs to be checked by the user. Students need to have a critical mind, so that they can deliver good QA.

The benefits of reflective learning have been recognized by TS teachers (Chen 2010; Hubscher-Davidson 2008; M.A. Kenny 2010; Kelly 2005; 2008; Li 2002). Awareness raising already begins when the students are informed about imminent discussion of their work (Chen 2010). Knowing that they are expected to write about their actions and learning, the students tend to take more note of the process. In the PB syllabus (Appendix 7) aims and objectives for each new task are stated clearly. Ideally, students should evaluate their achievements, successes and failures against the aims of the syllabus. Therefore, comments added by the teacher often take the form of questions to invite critical thinking. Blogs are used in the post-task phase to encourage the student to reflect on what has been achieved and what needs remediation.

Reflection is a form of non-cognitive learning. It is prevalent in spontaneous forms of communication such as blogs and online discussion boards. The following section will compare the cognitive and non-cognitive aspects of learning in the online communication tools.

2.3.4.3 Cognitive and non-cognitive learning in blogs and wikis

Wiki websites help gather information, share and analyse. A wiki in the VLE enables collaborative and interactive translation procedures, group communications and the sharing of resources and databases. In the PB methodology it is managed by a small group of students who volunteer or are invited to join and run the project management team. The use of a wiki means that the project management team assists in creating a collaborative atmosphere in class. M.A. Kenny (2010:102) describes the collaborative group as a structure in which a group of learners is engaged in the creation of a group product and where all members work in parallel on all aspects of the task. Therefore, the project team is the collaborative group engaged in the provision of services to their classmates. In class the students offer each other emotional and cognitive support via the wiki, while they are engaged in the same task, yet working on their individual translation portfolios (Mitchell-Schuitevoerder 2013:127–142). In 'The Impact of Task Design on Small-group Interaction in an Online Translation Exercise Classroom' M.A. Kenny (2010) offers a pertinent discussion of methodology in an online classroom.

During the study, the FAQ page on the wiki often led to interesting discussion threads among the students. Web-based communication skills were tested, and when a particular query remained unanswered, the project management team might suggest appropriate forums to be contacted. At that moment the professional world entered the classroom: when students contacted support services with questions about compatibility, or when they posted questions on translator group lists.

The wiki website is filled with postings that can be both cognitive and non-cognitive (M.A. Kenny 2010:102). Cognitive postings give evidence of student learning via discussion, negotiation and debate, while non-cognitive postings refer to administrative issues, or after-class arrangements. Non-cognitive postings are less prominent on the wiki in the study than they are in the blogs. The blogs are designed for personal reflection and are less inhibitive than the wiki, which is public. Blogs may even be considered to be a form of blended learning, a combination of face-to-face learning with e-learning, which has the advantage of extended learning time beyond

contact hours (Garrison 2003:73–118). The students reflectively record their findings in the blogs: they rate their own experience (micro reflection) and what dis/advantages the tool they are studying may present to the translator (macro reflection). Discussion lists with threads on controversial translation issues enable students to respond to each other in their own time.

In sum, the PB syllabus supports a variety of independent learning tools in the VLE that encourage reflection, critical analysis and online communication among students as well as with professionals outside the university. The quality and full contents of the PB syllabus deserve particular focus: they are detailed in section 2.4.

2.4 Curriculum and syllabus

CLT theorists (Nunan 2004; Tyler 1949; White 1988) have defined and redefined terms such as curriculum and syllabus, whereas in the TS literature the distinction is not always made explicit. Some confusion might stem from the differences between British and American English. White (1988:1–6) gives a very clear overview of the differences between 'curriculum' and 'syllabus'; 'syllabus' in its British usage refers to the content or subject matter of an individual subject (cf. OED 'A statement of the subjects covered by a course of instruction or by an examination, in a school, college, etc.; a programme of study'), whereas 'curriculum' refers to the totality of content to be taught and aims to be realized within one school or educational system' (cf. OED 'A course; spec. a regular course of study or training, as at a school or university').

Thus, a curriculum subsumes a syllabus. Nunan (1988:1–9), a respected theorist in Communicative Language Learning (hereafter CLL), would agree that in some contexts 'curriculum' is synonymous with 'syllabus'. He refers to Tyler (1949 cited in Nunan 2004:4–5), the forerunner of modern curriculum study, who proposed a tripartite curriculum model: first the identification of goals and objectives in the syllabus, then listing, organising and grading of learning experiences, which constitutes the teaching methodology, and finally finding means to check if goals and objectives have been met in assessments and by evaluation. Nunan (1988:1–9)

indicates that his kind of curriculum, including the syllabus, is product-oriented and does not account for a process curriculum in which the teacher is the agent of change, and users experience a curriculum in action. While process and action are fundamental to a TB syllabus or curriculum in CLL, and will be so to the PB syllabus in TS, Nunan's (1988:135–158) preferred view of a tripartite curriculum, similar to Tyler's, is one in which the 'syllabus' selects, sequences and justifies content. Richards (2001:223–255) defines curriculum and syllabus as follows: the curriculum envelops knowledge, skills and values to be learnt, experiences that need to be provided to bring about the desired outcomes, and the planning, measurement and evaluation of both teaching and learning, while the syllabus is the specification of the content of the course and lists what will be taught and tested. This research requires an integration of syllabus and teaching methodology in which the latter is required for selection, sequencing and justification of learning experiences, and 'assessment' to further the selection of appropriate assessment instruments and procedures.

The PB syllabus aims to follow the aforementioned models for the syllabus and curriculum proposed by Richards (2001:223-255). It is however dependent on the MATS curriculum and must be modified in line with curricular changes (3.1.1). The other dependency is on the proposed components of the European Master's in Translation (hereafter EMT), which will be outlined in section 2.5. However, first there will be more focus on the actual contents of the PB syllabus and its implementation during the three-year study.

2.4.1 *An innovative project-based translation portfolio*

The PB syllabus follows Richards and Rogers' (2001) proposal for a clear pedagogical division into approach, design and activities. The approach includes the theories as discussed in the previous sections, while design refers to the syllabus and the activities as part of the teaching methodology. The translation portfolio in the PB syllabus consists of a series of short website translations, which give the portfolio its design structure and determine to some extent how technological tools are used. The ultimate objectives of the PB syllabus are to enhance professional skills, and to give the student

experiences that stretch beyond the classroom. The project in the T&T syllabus consists of the creation of a translation portfolio (see Introduction). The portfolio consists of a series of short translated web pages of Durham University on specific topics chosen by the student, for instance, health and safety, sports, international students, tourism, and so on. The translation process of those web pages supported by technological tools provides the data for the students' summative essays at the end of each term. The portfolios are emailed to the teacher shortly after the last practical session of each term. They are not assessed for two reasons: firstly, because collaboration and peer-revision do not allow for a fair assessment of the student's abilities, and secondly, because students who are not translating the university's English website into L1 might be disadvantaged (2.4.3.4). The advantage of non-assessment is, however, that students are not product-focused while translating and that they may subsequently be prepared to experiment and spend more time on, for instance, terminology searches which will help them meet the accredited assessment criteria in their summative essays. The risk that students deliver translations that are not 'fit for purpose', that is according to translation service standard BS EN 15038:2006, can be reduced by applying adequate self-revision. In the pilot year the students were advised to organise peer-revision themselves (1.4.8). The translation portfolios in the pilot study were evaluated by professional translators and in the second and third year by alumni who had graduated the previous year and had found employment in the translation sector. This system created a situation in which 'junior translators' of one year became the 'senior translators' of the following year (see Mossop 2007:196).

The translation portfolio is a key component of the PB syllabus, it constitutes the 'task' and it becomes the scaffold of the teaching methodology. The following sections 2.4.2–2.4.3 give an overview of the rationale of the PB syllabus design, its implementation and its task structure with examples of content.

2.4.2 *Design of the project-based syllabus*

It is difficult to separate syllabus design from teaching methodology. In order to achieve objectives the teacher needs to define procedures to achieve them (Nunan 2004:130). Task-based, problem-based and project-based syllabuses are subtypes of a process-syllabus, yet they also effectively describe the teaching methodology. Neither the PB syllabus nor the PB teaching methodology rely on prior analysis of the subject to be taught, instead the syllabus is organised with a purpose in mind, which is completion of the translation portfolio. Its task-based structure offers scaffolding to assist the student. The student effectuates the syllabus independently and personally. Kiraly (2000:5), in his design of a syllabus and an appropriate teaching methodology, identifies the following components for consideration:

- the objectives of the method
- how the student selects and organises within the method
- what types of learning tasks and teaching activities will be promoted
- what the role of the learner is
- the role of the teacher
- the role of materials.

The PB syllabus amply meets Kiraly's requirements. The objectives of each task are stated in the syllabus (Appendix 7). The well-structured tasks do not equate to assignments: the students have to design and create their own activities. In some of the tasks, the students can determine their own roles: they may volunteer to be a project manager or a translator, reviser, pre-editor, post-editor, terminologist, or any other role included in the syllabus. The teacher is a monitor, a guide and an instructor who manages the tools (software and hardware) and suggests appropriate literature, which the students should read to support their understanding of the topics.

It was mentioned in section 2.4 that the syllabus is dependent on the modular curriculum of the Durham TS master's degree. In many respects the MA programme shows a building buttress structure (Baume and Baume 1992) where the core modules are theoretical and are supported by optional more practical courses in a variety of

subjects, such as editing or intercultural project management. Optional courses support core modules and contribute to the students' learning. In the pilot year of the study the T&T module was not yet part of the core, but it was mandatory for students who were studying only one language pair. After the pilot year T&T gradually became an optional module for all students. It was a major change and affected the syllabus as well as the planning of the study (3.1.4). In terms of the building buttress structure it meant that T&T changed from a central buttress as a core module to a supporting buttress as an optional module. In the second year of the study, T&T could no longer rely on extended learning in other TS modules. For instance, the use of CAT tools was no longer practised in specialised translation modules because some students might not have attended the T&T module and would not be familiar with translation memory software.

Ideally, the learning and practice of TM software should integrate with practical translation modules in the programme. Overall, the modules are fairly compartmentalised and relate to each other like a Lego structure (Baume and Baume 1992), which means that the students have to make connections between the modules themselves. A variety of tasks in the PB syllabus allows them to reflect on their learning and the integration of other modules. One of the objectives for setting up voluntary project management teams in class is to emphasize the necessity of cohesion in the translation profession. The T&T module also has a building buttress structure: in the pilot year it was designed with two reflective components to support the 'buttress structure': oral presentations and blogs. The presentations were held by two to four students and aimed to encourage group reflection on the supportive quality of academic resources. From interviews (4.1) it became clear that some students could not relate academic sources to practical learning, even though the presentations had aimed to help students close the gap by discussing topics in groups. The blogs in the VLE enabled personal reflection. Brown *et al*. (2005:215) suggest that personal reflection in blogs helps learners to relate theories and practice. The following blog entry (verbatim) gives an example of a student's reflections on the use of TM software:

> Problems when insert words: Once I copied and paste something, such as tags or terminology, in the middle of a sentence, I found that I cannot get the cursor back to the end of the sentense, or anywhere else except for the end of the inserted part. By repeating a process of 'inserting-deleting' I somehow can get the cursor back, for every time you repeat the process, the cursor goes forward a little bit. (That's one character in Chinese. I have no idea how it will be in a alphabetic language.) To this problem I did not find a solution, either.
>
> (Student blog 2010)

The teacher has the option to respond directly by adding a comment to the blog, or to use this problem for discussion in the post-task phase of the topic. One of the teacher's questions was to help students consider how any potential difficulty in managing the software might impact on the quality of their translations.

In sum, the PB syllabus is comprehensive and flexible. It can be modified according to external changes in the degree programme, or to requirements from students expressed in blogs or in questionnaires, it can adapt itself to new objectives that have emerged from old ones. The design of the PB syllabus accommodated internal and external changes during the three-year study (4.3.1). The tasks were crucial in the process, because they offered the flexibility to students and teacher to redirect the course. The summative essays were a culmination of the tasks that had been completed to create the translation portfolio (4.3.1). The following section gives an overview of the task structure in the project-based syllabus.

2.4.3 *The task in the syllabus*

In line with CLT components as well as Kiraly's (2000:1–14) social constructivist ideas, the PB task features the authenticity of materials and the construction of competence, based on real-world knowledge and understanding. A sense of authenticity is created by simulating a real-time translator environment and translation process. The three-phase task (Table 1) is given content by the students to support their independent learning (see Skehan 1998; J. Willis 1996; D. and J. Willis 2007):

PRE-TASK	Introduction to topic and task
MAIN TASK	Task Planning Report
POST-TASK	Analysis Practice

Table 1 The CLT task (based on Willis 1996)

The students create their own tasks within the given framework and the outcome is not predetermined.

In the pre-task phase the students explore the nature of the problem, gain appropriate insights into the bigger picture and establish a plan to deal with the learning activity, which is carried out in the main task. The pre-task involves a discussion of authentic materials, including primary sources in relation to the relevant T&T topic. The syllabus is supported by a reading folder in the VLE, which consists of articles published in either academic or professional translators' journals. Reading the relevant articles is essential for the students' involvement in pre-task phase discussions and activities. During the weekly seminars small groups of students deliver an oral presentation as a lead into a general discussion. The pre-task phase generally includes a demonstration and an introduction to the associated practical session by the teacher. The pre-task phase is substantial and may take up around 50% of the weekly contact hours (Mitchell-Schuitevoerder 2013:127–142).

The main-task phase consists of the actual translation activity which is carried out after adequate preparation, such as online terminology searches, the use of search engines, or after new features of CAT tools have been studied. The main task begins after considerable time has been spent on researching a technological tool and planning its use in the pre-task phase. There is less teacher input in the main-task phase: the student explores and experiments, and the teacher monitors and responds to questions.

The post-task phase in the PB syllabus is one of analysis, feedback, discussion and a completion of practice. Its duration is undetermined and students are encouraged to

practise outside contact hours. In the sample of the syllabus in the pilot study (Appendix 7) the post-task phase is not defined, whereas the excerpt in Appendix 14 includes reflective questions for the class and the project management team to constitute the post-task phase. The questions are added as triggers to initiate the post-task phase. Some examples of the different task phases in the PB syllabus are discussed in the following section.

2.4.3.1 The task in the project

The project (the translation of Durham University's web pages on its official portal) consists of tasks that are carried out on a weekly basis (see Appendix 7 and 14). The tasks in the project are similar to tasks in CLT (2.2.2), which have also been applied to translator training by Hurtado Albir and González Davies (cited in Kelly 2005) in recent years. The tasks present real-world contexts, such as translation projects set up by LSPs, to encourage students to develop their personal opinions, and not to regurgitate facts. Each task in the PB syllabus is planned for one week and is spread across a seminar and a practical session. The pre-task phase in the T&T module contains a reading list with articles in professional and academic journals to introduce the students to the topic. The articles are read prior to seminars, and are the basis of presentations held by small groups of students. The presentations are followed by student-led discussions. The topic of the following example of a three-phased task during the pilot study is cloud computing:

Pre-task phase	Main task phase	Post-task phase
Background reading: An article written by a practitioner on 'Cloud computing' in *ITI Bulletin*, the journal issued by the Institute of Translation and Interpreting	The main task is set during the seminar but is carried out in the following practical session:	Recording in blogs
Short presentation by two students	Assignment in class (practical session)	

An introduction to forms of communication via the internet	Cloud computing in real time: Students revise each other's translations in Google Docs

Table 2 Excerpt from the project-based syllabus in pilot study

In the pre-task phase (see Table 2), the students are introduced to the concept of cloud computing and networking in the cloud. The introduction by teacher and students includes one of the various forms of online communication, ranging from communication between machines, such as automated machine translation (hereafter MT), exchanges from server to computer without human intervention, communication between translator and the internet: for instance, terminology mining, and communication between translators by email or online messaging or real-time revision in Google Docs (see Table 2). During the practical session in the main task phase students revise their project translations online in Google Docs with a partner (Mitchell-Schuitevoerder 2011). In the post-task phase they are encouraged to comment on the benefits and drawbacks of online revision in real time.

In the second term of the pilot study the revision session is conducted with the aid of TM, involving self-revision and anonymous peer-revision, organised by the project management team (2.4.4) as shown in Table 3.

	Pre-task phase
Background reading:	Martin, T. (2007) 'Managing risks and resources: a down-to-earth view of revision'
	Dixon, J. and D. Peart (2010) 'PEMT: the latest developments', in *ITI Bulletin*, Nov/ Dec. 2010
	Muzii, L. (2006) 'Quality assessment and economic sustainability of translation', *International Journal of Translation.* University of Trieste: EUT
Aims and Objectives	Understanding the difference between proofreading, revision and editing.
	The set up and application of suitable criteria.

Student presentation	Quality assessment/assurance and technological tools for revision.
Lecture/Seminar	How to establish criteria and work accordingly.
	Main task phase
Practical session	Anonymous peer-revision organised by the project management team through electronic file transfer.

Table 3 Revision, quality assessment and assurance

The sample in Table 3 shows aims, objectives and process in both the pre-task and main task phase. The revision of electronic files is a clear goal. The students can only meet the task objective by proceeding towards the goal and experiencing the features of translation quality assurance. The process is analytical and requires a high level of student involvement to be successful.

The post-task phase is not listed in Table 3, partly because the revision task is an ongoing process alongside other tasks in the project. The students know that their translation portfolios should be submitted after their application of procedures to monitor translation quality assurance (hereafter TQA) with CAT tools, as well as peer-revision. They are responsible for the revision of their portfolios and there are no set times when this should be performed, other than task activities (see Table 3) which in effect constitute part of the revision process. Their activities and observations should be recorded in the blogs. Blogs can contribute suitable material to the students' ultimate assessments of the technological tools. Post-task feedback is provided by peers in the revision activity and by the teacher, who can add comments in the blog.

In sum, the pre-task phase and main task phase can be defined and recognized in the task process, while the post-task phase is fluid. Quantity and quality of the post-task phase depend greatly on the input of the student in terms of effort, such as entering thoughts and reflections in the blog, and participating in revision activities. In FG discussions after the pilot study students gave reasons why some did not pay much attention to revision. Nicol (2013) stresses the benefits of peer review activities, and

therefore it is important to highlight the importance of the task to the students (1.4.8). The following section focuses on the learning value of collaboration and revision activities in the PB task.

2.4.3.2 Revision task and collaborative learning

Among professional translators anonymous third-party revision has become increasingly common-place since the introduction of the BS EN 15038:2006 standard. It requires a translation to be revised by a person other than the translator and the reviser should examine the suitability of the translation for its purpose (Martin 2007:75–83). The PB syllabus offers opportunities to carry out anonymous third party revision in class, managed by the PM team (see Mitchell-Schuitevoerder 2011). The project management team members are expected to design their task according to a workflow model, and to organise and supervise the revision process over a period of several weeks. The team organises web-based communication on a wiki. The team members manage the website, which serves the revision process as a database. They also oversee a Q&A forum. The revision task requires the PM team to draw up a brief for the revisers with appropriate criteria. The team members are expected to check all translations after revision, including those into languages that are unfamiliar to them, a skill generally required by language service providers (hereafter LSP).

Martin (2007:75–83) claims that revision is not especially well understood, either as a concept or as an activity. He adds that the new European standard BS EN 15038:2006 for translation services has helped to clarify matters but that it understandably avoids being prescriptive. The 'fit for purpose' principle, however, offers enough scope for most revision policies. It has been adopted as the main criterion in the translation portfolios, which are reviewed by alumni and returned to the students as 'fit for purpose' or 'not fit for purpose'. In the second and third year of the study the teacher set up criteria for the reviews (Appendix 15).

Gouadec (2010:3–28) draws attention to another issue, which is that job descriptors, such as editor, reviser and proofreader are often used indiscriminately in the post-translation quality control process. In a surveyed sample taken in a

lecture/seminar during the study, students were not clear about the three functions either. They associated revision with ‘localisation’, ‘respect to the author’, ‘structure of the text’, ‘spelling’, ‘grammar’, ‘purpose’, ‘adequacy’, and ‘cultural connotation’. Consequently, students need in-depth training in revision in order to enhance their skills and competence. The European standard requires professional revisers. During one of the revision tasks in the study in the pre-task stage, students are shown examples of poor criteria and guidelines issued by LSPs. Next, they are asked to draw up workable criteria according to the BS EN 15038:2006 standard, which can be applied to their own translations in order to make them ‘fit for purpose’. Once students have agreed on revision criteria, they may apply them to peer-revision in the main-task phase.

Revision is a primary translation skill that needs to be taught and learnt. In the learning process it requires collaborative group work, which is not only a good preparation for the workplace but it also supports the development of higher thinking skills (2.2.4). Collaboration functions as a support mechanism in the learning process (M.A. Kenny 2010:102; see 2.2.3; 2.3.4.3). Teamwork gives emotional and cognitive support to all members of the group. Collaborative learning, however, generates a challenge in terms of assessment, which is discussed in 2.4.5.

The following section looks at the impact technology can have on revision and how CAT tools may affect the translation in different ways. The task structure gives the students an opportunity to experience, observe and experience different outcomes.

2.4.3.3 The task and technology

The PB syllabus requires that students experience how revision is supported by CAT tools – they will use functions such as Autocheck, TQA, and export bilingual rtf files for their revisers (see Mitchell-Schuitevoerder 2011). They also need to experience how TM segmentation of the source text (hereafter ST) can be detrimental to flow and even revision. The knowledge that the portfolios will not be graded has the advantage that students feel free to experiment with the CAT tools. Particularly during the TM part of the T&T module, they focus on the technology and they can afford to pay less

attention to the linguistic quality of the translation until they revise the portfolios in the revision task. In the end, the portfolios have to be delivered 'fit for purpose'.

Particularly MT offers much scope for a comprehensive task that encompasses many translator skills. It is important to include MT in translator training and not to consider it as a failed attempt to replace human translation. Post-edited machine translation (hereafter PEMT) is popular with global companies who visualise a great output potential in MT (Gouadec 2007:298–306). The reliance on human post-editing by translators, who can do so efficiently and quickly to be cost-effective, is increasing as well. Today's translator/editor/reviser should understand the MT systems so that they can advise the writers how to make their texts more suitable for MT. Moreover, edited output should be fed back into the TM of the MT, which may then produce better translations. Hence there is scope for specialist translators in many new fields, which can be accommodated in the task-based structure. During the three-year study MT was not included in the curriculum: in the syllabus it constituted one task only. Additionally, financial costs can be obstacles, such as the pay-as-you-go API keys, which are needed to use MT in or out of TM programmes. MT training during the study therefore moved from a PEMT and controlled language task in which an automated translation was the product to a task which presented MT as a resource in the form of a corpus, and for which Google Toolkit, an open source, could be used (Kelly 2007:128–142).

The task lends itself for the teaching and learning about technological tools. The task enables students to study the workflow process from ST to target text (hereafter TT). It works well for the project management teams, whose task it is to bring the components of the project together. In fact, even the multilingual classroom benefits from the task-based structure, as discussed in section 2.4.3.4.

2.4.3.4 The issue of directionality

Language directionality is a complex issue. In the translation sector, translators may be requested to translate into L2, particularly for certain EU languages where there is a shortage of L1 translators, and also from Chinese into English (Pokorn 2005:25–38).

In the pilot study the Durham students represent six language pairs with a mix of L1 and L2 competence. Consequently such diversity has implications for the translation project that requires each student to translate a selection of web pages of the university website from English into L2 or L1.

Although in this study directionality is not a topic of discussion, it does affect the outcome and quality of the translation portfolios. In the pilot study professional translators outside the university were asked to give unilingual evaluations of the students' portfolios. In a mixed group of native and non-native speakers of the target languages, the translations of the non-native speakers (hereafter NNS) were given lower ratings by the practitioners. To compensate for this variation in competence, any NNS of the target language is given the option to become a project manager. Because project management activities require additional input and time, the students are offered a reduction in the ST word count of their respective portfolios. In addition, one of their activities in the task involves setting up specialist terminology databases on the wiki website on behalf of all contributing students in class. Involvement in this terminological activity supports the NNS of the target language. Furthermore, teamwork also supports the NNS.

Multiple directionality can be a bonus in the TB methodology because students performing L2 translations benefit from close proximity of students translating into L1. The project management teams play a crucial part in bringing students with different language competences together. Section 2.4.4 reviews the role of project team members and gives some additional examples of their activities in the TB structure of the PB syllabus.

2.4.4 *Project management team*

A project management team consists of two to four students, who represent the target languages in class. The role-play duties of the project management team members require an overall input of an additional five hours per term after class, which they record on a timesheet (Appendix 16). In addition, they are expected to include a critical assessment of project management in their summative essays. The team members

create a simulated LSP server on an interactive wiki website. The wiki becomes a platform available to all students in class. The team members check and manage incoming data and translations on the wiki web pages. They have to manage translations into unfamiliar languages.

In the two years following the pilot study the wiki server developed into a valuable database of language resources (Table 4).

Wiki web pages	**Category**	**Task**
2:1	Discussion thread 'Accessibility'	Chinese translations
2:2	Terminology bank – You can also come here for reference when looking for a terminology solution.	You need to update this page every time you come up with a translation solution.
2:3	Weekly Presentation Materials	If you have given a presentation, please edit this page to upload your PowerPoint/hand out ahead of each lecture.
2:4	Road Map Translation	Please upload your file after review by another person and remember to keep it anonymous. Thank you. To do this, enter this page and click 'edit', and click 'upload file'. Any question please contact the project management team.

Table 4 A wiki web page set up by students

In the first year after the pilot study it was managed by three team members in a class of twelve students. The VLE statistics indicated that the wiki attracted an average of eighty-five viewings per week. The example in Table 4 is a categorised representation of the wiki server created by one project management team. The second column 'Category' describes its activities. The discussion thread of problematic terminology is the outcome of a comment by one of the external reviewers about the translation portfolios into Chinese. The reviewer had identified six different translations of the ICT term 'accessibility' in nineteen translation portfolios. In the thread on wiki the

students tried to reach an agreement which translation was appropriate. Furthermore, the wiki contained a terminology bank, PowerPoint slides of the weekly presentations, and a server page where translations could be uploaded for revision, or downloaded after revision. The third column 'Task' contains instructions given by the project management team in line with the syllabus.The project management team plays a crucial part in the PB syllabus.

More details of its impact on learning behaviour are given in the sections on FG discussions (3.6.2; 3.6.4). Project management and collaborative learning have many learning benefits, but their assessment offers pedagogical challenges, which are discussed in 2.4.5.

2.4.5 *Collaborative projects and individual assessment*

The portfolios are examples of collaborative learning in the PB methodology. Much of the action and learning continues after class, when it actually becomes a form of blended collaborative e-learning. The translation portfolios are reviewed but they are not formally assessed or accredited (see Introduction; 4.5). During the translation process the teacher offers feedback to students in the VLE blogs. The combination of comments and the ultimate review plus feedback constitutes a form of non-graded formative assessment. Formative assessment is diagnostic and intends to support the learning. It is generally considered informal and its values are often not understood by students or teachers (Fry *et al*. 2003:42). In the portfolios self-assessment and peer-assessment contribute to the overall formative process. Self-assessment aims to provide not only revision and correction, but also an increased awareness of the student's abilities at a particular moment. It is practised by the students when they use the QA (quality assurance) function in CAT tools. Peer-assessment also plays a part in the revision process (2.4.3.1).

The main purpose of an assessment strategy is to align the assessment with the learning outcomes (Butcher *et al*. 2006:100). The teacher/researcher of the T&T module emphasised the equal importance of the credit-bearing summative essays and the non-credit-bearing formative translation portfolios. Firstly, the learning outcome

of one depended on the learning outcome of the other, and secondly, although the activities/tasks in the portfolios were not assessed, their learning outcome would be evident in the students' technical, project-managing, revision and other professional competencies and skills.

Assessments are necessary for teacher and student to mark achievements in the learning progress. In the design of the syllabus for the T&T module the teacher needs to determine what the students should learn to achieve the vocational learning objective, and assessments demonstrate if objectives have been met. The results of the summative essays are not known until after the term has ended. Their feedback will have less effect than formative feedback during the module, particularly for students who will not attend the second part of the module. In addition, it is important during the creation of the translation portfolio to remind students that they are learning translation skills as well as academic skills. Pym (2009) expands on this approach and relates current developments to Kiraly's constructivism philosophy in that the students actively construct their own world knowledge, set their own objectives and are involved in the evaluation of their own work (2000:17). The eclectic PB approach to assessment supports these criteria.

Students in HE anticipate a form of assessment and generally equate it to summative assessment. They consider assessment as important, because it not only supports their learning process by setting goalposts, but it also counts towards their final grades. However, the importance of different forms of assessment is given different ratings by the students. Contrary to formal summative assessment, self-assessment and peer-assessment may be considered random and meaningless (Hubscher-Davidson 2008). Students as well as teachers will undoubtedly agree that assessment 'provides licence to proceed, and improves student learning' (Brown *et al*. 1997:10). Yet not all students realize how much self-assessment contributes to enhanced learning skills and translator competence (see Federici 2010:171–192; 4.4.1).

Visibility and transparency of learning progress are much more present in the project management activity than they are generally in class. Raising the students'

awareness of their own learning process is a pedagogical challenge. A detailed discussion and analysis of assessment in the PB methodology can be found in 4.4.

The following section 2.5 takes a step back from the outcome of PB pedagogy and focuses on the qualities and standards that precede the design of the PB syllabus. Syllabus and curriculum are taken to a different level and considered strategically against the background of the EMT project.

2.5 The European Masters in Translation project

The Directorate General for Translation (hereafter DGT) launched a project called the European Master's in Translation in 2006 to set out clear benchmarks and qualifications which could be adopted by translator teachers (or tutors, lecturers, teachers) and by providers of training (public and private universities recognized as Higher Education Institutions).

The EMT programme (2009) was proposed in response to the changes to European Higher Education regulations ratified by the Bologna Process (1.2.4), a declaration signed in 1999 by Ministers of Education from 29 European countries (46 signatories in 2014). The purpose of the Bologna agreement was to create a European Higher Education Area, setting quality standards for academic degrees that could be comparable and compatible across Europe. The Bologna Process was not an EU initiative, but it has since been embraced by the EU member states. The EMT project is part of this drive to setting a benchmark valid across all European countries.

The EMT document is drafted as a reference-point for curriculum design, assessment, and for the comparison and benchmarking of training providers. The document requires that the design of a syllabus leading to a professional qualification take into account the expectations of professional bodies and the translation profession. The syllabus and, more comprehensively, the curriculum must reflect professional conditions, requirements and essential skills (EMT Expert Group 2012). Consequently, in the European Union (hereafter EU), the benchmarks are more or less implicitly set by the EU translation service. Considering the appeal and significance

of working as a translator in and for the European Union, the considerations of the DGT have had an implicit influence on translator training since the 1970s.

Pym (2008) expressed his reservations in respect of the EMT document. He claimed that although it had emerged from the needs of the EU as a large employer, it should not exclude the specific requirements of many other employers. Moreover, he added, there were many well-established TS Master's programmes in numerous countries which have already incorporated most or all of the components in the list. Pym (2008) felt that a centralised master's programme would exclude the local context of such programmes. For the purposes of the PB syllabus, the EMT programme is not taken as a blueprint, but as a reference point or benchmark, a benchmark that can be used to produce statements about the 'threshold quality' or 'minimum standards' of the subject (McKimm in Fry *et al*. 2008:182–199). Sections 2.5–2.5.1.2 consider the PB syllabus in the T&T module in relation to the EMT framework, which could function as a benchmark for the syllabus.

2.5.1 *Benchmarks and the benchmarking process*

For the purpose of this study two of the domains identified by the Council of Australian Directors of Academic Development (hereafter CADAD) as Academic Developments Units will be used to benchmark quality and standards in the T&T module in relation to the PB syllabus, namely the quality of learning and teaching, and curriculum development (CADAD 2011). The three steps in the CADAD benchmarking process are 'self-evaluation against the benchmarks, comparing and contrasting self-evaluations against the benchmarks with benchmarking partners, and applying outcomes to unit improvement processes' (CADAD 2011:7). Self-evaluation, in which staff is involved, should take place at three levels, at institutional, school and course level. Even at course level an understanding of applicable government policies and their implication on national and international level is essential. In the domain of the quality of teaching and learning, evaluation can be supported and improved by student feedback, staff peer review and curriculum review (CADAD 2011:17). Furthermore, evaluation at this level supports curriculum review

and development (CADAD 2011:19). In the UK the Quality Assurance Agency for HE, QAA, aims to safeguard standards in HE and to improve the students' learning experience (3.7.2).

In this study, action research (hereafter AR) (3) effectuates self-evaluation against EMT benchmarks. Some reference is made to self-evaluations of the T&T module compared with other AR studies (1.4.1), and the application of outcomes during the study to improve syllabus design (4.3.1). The evaluation process is supported by student feedback and the emergent syllabus review. As to the level of performance in the benchmarking process which conforms to CADAD categories (1011:7), it should be noted that benchmarking in this study is performed at the first level, 'beginning up to developing', in which strategies and systems are developing and partially implemented.

The following sections 2.5.1.1 and 2.5.1.2 outline translator competences proposed in the EMT project and benchmark relevant components in the T&T module accordingly. Competences are first considered for the translator and then for the translator teacher.

2.5.1.1 EMT and translator competences

In 2006 the EMT Expert Group proposed a negotiated vision for the way in which translation skills should be acquired by students of an MA in translation. They were succinctly represented in a diagram to portray the types of competence a translator requires. Competence is defined as

> the combination of aptitudes, knowledge, behaviour and know-how necessary to carry out a given task under given conditions. This combination is recognized and legitimised by a responsible authority (institution, expert)
>
> (EMT Expert Group 2006:3)

The proposal lists the following competences for professional translators: language competence, thematic competence, technological competence, info mining competence, and intercultural competence, with translation service provision

competence at the centre. The T&T module can account for training in three competences in particular: translation service provision, information mining and technology (mastery of tools). Language, thematic and intercultural competences are not included in the objectives of the module, although they are part of the comprehensive TB teaching methodology in the PB syllabus. The extent to which the PB syllabus in the T&T module matches the EMT competences is discussed in 4.5.

In 2013 the EMT Board published a document entitled 'The EMT Translator Trainer Profile', which contains a reference framework for the translator teacher. The following section relates the teaching requirements and the teacher's role to the objectives in the PB syllabus in T&T module.

2.5.1.2 EMT and translator teacher competences

Although qualifications and competences of the translator teacher are not central to this study, it is appropriate to reflect on the range of qualified translator teacher competences put forward by the EMT Expert Group and to compare them with required competences in order to teach according to the PB syllabus. The EMT Translator Trainer document (EMT Expert Group 2009 and 2013) observes that few publications deal with teacher qualifications. Kelly (2005; 2008) and Gouadec (2003; 2007) are mentioned as two of the few who discuss the need for clarity in what translators teachers should be able to do. The online symposium (Pym *et al.* 2003; 1.4.7) enumerates detailed responses to the question 'who should be teaching'. The divergent responses demonstrate the need for (a standardisation of) qualification criteria. In response to the apparent variety in standards, the EMT Network delivers a translator teacher's framework which includes both competences, academic qualifications and relevant professional experience. The EMT Translator Trainer Profile Competences of the Trainer in Translation framework includes five fields (in the translation profession): instruction, organisation, interpersonal dimensions and assessment. The organisational competence includes syllabus design and it is proposed that the translator teacher demonstrates the following competences (EMT Expert Group 2006):

- Ability to perform students' needs analysis
- Ability to design a translator-training curriculum or to understand the existing curriculum
- Ability to identify and express learning progression in the programme
- Ability to design a course syllabus or understand the structure of the existing syllabus in relation to the EMT competences benchmark
- Ability to update in anticipation of and in response to changes to the profession.

The PB syllabus can take the aforementioned competences as a benchmark. The syllabus requires ongoing needs analysis by the teacher (in AR) and self-evaluation by the students (in blogs), and it has the flexibility to accept updates in response to changes. Furthermore, the PB syllabus equates to EMT benchmarks in two other areas, namely instructional and assessment competences. The following list is not complete: it only mentions components where the PB syllabus meets the standards (exemplified in brackets):

(Instructional competences)

- Breakdown of educational components into tasks[1] and sub-tasks drawing on relevant theoretical knowledge (TB structure in PB syllabus)
- Students become aware of challenges and draw on relevant theoretical knowledge (incorporated in three-phase tasks)
- Research-led (TB structure includes reading lists and student presentations based on academic sources)
- Use of specialist and professional tools (for instance, TM software)
- Students' awareness raising of quality, learning strategies, the ability to analyse (objectives in the PB syllabus)

[1] Here 'task' means assignment, which is not the comprehensive three-phase task in the TB approach.

- Critical thinking (objectives of the PB syllabus)
- Reflexive thinking (self-reflexivity) (in blogs)

(Assessment competences)

- Clarity in assessment procedures (in regard to summative essays and non-summative translation portfolios)
- Assessment of students' entry level (incorporated in needs analysis and met in TB structure)
- Measure students' (enhanced) competences in relation to the EMT benchmark (2.5.1.1)
- Adaptation in line with feedback or evaluation of syllabus or lesson (through AR and IIQ).

The EMT competence framework for translator teachers can be used to benchmark quality and standards in the PB syllabus in regard to the quality of learning and teaching as well as curriculum development, the two domains identified by CADAD (2.5.1). The benchmarking process can be applied by the translator teacher through self-evaluation against the benchmarks, comparing and contrasting self-evaluations against the benchmarks with benchmarking partners and by applying outcomes to unit improvement processes. In this study, benchmarking is performed at first level in that strategies and systems are developing and partially implemented. The purpose of benchmarking is to assure quality and standards. The following section aims to define quality assurance and discusses ways in which it can be implemented in HE. References are made to its application to the PB syllabus.

2.5.2 *Quality assurance*

Definitions of key concepts seem to be an issue, similar to 'competence', it is difficult to reach a definition of 'quality'. Schmitt (2012:23–34) finds that 'the degree to which a set of inherent characteristics fulfils the requirements' (in the ISO series of standards ISO 9000, clause 3.1.1) is the most common definition. For translation specific

standards Schmitt refers to Budin's (cited in Schmitt 2012:24) comprehensive overview. Schmitt continues that regardless of the standards framework (Bologna Process, EMT Network or CIUTI), it ultimately depends on how the standards will be interpreted. Schmitt's (2012:26) argument in favour of a form of standardisation is that modularity (see 'building bricks' in 2.4.2) could improve mobility, but that there needs to be greater awareness of accreditation procedures in relation to other universities, so that students can attend modules at other universities without losing credits. Schmitt (2012:26) states that if HE institutions require teachers to define learning objectives in their modules and to verify achievements at the end, it means they have to rethink their concepts. And the next issue for consideration is that if institutions agree that it is good to have frameworks and standards, they need to answer the question as to who will evaluate the programmes.

QAA has a remit to investigate standards and quality. The agency monitors threshold academic standards for the benefit of students, which address academic quality in, for instance, teaching and student support, assessments and resources; and quality assurance to guarantee standards and the quality of education provision (QAA 2011). Quality and standards are important to students, and the university will monitor programmes, for instance, by inviting external examiners to check the standards and quality of summative assessments, so that standards of marking are consistent locally and proportionate/comparable with UK marks nationally. Students can have a positive effect on quality and standards by filling out questionnaires and contributing views in interviews or focus group discussions, provided their responses are taken into consideration.

The T&T module fulfils the requirements of several of the aforementioned standards: external examiners check the academic standards and quality of the summative assessments (self-evaluation against benchmarks at School level; see 2.5.1), and FG discussions and interviews during the study enable students to express their views on the module. In terms of CADAD benchmarking, the self-evaluation takes place at course level (initiated by the teacher) and School level (external examiners as a prerequisite for maintaining standards). EMT provides the international

standards for the course: a general framework for translator and translator teacher competences.

In 'Institutions and Quality Teaching Initiatives under Focus' Hénard (2010:23–24) reports on the outcomes of 46 teaching initiatives in 20 countries. It appears that institutions consider teachers as the foremost drivers of change, followed by students, among whom undergraduates score highest and doctoral students score lowest. Furthermore, the author concludes that only 8% of the teaching initiatives affect 'student support' or 'support for student learning' (ibid.). In the 29 institutions that were investigated, it was found that the main commitments to enhance teaching were derived from student evaluation (evaluation by students of the programmes, or learning experience, or learning environment) (76%), followed by commitment (69%) to programme design, monitoring and implementation (ibid.). In comparison, in this study, syllabus design is prioritised, and subsequent monitoring and implementation will drive the enhancement of the learning experience.

2.6 Training translators for the realities of the profession

TS scholars generally agree that translators need formal training. Clark (1994:301–308) states that it is the responsibility of educators to provide students with the skills that may be expected by their future employers. Likewise, Kiraly (1995:1995:5–19) shifts the focus from the employer to the student. Furthermore, he claims that 'there are only a handful of academic programmes worldwide that purport to train translator teachers themselves' (2000:193). Kiraly (1995:1–4) describes how he uses his own translation background to set up a simulated total experience, with client constraints included. Pym (2009), Mossop (2007), and Gile (2001) are leading researchers on the enhancement of translator proficiency in the academic environment. They, too, can relate observations and suggestions to their experience as translators in the industry. Gouadec (see 2007) gives an objective and most comprehensive overview of the translation profession in *Translation as a Profession*. Kiraly (1995:5–19) does not set objectives for the students: he stresses that students need to determine themselves what

skills are needed to meet the specifications of the translation assignment. In the PB approach learner independence is indeed one of the main objectives.

This study does not purport that translators must have formal training, as it might suggest that translators who have learnt the profession on the job or by means of apprenticeships are inferior. Professional organisations such as the Institute of Translation and Interpreting (UK) (hereafter ITI) encourage corporate professional development (CPD) and give much attention to translator training for trainees as well as practitioners. Webinars have become a standard method to offer training to their members. Additionally, ITI's regional networks organise regular workshops and invite HE students to attend. Instead, this study is based on the premise that translator training which takes place in a HE establishment needs to be founded on an inclusive programme that gives student translators an awareness of the workplace and that it should increase its visibility to the sector. The translation industry needs to know how TS graduates are being educated and trained.

For that purpose it would be interesting to measure the impact of the OPTIMALE (Optimising Professional Translator Training in a Multilingual Europe) Network, a three-year project, which ended on 30 September 2013. The Network aimed to enhance the visibility and relevance of professional translator education and training in Europe (OPTIMALE 2010). It sought to expand and improve the provision of Master's degree programmes which would equip graduates with knowledge of the translation industry, professions and processes, and the competences to support professional requirements. Whereas the EMT project outlines the competences a translator should acquire and maintain during their career, OPTIMALE was a research project which aimed at optimising the network of translator training in Europe in order to monitor standards in translator education and training according to societal and professional needs, to reinforce the relevance of translator training, to enhance its quality, and to disseminate best practice, and ultimately to provide support to HE establishments by organising training of teachers. Their target groups were academic staff, students, LSPs and international organisations or public services who recruited graduates.

In spite of a general increase and expansion of translator training programmes in HE, Seidel and Durban (2011:22–38) prefer not to list translation courses, even though they are asked on their Q&A website. They would prefer translators to go out and find such programmes on their own. The authors want to give an honest picture of the professional world, which is not necessarily waiting for graduates. For instance, recruitment to EU services is by competition and not according to specific formal training, although a university degree is required. Seidel and Durban (2011:22–38) affirm that what professional translators do is very different to what student translators experience in translation as an academic exercise. It is for such reasons that the PB syllabus aims to replicate the professional translator's job by creating a market-place in the classroom with a project management team that runs the translation project like an LSP. Collaborative projects, however, offer pedagogical challenges, as discussed in 2.4.5.

Much has been said about competence(s). Among scholars there is less agreement about which competences should be taught other than that they should be taught. The following section considers the role translator competence plays in translator training.

2.6.1 *Translator training and translator competence*

'Translation competence is most effectively developed at an academic institution' (Schäffner and Adab 2000:51–63). But what is translation competence? Ulrych's (2005:3–33) survey does not give a specific answer to the question. She compares the views of Delisle (citing Roberts 1984), Gile (1995) and Kiraly (1995) to show that there is considerable disagreement as to what kind of competence is required by the professional translator (Table 5). The three scholars agree that a translator should have a suitable level of linguistic competence, but they do not agree on the (quality of) professional translator competence. Ulrych (2005:3–33) concludes from her survey that trainee translators need to acquire declarative, factual knowledge, leading to procedural, operative knowledge and a great deal of versatility to deal with all the demands and changes they will be faced with as professional translators. Training courses therefore need to be flexible and multidimensional. They must be prepared to

update materials and methods regularly, particularly in the technological arena. Schäffner (2004) claims that in spite of a lack of agreement about the nature and order of translator competences, there appears to be uniformity about the importance of learner independence and process learning in preparing the student translator for the profession.

Delisle	**Gile**	**Kiraly**
Linguistic competence	Language related competence	Cognitive, social, textual competence
Translation competence	Domain-specific competence	Linguistic competence
Methodological competence	Job-related competence	Cultural competence
Disciplinary competence		Real-world competence
Technical competence		

Table 5 Comparison of professional translator competences (Ulrych 2005:3–33)

Ulrych (2005) sent questionnaires about teaching methodologies to 65 HE institutions, mainly in Europe and North America, of which 41 responded. The responding universities claimed that all their translation training programmes had vocational/professional components. The questionnaires contained four question topics: the final translation, computer aids, the blending of professional and academic criteria, and translation competence. Her results do not explain fully which translation competences need to be taught, in what way they differ from skills and how they will enhance translator competence. What emerged from her survey is a general trend to introduce comprehensive translation-training programmesin curricula to satisfy not only market needs but also the growing demands within HE for professionally oriented degrees (2005:23). Ulrych confirms there is still a way to go in order to match academic training to professional expectations and standards. The added complication is that HE programmes must satisfy the research benchmark necessary to fulfil

academic requirements. Furthermore, an MA also embeds in its definition a research component intending to equip interested students to complete further research in doctoral studies. Ulrych (2005:3–33) concludes from her results that the extent to which professional and academic criteria blend within the courses relates to their concept of translator competence.

Concepts vary between the HE establishments, which naturally affects the way in which components are taught. Fraser (2000:51–73), in her survey, distinguishes between translation in the academic context and translation in the professional translators' world, which she calls the 'real world of translation' (cf. Kiraly 1990) who refers to professional or didactic translation). Fraser's (ibid.) conclusion from her survey on translator practice is that practitioner translators are often left to their own devices with poor briefing, little or negative feedback, and little terminology support. They are often held responsible for revision of their work and may have to carry out a personal evaluation of their competence. She therefore advocates a more empirical approach to training with a practice-oriented syllabus content.

It may be concluded from Ulrych's and Fraser's observations concerning their surveys that the understanding of competence and competency (see 1.3.1) is not homogenous. Yet the HE programmes they investigated seem to agree that university teaching methodology should focus on translation process analysis. A holistic approach that incorporates better briefing, good use of resources, clear feedback and substantial evaluation in syllabus and teaching methodology will produce a higher level of professional and independent translator competence. Translation pedagogy cannot be solely product-focused and satisfied with what has been achieved, because it will need to adapt to the ever-changing world of translation, involving all parties concerned. Many globally advertised degree courses in TS appear to reflect a broad consensus on what should be taught. But how they wish to achieve their aims is less clear: their teaching methodologies are generally not publicised and tend to be developed behind closed doors (Ulrych 2005:3–33).

The aim of this study is to address the methodology and pedagogy of translator training. The transparent framework of the PB syllabus creates an opportunity to

prepare students for the profession – it allows them to experience challenges and resolve them independently or collaboratively, and it enhances their competence and skills as potential translators.

Concluding remarks

Since the 1970s TS has been nurtured by outstanding researchers who have identified many areas for development, not ignoring teaching methodology. The research process continues. TS is a discipline that will most likely continue to change; it will need to adapt to the ever-changing world of translation, involving all parties concerned. One of those parties, the EU, is a major player and it is not unreasonable to adopt their quality criteria for translation, translator and translator training. Furthermore, the EMT project is actively involved in promoting its standards in collaboration with major Chinese Universities, in the North American network of translation programmes, and also as a founding document for new MA networks in Asia and Africa. The risks and scepticism surrounding this operation are healthy and numerous: the underlying EMT premises that their curriculum could represent by default a position ensuring minimum learning and teaching quality clashes with the reality that there is not a fit-for-all purposes curriculum in translation, especially in relation to the different professional markets and cultural needs.

It was discussed in the previous section that HE institutions each have different ideas about translator competence, and that their translator-training programmes are often led by market needs (Ulrych 2005:3-33). Furthermore, Fraser (2000:51-73) proposes an empirical approach to translator training which will help translators evaluate their own competence. Ulrych and Fraser's conclusions imply that a syllabus is determined by the HE institution's individual concepts of translator competence. Section 1.4.6.2 also demonstrated the different views held regarding translator training with reference to the educated, trained or skilled translator.

The definitions of competency, skill, competence, competencies in the OED amount to the following concepts:

- Competency The ability or potential to perform
- Skill The ability to do something well
- Competence The capacity to deal adequately with a subject
- Competencies The actual performance of competence

The order of the concepts is deliberate. Students arrive with varying degrees of competency, which could be regarded as the independent variable, whereas skills, competence and competencies can be affected and enhanced by suitable training. Interestingly, observations made by student in this study record a recurrence of 'skills', but no mention of 'competence'. The EMT project refers to both 'skills' and 'competences'. In its criteria for translator training, 'competence' is described as 'knowing how to', 'mastering', 'developing', or 'ability to'. And this is how competence is understood in the PB syllabus: students need to enhance their abilities to manage a multitude of changing translation and translator requirements, which will result in an ability to perform well in a variety of translation fields.

PB teaching can be more effective if the teaching methodology is supported across the curriculum and applied to other modules. A T&T module provides many opportunities for cross-linking to other modules in a TS degree programme, such as the application of online terminology searches or TM in specialised translation modules. One of the requirements for the submission of the extended translation project is that students include associated terminology lists and translation memories in their submission. For PB learning to be effective, it should ideally be part of other syllabuses in the TS department.

Translator training could be regarded as a formative exercise, constantly in flux, preparing students for the challenges that will be presented to them in today's and tomorrow's world of translation. Training could benefit from a PB syllabus as part of a process-oriented teaching methodology which supports the student translator as the key player to achieve the best consensus translation in a collaborative environment. The PB syllabus, a collection of process-focused methodologies, does not only function as an interface between translation theory and real-time practice, but it also provides an efficient method of combining the required multilateralism within

translator training. The data collected during the teaching of T&T at postgraduate level in the years 2010/'11/'12 and the subsequent analysis provide the evidence necessary to show how high-level learner independence and translator proficiency can be achieved within an academic environment. Themes, processes and teaching methods discussed in this chapter will recur in the next chapter, which outlines a mixed method of data collection required to investigate the impact of the PB syllabus during the study.

Chapter 3

3 Research methodology

To train student translators, we must first ask what skills and knowledge professional translators have that our students do not yet have and, second, how we can effectively and efficiently create an appropriate learning environment for acquiring such skills and knowledge.

(Kiraly 1995:2)

As stated by Kiraly, needs analysis is crucial to translator training, in regards to translators as well as students, so that training can be customized. Following on from the two objectives in Kiraly's aforementioned proposition, it would be appropriate to ask how a process-oriented project-based (hereafter PB) teaching methodology can play a fundamental role in a translator training approach that incorporates Kiraly's objective. In this study, needs analysis has shown that arriving students have little or no experience of computer-aided (hereafter CAT) tools and they have limited knowledge of online resources[2] applicable to the translation profession. Kiraly's recommendation is important to the teaching methodology at the core of this study: the success of a process-oriented PB teaching methodology and the creation of an appropriate learning environment depend on the outcome of and response to a sound needs analysis.

In the latter half of the twentieth century, there was more interest in product-focused translation than in process-oriented teaching methodology. In the 1960s and 1970s, Translation Studies (hereafter TS) was dominated by Jakobson's views

[2] In the second year of the study the name of part of the T&T module was changed from 'Internet-based tools' to 'Internet Resources' and in the third year to 'Online resources'. The name changes did not affect the content.

(2004:138–143) that the SL-TL equivalence and translatability were the key issues. Consequently TS was considered product-focused. It was thanks to Toury's map (1995:10) based on Holmes' map (1988b/2004) that translator training and the process of translating became charted and a TS discipline was initiated. Toury (2012:xi) makes a strong case for TS research to be placed under the theoretical paradigm of Descriptive Translation Studies (hereafter DTS), first in 1995 and later in the second edition of *Descriptive Translation Studies*. DTS seeks to describe, explain and predict phenomena. Therefore, studies, tests, and modifications are put forward as the best way to support and amend the theory of TS or some areas of the discipline. Toury (ibid.) claims that a reciprocal relationship between theoretical and descriptive studies (see Holmes' map in Toury 1995:10) will promote a better understanding of the 'real' world of translation in question. Furthermore, the map and therefore the TS discipline include an enhancement of its applications. The PB method strives to be part of the TS applications: it requires description and explanation, it aims to predict, and thus claims a place within DTS. A feature of the PB method is to procure and predict enhanced professional translation competences and skills.

However, strictly speaking, this study also positions itself within 'Applied' TS on Holmes' map and focuses on translator training with reference to Holmes' 'Translation Aids' and 'Translation Criticism'. Munday's map (2012:19), which expands Holmes' 'underdeveloped' map, places teaching methods, testing techniques and curriculum design under translator training; IT applications (machine translation (hereafter MT) and CAT tools) under translation aids; and revision and evaluation within translation criticism. All are equally represented in this study. In the twenty-first century new maps have been designed to show the interdisciplinary or multidisciplinary nature of TS. The 'map of disciplines interfacing with Translation Studies' in Hatim and Munday (2004:8) illustrates how translation is surrounded by language engineering (for instance MT), philosophy, linguistics, literary studies and cultural studies. Less multidisciplinary and more interdisciplinary is Luc van Doorslaer's map on translation strategies (see Munday 2004:23) that includes the strategies of production, training and problem-solving in its taxonomy, as reflected in this study.

To some extent the methodology of investigation and data collection in this study returns from 'applied' TS to 'pure' TS in that it offers a descriptive survey of theoretical TS. It locates itself in the middle ground with its specific and partially process-oriented focus, and puts an emphasis on function and process-oriented DTS rather than product-oriented DTS. While a product-focused inquiry would examine existing translations, the pilot study is about the translation process, rather than about the product, which is the natural outcome of that process. For instance, when the product, the student's translation portfolio, became part of the investigation, the inquiry turned to the revision process leading up to the final translation product (4.4.1).

The study of (process-oriented) mental processes in the act of translation is not new. It began with Levý's 1967 model of 'translation as a decision process' and Holmes' 'two-plane text-rank translation model' of 1976 (Toury 2012:268). More recently, research into mental processes has been supported by the Thinking Aloud Protocol (hereafter TAP), key-logging and eye-tracking experiments. TAP and other process-oriented approaches are often used to discuss cognitive stages in the translation process, but they have not been applied in this study. Nonetheless the mental and reflective processes of the student's adoption of learner independence and their explicit perception of reflective learning remain central to this study. Hence, a variety of methods were selected to monitor how professional translator competence and skills can be acquired through appropriate learning approaches. The researcher chose action research (hereafter AR) to support her eclectic teaching methodology.

AR is a style of research, an approach to inquiry, rather than a specific method and was chosen in this study to complement and bring together the different methods of data collection. The reasons for adopting AR were twofold: firstly, the MATS degree course was new and the module was only taught by the researcher/teacher. Therefore, it was not possible to investigate teaching of the module in other classes within the HE establishment. Planning, monitoring and evaluation through data collection had to be carried out in the researcher's own classes, which constitutes AR. Secondly, it became clear from the pilot-study questionnaire (hereafter IIQ-PS) that teacher intervention would be necessary in various areas to improve the students' understanding of the

objectives of the PB syllabus, and to address curricular changes in the second and third year. AR was considered a suitable democratic method to implement required changes based on comments by students in questionnaires, interviews and focus group (hereafter FG) discussions.

AR has increasingly become a mode of investigation in translator training (see González Davies 2005, 2004; Hubscher-Davidson 2008; Li 2006; Ulrych 2005). Yet it is not a single academic discipline; it finds its origin in many different fields. Dewey (see 2004) shows elements of action research in his philophical work and in his discussion of experiments in education. Educational experiments are closely connected to AR in the classroom (McNiff *et al.* 2004; Nunan 1993). Collaborative work, such as project management in this study required close monitoring during the planning, implementation and evaluation stages. AR proved a suitable approach because it involved teacher and students, research and action. AR deals with generating knowledge that is valid to multiple parties, to the academic environment in which it is situated, and to the potential work environment for which the students are preparing themselves. AR is close to social constructivism where knowledge is socially constructed (see Kiraly 1995). AR challenges conceptions and embraces change; it does not take a positivist view, in other words, it does not claim to be objective or value-free.

The advantages of AR for this study were apparent: firstly, AR provides immediate results enabling responsive action during the teaching of the module. Secondly, it allows the teacher/researcher to be involved in the action, to monitor and to guide. And thirdly, it helps the teacher make informed decisions during the teaching process. AR allows the teacher to become a self-reflective practitioner, who will make modifications during the module and before its completion (Brigden and Purcell n.d.).

AR can also test the design of the syllabus, find supportive evidence and test it against the model syllabus, or refine it. The questionnaire is the starting point for AR, and subsequent data collection continues during and following on from AR (Heller 1993:1235–1242). The relationship between researcher and participants is a collaborative process. AR is practical and involves action; it allows the researcher to

intervene when modifications are required as part of the process to test and develop the PB theory. Although the researcher can be interpretivist, it is not the intention to become prescriptive. The researcher's role is predominantly distant, exploratory, and descriptive within the participatory observation process.

The objective is to effect change through process and progress. O'Leary (2004:99) describes AR as an emergent and cyclical process dependent on the collaborative input by the stakeholders, in this case the students. The aim is to work together with the stakeholders to generate knowledge, and to facilitate change.

3.1 The main objective of the research methodology

The proposition that DTS should account for 'segments of the real world' does not mean that Toury (2012:291) supports the implication that teachers should therefore replicate the 'real world' in class. Toury suggests that a prescriptive syllabus or a teacher-centred syllabus might lead to the graduate having to 'unlearn' much of what has been taught. He states that what trainees really need is the chance to select 'their own guiding principles and routines', a process that is investigated in this study through questionnaires and complementary methods (3.6). The current study will demonstrate that teaching styles were adapted in line with findings in questionnaires, and other sources such as disappointing translation portfolios (4.4.1).

Ideally, a study should include questionnaires completed by professional translators as well as trainee translators. However, it appears that students, as opposed to professional translators, are often used for data collection in process studies, because of their immediate availability (Englund Dimitrova 2005:73–82). Furthermore, students are suitable participants as they have relatively similar levels of knowledge when they arrive. In comparison, recent studies have included professional translators (see Hansen 2013; PACTE in 1.4.7.4). Englund Dimitrova's research concentrates on the process of translation, and this study follows a similar line. Her research methodology of translation pedagogy revolves round three main components: planning (cf. syllabus design in this study), the creation process of translation, and

revision (cf. translation portfolios in this study). Her mixed research with professional and student translators takes account of the participants' previous experience of translation, whereas the respondents in this study start and progress with a similar degree of cognitive knowledge. Differences in learning styles tend to relate to individual process profiles and educational background (4.4.2). They emerged during the pilot study and were not considered in this study until the third year. The primary objective in this study was to investigate the student's adoption of learner independence and their explicit perception of the PB syllabus and teaching methodology.

In the first year of the study a pilot questionnaire was carried out to establish a good methodological approach to designing the data collection. The pilot year was used to test the questionnaire and to enhance it for distribution and data collection over the small-scale study in the following two years. The questionnaire design for the pilot study sought to assess the quality of learning and teaching as experienced by a sample of postgraduate students in the T&T module at postgraduate level. The objective of the questionnaire was to discern whether the PB syllabus leads to an enhancement of skills that are crucial to the translation profession, such as the management of technological tools and internet-based tools for translation. The acquired ability to manage tools and resources implies that the translation student knows how to address technological problems and find suitable solutions. Translation technology is always changing – for instance, software programmes are upgraded, websites are closed down, machine translation becomes open-source. Therefore, the question is how the translation student copes with these changes during training and if their training ensures that they can manage independently once they have entered the profession. Cook and Campbell (1979 cited in Trochim and Land 1982:1–6) argue that the following conditions must be met in order to determine a potential cause and effect relationship between teaching and outcome, which in this study could be interpreted as translator training and professional skills:

- Covariation: changes in the teaching style must be related to the presumed outcome (4.3.1).

- Temporal precedence: changes in the teaching style must occur prior to the presumed outcome (4.3.1).
- No plausible alternative explanations: changes in teaching style must be the only reasonable explanation for changes in the presumed outcome (4.3.1).

The first two conditions are met through AR (see 3**Error! Reference source not found.**).The third condition is more difficult to meet and poses the greatest threat to data validity (Cook and Campbell 1979 cited in Trochim and Land 1982:1–6): changes in teaching style will affect the outcome. And yet, it is not always possible to explain unexpected outcomes as a direct consequence of adopted teaching styles. Educational pedagogy generally recognizes three main teaching styles: direct instruction or the Presentation – Practice – Performance approach (see 2.2.3), inquiry-based learning, which is closely related to problem-based learning (see 1.5) and cooperative learning, which manifests itself in peer review and other forms of collaborative learning, such as project management (see 2.4.1). Through these three teaching methods, teachers can gain a better understanding of how to govern their classroom, implement instruction and connect with their students. Teaching styles are often driven by the syllabus, the curriculum, and the teaching methods, which depend on general principles, pedagogy and management strategies used for classroom instruction.

During the pilot study and the following years, threats to validity caused by changes in teaching styles were reduced through measurement and observation rather than by argument. The pilot study was confined to a sample of students that was not likely to be exposed to teaching and practice beyond the syllabus. Attending the work-experience study option is an example of what might impact validity of this study and the measurement of skills. Students in the first two years of the study were not involved in work placements, whereas work experience in the following year was not acquired prior to completion of the questionnaires or focus group (hereafter FG) discussions. Only one student in each cohort appeared to have had previous experience as a translator (personal communications 2009-2012).

In sum, the conditions of cause and effect relationships affecting the design of the syllabus were met during this study. They helped the pilot study develop from a mere

questionnaire to a complex study based on AR (3.6.2) through multiple questionnaires, and enhanced by FG discussions. This study was performed solely with students, all of whom entered their postgraduate degree course with similar levels of knowledge. The assessment of their foregrounded knowledge took place during the admission procedure set up by the university.

3.1.1 *Research design*

This study included the basic design elements as proposed by Cook and Campbell (1979 cited in Trochim and Land 1982:1–6; see 3.1). Firstly, the programme element in the syllabus is planned by the researcher; secondly, the element of measurement is created by the measuring tools in the pilot year of the study and repeated in the two following years, including some ensuing modifications. Thirdly, the final basic design element consists of cohorts of students that participate in various conditions during the years (3.1.2). The lapse of time between teaching and outcome is self-evident and determined by the time span of the module up to the moment of the completion of translation portfolios and summative essays. In relation to the objective of this study the presumed cause of the presumed outcome lies in the syllabus, and can be controlled. AR (see 3**Error! Reference source not found.**) during the three-year study led to modifications in the syllabus.

To support a tailored research design the following criteria are suggested by Trochim and Land (1982:1–6), which are applied to the current study:

- Theory-grounded: theoretical expectations are built into the design of this study: the independent learner approach was offset against the traditional teacher-centred learning approach.
- Situational: this study design reflects the settings of the investigation. As this study progressed in the two years following the pilot study, account was taken of the variety of educational backgrounds within the classroom (4.4.2).
- Feasible: the realistic implementation of the design. The timing of the questionnaires in pilot study and following years was adjusted to obtain the

best results. Account had to be taken of curriculum changes which meant that students no longer had to attend both parts of the T&T module after the pilot study year. Hence questionnaires were submitted in both terms. In addition, this study was feasible because the researcher was solely responsible for the syllabus and the delivery of the module during the entire period of this study and beyond.

- Redundant: good research design requires a degree of flexibility, which necessitates some duplication in the design. Replication means that failure to achieve suitable responses in one question can be remedied in another. It should be noted that some questions in the pilot-study questionnaire are repetitive (3.4). When responses were at variance, further investigation was required which led to FG discussions and interviews, where initial questions were sometimes repeated, although in a modified form.
- Efficient: the balance between redundancy and overdesign. As aforementioned, some questions were repeated in the mixed methodology approach, and some were deleted in questionnaires after the pilot-study year. Redundancy and duplication were apparent in both research and syllabus design during the entire study.

The pilot study began on a theory-grounded basis but when it appeared that some of the theoretical expectations that were built into the syllabus design, namely that the respondents would be familiar with a learner-centred approach, would not be met and that saturation would not be achieved either, it was decided to opt for a mixed method design of this study (3.6.1). Triangulation was used as an additional form of validation and AR enabled the emergence of new theories concerning the learner-centred approach (see portfolio approach 4.2.3.2; 4.4.1).

3.1.2 *Procedures and administration of pilot study*

3.1.2.1 Sample, respondents and measuring tools

In the pilot year of the study, the sample included all respondents in one class: fifteen students who attended the module T&T during both terms that spanned eighteen weeks in total. The sample in the first year was small for two reasons: the size was determined by the maximum number of students in one class, which in turn depended on the number of available laptops, namely fifteen. In addition to logistics the other reason for a small sample was that it is difficult to estimate when saturation will be reached in a predominantly qualitative study. The quantitative data from numerical questions (Figure 2) are few but they are validated by a repeat of some of the questions in the following years, which are discussed in the analysis in 4.2.4. Creswell (2007:240) explains that to achieve a grounded theory the researcher wants to reach a point where all his categories are saturated and no new information can be found that might add to the understanding of the categories. In qualitative research such as this ongoing study it would be difficult to determine saturation point. Moreover, the size of the sample was not large enough to develop a theory grounded in data from the field (Creswell 2007:78). The study was looking for meaning rather than aiming to prove set hypotheses. To some extent the hypotheses about the syllabus were emergent. AR is a constructive and progressive research model that does not set out on a pre-mediated path and may not reach saturation. Rather than generating a theory, the objective was to discover the students' responses to academic learning and their personal enhancement of vocational competences and skills. The syllabus was modified accordingly (3.1.4.1). The responses in the relatively small sample set the tone for further methods, such as FG discussions.

The measuring tool consisted of a questionnaire designed by the researcher. The questionnaire contained open-ended and closed questions that provided quantitative and qualitative data. Emergent qualitative data were used as a basis for subsequent face-to-face interview questions submitted to two students several months after the questionnaire in class took place (3.6.3.1). The questionnaire contained three

categories of inquiry: 1) student approach to the syllabus (module and readings), 2) professional skills and competences (CAT tools, internet-based tools, revision), 3) student approach to non-teacher-centred learning (syllabus; see 3.5.1.1–3.5.1.3). This format was chosen because of its clarity and ease of administration.

The questionnaires were submitted and completed by the students in class. Absentees were asked to complete the questionnaire on their return. A mix of qualitative and quantitative data allowed for an emergent variety of measuring tools, as appropriate in AR (3.6.2). For instance, in the following two years of the study, FG discussions complemented the data (3.6.4). With regard to reliability and validity, it should be noted that questionnaires were repeated and administered to successive cohorts in the following two years and their validity relies on their parameters, the actual measurement of what they aim to measure (3.1.4).

3.1.2.2 Dates of administration and modification

In the pilot year of the three-year study, all students attended both parts of the T&T module and one questionnaire was submitted in week six of the second term. Absentees were invited to complete the questionnaire when they returned. The questionnaires were filled in anonymously on paper. In the second year of the study, the questionnaires had to be modified: not all students were required to attend both parts of the module, but could select CAT tools or internet-based tools (3.1.4.1). Hence, in the second and third year of the study, two separate questionnaires were submitted to the students, one at the end of each module. The size of the cohorts differed per module in one academic year depending on the module(s) selected by the students. The questions were focused on the relevant topic in the T&T module of that term. In total 118 questionnaires were completed over a survey period of three years:

In Itinere Questionnaire pilot study (hereafter IIQ-PS)	15 students	24 February 2010

IIQ2a Online Resources	24 students	29 November 2010
IIQ2b Translation Memories	26 students	14 March 2011
IIQ3a Translation Memories	31 students	5 December 2011
IIQ3b Online resources	22 students	7 April 2012

The change in the curriculum from one T&T module to two parts of the module affected both syllabus and questionnaires (3.1.4.1).

3.1.2.3 Procedure of data collection

IIQ-PS has both high fidelity (accuracy) and high structure, while the following complementary methods of interviews and FG discussions have high fidelity, but less structure. Particularly, the transcriptions of recorded FG discussions offer high fidelity (3.6.4), while interviews that rely on note-taking have a lower level of fidelity. They were not repeated in the following years of this study (3.4.1). In the pilot study, it was not possible to include additional respondents. However, the following two years produced new cohorts of students, which added to the number validity of IIQ-PS. Obviously, different cohorts may produce different kinds of data, which will all be taken into consideration. Because it is an evolving study, questions and syllabus design were modified during AR and after data analysis.

3.1.3 *Literature on questionnaire design*

3.1.3.1 The methodology of the research design

The methodology, that is transparency of the research design, is paramount in order to obtain adequate responses (O'Leary (2004:84–101). O'Leary attempts to clarify the meanings of 'methodology': firstly, in terms of framework and paradigms such as AR, secondly, in terms of 'methods', or techniques, such as interviewing, surveying,

observing, thirdly, in terms of 'tools', or the actual data collection devices, such as interviews and questionnaires, and finally in terms of 'methodological design' that includes the former three. O'Leary (2004:84–101) is very practical in that she encourages strategic planning and the weighing of all the advantages and disadvantages. In respect to 'working with autonomy and innovation' (2004:88) she suggests the advantages are that the researcher is not limited by what others have (not) done; there is the potential to break new ground and it allows the researcher to be highly context-specific in their methodological design. Her caveat is that the researcher needs to maintain focus, to allow more input when working on new terrain, and to recognize that credibility is not achieved without considerable effort. In addition O'Leary emphasizes the need to 'let the question drive the method', which is equally applicable to this study. The research question 'will PB teaching enhance translator competence and skills?', as well as the anticipated answer that it does, should drive the questions in IIQ-PS and following questionnaires, as well as other methodological tools (see Oppenheim 1992). Finally, O'Leary (2010:84–101) comments on the perceived 'dichotomy' between 'qualitative' and 'quantitative': she prefers them to be used as adjectives to describe data, where the latter refers to numbers that are analysed through statistics, whereas the former relates to data represented by other means and are analysed through thematic exploration. Similarly, she argues that the terms 'subjective' and 'objective' can lead to confused assumptions and protocols, and may send the researcher in an undesirable predetermined methodological direction.

3.1.3.2 Research techniques

Oppenheim (1992:5–20) emphasizes that research design is distinct from research techniques. Techniques refer to methods used for data generation and collection, which in this research consist of questionnaires, followed up by face-to-face interviews, email correspondence (question and answer), and FG discussions. The triangulation of data (3.6.1) takes place over a period of three years and the data analysis occurs on a yearly basis with a similar cohort of students. Essentially, research techniques are about measurement, quantification and the building of instruments (Oppenheim 1992:6). Measurement also includes questioning how certain attitudes

can be measured and how questions can be grouped to enable inventories and scales. In the questionnaires, measurement provides numerical data as well as qualitative data. Numerical data are countable, including closed questions. Open-ended questions may provide limited data and are subsequently followed up in interviews. Oppenheim (1992:7–8) goes on to say that good research design depends on

- the plan, the aims and objectives (3.1)
- preliminary and revised conceptualization of study and objectives (2.4.1; 3.1.1)
- deciding feasibility (3.1.2.1)
- deciding which hypothesis needs to be investigated and making the hypothesis operational, that is specific to the situation (3.1.4.1)
- designing or adapting measuring tools (3.4; 3.4.1)
- the design and implementation of the pilot study (3.1.2)
- followed by field-work, namely actual data collection, data processing and analysis

Dörnyei (2002:1–10) refers to Oppenheim (1992) as a good source on questionnaire design and quotes Brown's definition of a questionnaire: 'Questionnaires are written instruments that present respondents with a series of questions or statements to which they are to react either by writing out their answers or selecting from among existing answers' (Brown 2001:6). Dörnyei (2002:1–10) discusses more emotive and pragmatic features that affect the researcher, such as advantages and disadvantages of questionnaires as well as of anonymity. The main advantages are suggested as the efficiency of questionnaires in terms of the researcher's time, effort, versatility and financial resources. He does not agree with claims that they are unreliable and invalid, although he admits that ill-constructed questionnaires may easily lead to undesirable results. He suggests that the main problems lie either in the simplicity or superficiality of answers or unreliable and unmotivated respondents. This study aims to compensate for incomplete or inaccurate

answers (due to literacy problems by international students) by reintroducing the questions in interviews and FG discussions. He stresses the importance of balancing closed and open-ended questions, which will be examined in 3.5.1. Experience teaches that rich data are not necessarily achieved by open-ended questions, but rather by other means of data collection (3.6.4).

Likert-scale questions are suitable to find out students' opinions. Oppenheim (1992:187–210) calls the process 'attitude scaling'. Brown (2001:30–70) points out one potential drawback of this method: students might select the neutral non-opinion option rather than give an opinion. In IIQ-PS, only a few Likert-scale questions have been included, partly to avoid students selecting options such as 'don't know', 'sometimes' and 'moderately', which are closest to neutral. The impact of this type of question is discussed in 3.5.1. Brown's focus is much more on the type of question than on the environment, as is described in Dörnyei's publication (2002:11–58). First of all, the research questions need to be clear, suggests Brown (2001:30–70), for the survey questions to function well. Research questions, he continues, can serve three primary purposes in survey projects: descriptive, exploratory and explanatory purposes (3.2). Descriptive questions elicit numerical or quantitative responses; exploratory questions consider the different characteristics of the students, for instance, in their approaches to independent learning with regard to the syllabus, while explanatory questions look for answers in terms of possibilities that can be explored further. In the research the IIQ-PS did not initially include exploratory questions concerning the students' background. A different set of data was used, such as final grades, to investigate the potential impact of the different learning environments the students had previously experienced when it was apparent in the FG discussions that the responses were greatly influenced by acquired learning styles. Furthermore, Patton (1987 cited in Brown 2001:30–70) gives examples of six types of questions that can be used to design a survey: behaviour/experience, opinion/value, feelings, knowledge, sensory and demographic background. Behaviour questions refer to what students do, how they respond, and act. Ability questions, for instance, referring to the time of admission, are less important in IIQ-PS, compared to attitude questions, which are particularly salient. Solution questions were not asked, because the aim was to modify

the syllabus according to problems and issues that arose from the questions. Finally, it should be noted that the function of IIQ-PS is to discover opinions and attitudes of the respondents on a number of issues; hence Brown (2001:30–70) would classify it as an opinion survey, with an element of judgment.

3.1.3.3 The issue of response rate

Qualitative and quantitative data collections in AR are inevitably affected by the issue of response rate. Matthews and Ross (2010:181–189) value the targeting of suitable respondents to increase the response rate. In this study, it was not possible to select a sample, or any samples in the following years, as explained in 3.1.4.1. In IIQ-PS, the samples consist of all students who attended the module. Only the other measurement tools allowed selection. It should be noted that there was an almost 100% completion and return of IIQ-PS and following questionnaires. Only one student did not hand in the questionnaire, otherwise, students were supportive of the use of the questionnaire for personal research purposes. Students who were invited to FG discussion mostly accepted, and those who participated appreciated the opportunity to express their opinions. One student asked for permission not to contribute to the discussion.

The rationale for maintaining anonymity in questionnaires is the assumption that it will produce honest and comprehensive answers and will improve the response rate. However, Dörnyei (2002:11–56) puts forward research that has shown that respondents tend to offer the same answers even if the questionnaire is not anonymous. Therefore, the researcher needs to consider whether the subject matter warrants anonymity, and if it will make a difference. In IIQ-PS, it was considered important to maintain the anonymity of the respondents in order to obtain critical and honest responses to potentially sensitive questions. Some questions from different categories are shown in Table 6 to illustrate where critical and honest responses might have been affected if the surveys had not been completed anonymously.

Module	
3. How many hours per week do you spend on average on the module Translation & Technology (T&T) outside lecture hours on Wednesday?	Honest answer required
7. Which word best expresses your feelings about the module : (choose one of the following….)	Critical answer required
Readings	
12. Have you read today's readings?	Honest answer required
Assignments	
23. How many words of the Durham website have you translated?	Honest answer required
Instruction	
28. Would you prefer more instruction and less self-study?	Critical answer required

Table 6 Rationale for anonymity in IIQ-PS (Appendix 1)

Dörnyei (2002:11–56) argues that anonymity may potentially reduce the reliability of the investigation if the researcher cannot link the responses to data from other sources or to certain groups of students. It was not possible to relate responses in IIQ-PS to any specific data from other sources, other than AR as is exemplified in section 3. Motivational data and the response depend on the success the student feels they have achieved. IIQ-PS was completed prior to summative assessment in the second term, but it may have been affected by summative assessment results from the previous term. This was one of the reasons why the initial interviews were not continued. Students who had failed their summative essays did not respond to the invitation.Only IIQ2a and IIQ3a were not affected by results; responses to [b] questionnaires in the second terms might have been affected by summative assessments in the first terms. It should also be noted that due to anonymity, it was not possible to link the respondents in the [b] questionnaires to the same respondents in the [a] questionnaires. An additional study of learning styles affected by ethnicity and educational backgrounds was

conducted in the third year of the study to compensate for a potential lack of reliability in the investigation (4.4.2).

3.1.4 *Reliability and validity*

In order to increase the reliability of the responses, it is important to manage the length of the questionnaire as well as the organisation, layout and design of questions in such a way that the respondents feel confident and comfortable in their completion of the questionnaire. O'Leary (2004:150–183) indicates that it is not easy to decide which questions should come first, although the assumption that the first questions receive the most attention might be justified. Numerical questions (Table 13) and their importance are discussed in 3.5.1.2 below. In the second and third year of the study, the questions were modified in terms of rewording, layout and organisation in order to meet these criteria (Table 8). Whereas reliability refers to study procedure, validity is related to the content, the reported observations and their analyses (Rudestam 2001:87–204). In this study, the data collection process is described and explained in such a way that it can be replicated or understood by third parties and allows them to come to similar conclusions. IIQ-PS is modified according to initial analyses and amended in line with subsequent analyses in the replicated questionnaires of the following years. The modifications are detailed and reasoned (3.4.1).

Validity of the reported observations is expressed internally as well as externally. The internal validity is established through the relationship between researcher and respondents during the first term in the module from October to December, and the second term from January to March. This relationship means that the researcher knows the respondents and can assess the trustworthiness of their responses, regardless of the anonymity maintained in the questionnaire. For instance, the first question aims to find out how many hours the students apply themselves to self-study on a daily basis. Because the researcher wants to check the trustworthiness of the answers to this question, the question is repeated in different wording in IIQ-PS questions 1, 2 and 5 to verify the validity of the answer:

- IIQ-PS:1 - This module requires a high level of self-study, at least 1 hour per day. Is it realistic considering your current work load? Yes/No
- IIQ-PS:2 - How many hours per week do you spend on average on the (T&T) module outside lecture hours on Wednesday? Please encircle (0 - 10+)
- IIQ-PS:5. - How many hours per week do you think you should spend practising the use of technological aids and internet-based tools in order to feel comfortable with what you have been instructed?

The objective of these questions is to ascertain how many hours students actually devote to self-study, how many hours they think they should devote to self-study, and whether this number matches the expectations they had before they started the module. It should give a fair indication of learner independence, professionalism and competence.

An alternative option would be to match the questionnaire responses with the students' essay results. If a student fails an essay, it would be appropriate to consider time investment, which can be checked in the university's virtual learning environment (hereafter VLE) where access is tracked. Following the initial pilot study, the observations were validated and refined in the following years in a study of FG discussions (3.6.4.2). The questionnaire was amended as this study evolved. External validity is important as the number of respondents per setting is limited. Therefore, the questions are clearly defined and described to allow for transferability to other settings (Rudestam 2001:112). The provision of adequate detail enables the replication of a similar kind of survey by third parties. The following section gives more background details to show how changes in the curriculum and the degree structure affected the design of this particular study.

3.1.4.1 Validity affected by curricular and syllabus changes

External validity of a survey is important to any researcher who wishes to implement similar research. In this study only internal validity, which refers to the relationship between researcher and respondents was considered. During the pilot study all students attended both parts of the T&T module on translation memory and internet-

based tools. This pattern began to change in the second year of the study (3.1.2.2), while in the third year, new study options were introduced and more students attended only one part of the module. It affected continuity. For instance, students who were slow to understand requirements of independent learning did not have the opportunity to consolidate their learning behaviour in the second part of the module. This curricular change also had an impact on the relationship between researcher and students (internal validity), because the working relationship between the researcher (teacher) and the students had less time to consolidate. The change affected the syllabus and meant that some features had to be repeated for incoming new students in the second module.

In regard to the design of the questions, the researcher had to consider the students' potential lack of familiarity with the structure of the questionnaire. The students' degree of understanding could affect the internal validity. Modified questions are shown in Table 7. IIQ-PS was split into IIQ2a and IIQ2b because it was not reasonable to expect detailed responses to questions about the first part towards the end of the second part of the T&T module. Moreover, specific questions about preparation time and consolidation needed to reflect the individual modules: it was anticipated that students would require more time to learn CAT tools than internet-based tools. Furthermore, not all students would have attended the full module, because some absenteeism due to illness, job interviews and other personal reasons had to be taken into account. Questions needed to be specific and relevant to the topic in the module that the respondents had attended.

This was not the case in IIQ-PS. Due to the late completion of IIQ-PS towards the end of the full module the focus was mainly on competence and acquired skills, whereas in the second year the questions referred specifically to the topics that were taught in the terms when respective questionnaires IIQ2a/b were submitted.

IIQ-PS - CAT tools and Internet Resources(24.02.2010 Week 6 Term 2)	**IIQ2b - CAT tools** (14.03.2011 Week 9 – Term 2)
CAT tools	**CAT tools**
15. How important do you rate CAT tools for your future as a translator?	7. Have you used TM for translations in other modules?
16. Would you have preferred the training[3] to cover all three Translation Memories?	8. Which TM do you prefer? DVX □MemoQ □ SDL Studio 2009 □ 9. Why?
17. Have you read the CAT Help files?	10. Will you continue to use TM after completing your degree?
18. If so, did you find them <u>helpful</u> (please tick):	/
19. Have you learnt about hotkeys?	
20. Have you studied the menu bars + functions of DVX, MemoQ and Studio 2009?	
IIQ-PS ctd. - Internet Resources	**IIQa - Internet Resources** (05.12.2011 Wk 9 - T1)
21. Have you tried a form of Cloud-computing?	10. Have you changed your style of terminology searches since you began the T&T module (Internet Resources)?
22. Have you visited a website for translators?	11. Have you written in the Blogs?
	12. Do you think writing in the Blogs has any personal benefit?
	13. Have you used the Project Management (PM) Wiki?
	14. What is the value of the PM Wiki to you?

Table 7 Questions in Year 1 and Year 2 compared (Appendices 1 and 3)

Table 7 shows a reduction in the number of questions in IIQ2a and IIQ2b compared to IIQ-PS. Certain questions were only relevant in the first year, while the additional

[3] During the pilot study year an external trainer was invited to lead a training day on SDL Trados Studio 2009

questions 11–14 were only indirectly related to internet resources or of more importance to the researcher in terms of learning styles, approaches and reflective learning. Activities such as project management, as well as blogs and wiki websites, VLE tools, were not introduced until the second year. The shift from a focus on cognitive knowledge in IIQ-PS to learning approaches in the following surveys is discussed in detail in sections 3.5.1.1–3.5.1.3.

3.1.4.1.1 Validity of questionnaires in first and second year of study

In IIQ-PS there are fewer questions about Internet Resources (first part of the T&T module) than Translation Memories (second part) to compensate for the time lapse of several months since the teaching of the first part (3.1.4.1). Therefore, the questions on CAT tools are more pertinent than the questions on internet resources as the students were still studying the topic at the time of the questionnaire. Furthermore, there were two triggers for the modification of questions in the following questionnaires. Firstly, responses to IIQ-PS affected the pedagogy in the two following years and led to the modification of questions in IIQ2 and IIQ3 (3.4.1). And secondly, modified questions on internet resources reflect a shift of focus: a generic inquiry into independent learning in the pilot year became a more specific inquiry into independent learning in the second year after new VLE teaching tools had been introduced.

3.1.4.1.2. Validity of questionnaires in third year of the study

The questionnaires in year 3, IIQ3a and IIQ3b (Appendices 4 and 5) show new ramifications. They are due to the enhancement of the previous questionnaires in the first two years of the study, and they are also related to a significant turnover of students: approximately 25% of students left after the first module, while two new students joined the second module. In addition, the order of the topics in the parts of the T&T module was reversed: in the second year of the study, TM was taught in the first module in order to give the students extended access to the translation memory software and more training practice during their year at university. Consequently, the question ‘Will you continue to use TM after completing your degree?’ (IIQ2:11 in

Appendix 2) is rephrased in IIQ3a (question 8 in Appendix 5) as 'Will you continue to use TM after this module?' Another change in the questionnaires relates to the headings: the six headings in IIQ-PS were reduced to four and five headings respectively, in IIQ2a and IIQ2b. They referred to the specific modules: IIQ2a – module, readings, TM, learning and teaching, and IIQb – module, readings, internet resources, assignments; instruction. The decision to divide the heading 'Learning and teaching' into 'Assignments' and 'Instruction' was based on a FG discussion where it became apparent that not all students had understood the learner-centred teaching methodology in the T&T module. The reduced number of headings was continued in IIQ3a and IIQ3b, but with more detail: 'Module' was defined as 'Module - Technological Tools' or 'Module - Online Resources', 'Assignments' was defined as 'Module assignments', and 'Instruction' was redefined as 'Instruction in class'. Although the number of questions was reduced from thirty (in the pilot study) to twenty-eight (second year of the study) to twenty-two (third year of the study), a new heading 'Reflective learning' was added in IIQ3b with questions on VLE blogs. Previous FG discussions (in the second year of the study) had shown that not all students were familiar with the use of blogs in an academic environment, nor had they understood the objective. Hence the new heading 'Reflective learning' was meant to help respondents understand the objective of the questions. A further reduction of questions and a fair amount of rephrasing aimed at raising reliability and the external validity of the questions, of which details are given in sections 3.5.1–3.5.1.3.

The internal validity was inevitably affected by curricular modifications. Changes to the curriculum began to take serious effect in the third year of the study when it was no longer compulsory to attend both parts of the module for all students. Questions in IIQ3a and IIQ3b were modified accordingly so that they were applicable to only the part of the module the student had attended in order to prevent an effect on the validity of the collected data.

3.1.4.2 Limitations, demarcations and variables

In the pilot study there is no reference to gender, age or ethnic origin, nationality or country of origin. All students in each class and different cohorts follow the same

syllabus and the intent of the questionnaire is to discover how any individual responds to the teaching and learning process at a specific point of time in the module. The pedagogy and syllabus design are deliberate, not accidental or random, because they are aimed at learner independence, professionalism, and competences that any translator should acquire regardless of background. In the final year of this study it was decided to set demarcations and to differentiate between the learning styles of European and Asian students (independent variables). As it was not appropriate to adjust questionnaires in the final stage of the study in order to take account of different leaning styles, it was decided to take a closer look at assessment grades, which had become an alternative data source showing different levels of progress among students with different educational backgrounds. The effects of their particular learning styles on the pedagogy (not the teaching methodology) are detailed in 4.4.2.

Limitations to the questionnaires are imposed by the inability to follow respondents after they have completed their degrees. A longitudinal study was therefore impossible. Consequently, questionnaires were administered for comparative and contrastive purposes to new cohorts in the following years to provide comparable material in support of the initial sample. They did not function as a monitoring tool.

Independent variables are significant in this study and they affected the questionnaires in the two years following the pilot study, as was discussed in 3.1.4.1. At a different level, the students' personal learning styles might be considered to be limitations. However, the pilot questionnaire, which was completed towards the end of the year, disregards the potential limitation and seeks to take into account that manipulation of learning styles (independent variables) is crucial to this study. Dependent variables can be defined in outcome, both academic and professional. Assessed and accredited essays portray dependent variables, while the aspired professional competences are best measured in FG discussions. Potential limitations as a result of learning styles and educational backgrounds were considered in retrospect after the questionnaires were completed (4.4.2).

3.2 Research questions embedded in the questionnaire

A threefold rationale of the main research questions (O'Leary 2004:28–41) has been adapted to this study as follows: the researcher needs to find out a) how the students acquire professional competences and learn new skills, b) how to enhance their learning, and c) how the PB syllabus can support this goal. IIQ-PS is the initial and main tool to find answers to the questions. The FG discussions emerged from IIQ results and subsequent face-to-face interviews. In an emergent methodological design such as applied to this study details are not predetermined in advance, although the emergence of additional qualitative data collection is planned and considered (O'Leary 2004:88). The continuum of additional data and the absence of saturation and completion distinguish the design methodology from a grounded theory methodology in which theories are generated from data (Creswell 2007:62–69). In this study emerging theories are not final, as is exemplified in Summary and conclusions.

In the study, theory-building was to some extent an outcome of the descriptive/interpretive approach. The study did not only test the implementation of the PB syllabus, but also the actual project-based concept and the building of a theory that a project-based syllabus enhances translator competence. The PB syllabus is an amalgamation of various theories and approaches, mostly used in communicative language teaching, and it was not only implemented but also developed during the study. The PB syllabus is however theory-grounded: theoretical expectations are built into the design of this study, for instance, the independent learner approach was offset against the traditional teacher-centred learning approach (Trochim and Land 1982:1–6).

Much of the methodological protocol in this study could not be developed in advance, because it depended on what emerged from the initial data. IIQ-PS was followed up by one set of interviews, four questionnaires and three FG discussions in the following two years. The objective was to answer the following sub-questions that arose in the course of the study:

- Will the use of independent learning styles support and enhance translator training?
- Will motivation and attainment rates in summative, as well as non-graded assessment improve if students understand both the concept of independent learning and its vehicle, the PB syllabus, and recognize their own preferred learning skills? (3.8.2)
- Will a positive awareness of the above lead to enhanced competences and skills in translation?

A pilot study needs to be created, adapted, fashioned and developed before it can generate suitable responses (Oppenheim 1992:47–64). IIQ-PS became the cornerstone of pilot work conducted in the first year of the study, with a few supportive interviews to follow. Sections 3.5.1, 3.5.1.1–3.5.1.3 review IIQ-PS questions against the main objective, which is to assess how the PB syllabus leads to an enhancement of competences and skills that are crucial to the translation profession. In IIQ-PS the research questions are addressed in three categories: student response to syllabus requirements (3.5.1.1), quality and quantity of the student's task preparation (3.5.1.2), and the students' response to learner independence (3.5.1.3). The questions are reviewed in terms of their likeliness to elicit appropriate responses.

3.2.1 *Questionnaire design and its intents*

The pilot study questionnaire is descriptive in that it aims to describe how respondents consider their work ethos, their quality and quantity of preparation, and their response to learner independence. It contains two response categories: open and closed questions. Although qualitative data derived from open-ended questions can be rich and honest, preference is given to closed questions with predetermined optional responses for the convenience of analysis. The respondents are offered some background information with regard to the objective of the questionnaire, but they are not given any details: this is to prevent them from selecting responses to please the researcher. Matthews and Ross (2010:181–189) observe that the combination of open-ended and closed questions can structure the data collection so that the researcher can

target specific data that are required to dis/prove the hypothesis and/or objectives (3.5.1). Furthermore, they suggest that the researcher consider the structure of each measuring tool, the researcher's presence/absence, as well as their involvement, which could be active or passive. Finally, several checks should be carried out: firstly in regard to the quality of the questions and answers to find out if the obtained data address the research questions (3.1.3.3). Secondly, questions and answers should address the research concepts as they have become operational in the syllabus and teaching methodology. And thirdly, the researcher should consider the validity of the questions: their face validity (do the questions elicit the anticipated responses?), convergent validity (asking a question in two ways, concurrent validity (similar findings in other studies using different tools; see 3.1.4), and triangulation (Matthews and Ross 2010:181-216; see 3.6.1). A validity check of the questions was included in 3.1.4.1.1 and a validity check of the data is to be found in 4.3.2.

3.3 Quantitative and qualitative data collection

IIQ-PS is not numerical in its design and has mainly qualitative features. Qualitative data in this study are relayed in words, while quantitative data are generally expressed in numbers. The questionnaires produced some quantitative data by means of numerical counts as shown in Figure 5 and Figure 6. Other questions with responses that are relatively quantifiable were coded during computer analysis in order to produce a reliable percentage and give a clear visual representation (4.2.1). The questionnaire design deliberately excludes variables, such as gender, age and ethnic background because the objective is to study the effect of the syllabus on the respondents, regardless of their status and background. Where it appeared from the quantitative data in IIQ-PS that more and deeper probing was required, qualitative data were generated by means of interviews and FGs.

While 'what', 'when' and 'who' questions are best suited to provide quantitative data, 'why' and 'how' questions provide better answers for qualitative data. 'How' questions in IIQ-PS amount to 15%; 'what', 'when' and 'who' questions are absent. The responses to 'how' questions are more likely to provide an answer to the objective

of this study: how can the PB teaching method produce a more effective learning process and on a micro level how can certain aspects of the method, such as the tasks simulate real-time translation skills and translator competences in class. Many of the topics in the questionnaire are non-factual, they are about attitude, opinion, quality of teaching and learning, and therefore require non-factual questions. The question 'Which word(s) best express(es) your feelings about the module?' might be considered unreliable if all possible variables were taken into account, such as gender, ethnicity, time of day, point of time in the module, level of English, and more. However, it is possible to guide respondents so that they understand the purpose of the question.

Although open-ended questions allow respondents to phrase their own answers, the researcher may include probes and prompts in order to direct the respondent towards a suitable response, depending on the objective of the question (Matthews and Ross 2010:181–189). This strategy could be regarded as a semi-structured interview. An example of prompting can be found in IIQ-PS:1 'This module requires a high level of self-study, at least one hour per day'. It could be argued that this is a leading question; although the intent is as stated by Matthews and Ross (ibid.) that the respondent considers the question in context and answers fully or precisely (**Error! Reference source not found.**). Some questions consist of two parts, where the first question is introductory and the second is the researcher's crucial question, for instance, IIQ-PS:15 'How important do you rate CAT tools for your future as a translator?' Briefly state why. (Appendix 1). A general question at the end of the questionnaire such as 'Are there any topics you would like to be included in this module which have not been mentioned in the syllabus?' (Appendix 1) gives the respondent an opportunity to express feelings about the topic (Matthews and Ross 2010:181–189). The purpose is to assure respondents that their opinions are valued (3.1.3.3). The objective of this study is to raise the awareness of students of their learning progress and to produce findings that require further research. Qualitative research facilitates the continuum, whereas quantitative research is more conclusive.

3.3.1 *Selection of data type*

Sometimes research cannot be placed entirely in either a qualitative or a quantitative protocol (O'Leary 2004:99). This study has qualitative positivist (objective and scientific) elements in that it combines sensory experiences (discussions) with quantitative facts from data; it aims to be scientific (questionnaire), deductive and reliable in its methodology (quantitative), while it has qualitative features based on the respondents' personal knowledge of their learning behaviour. Furthermore, this study's methods are small scale and predominantly qualitative, with some quantitative data (**Error! Reference source not found.**; 4.2).

3.4 Question design in the surveys

The questions in IIQ-PS are intended to help the respondents reflect on their experiences and are retrospective in this aspect. The forward-looking elements that focus on translator competences are covertly present in the questionnaire, but they do not provide details in the same way as FG discussions. The questions are generic initially and become more specific in order to probe. Some questions are partially repetitive (3.3) in order to make the students think in more depth before they respond.

Rennie (1998 cited in Rudestam 2001:110) suggests that it is not advisable to start with a set of questions that is in effect a category for coding, because it does not allow categories to emerge from the data. Section 3.1.4.1 explained how categories merge and emerge depending on circumstances, such as modular and curricular changes, as well as subsequential modifications in the syllabus. The pilot study starts with a general plan of inquiry rather than a set of formal questions.

Sentence structure is paramount in how it introduces the topic to the respondent. The question can be presented as a declarative sentence or an assertion, an interrogative sentence or a request, an imperative sentence or an order. The purpose of each type of sentence is to elicit an answer (Saris and Gallhofer 2007:60–76). Another feature to be considered is the neutrality of the question, which can be affected by adverbs or by including the indirect object. Adverbs colour the assertion and may

deliberately influence or provoke the respondent. Meanwhile the indirect object includes the interviewer and changes the power relationship, so that interviewer and interviewee might feel equal to some extent. Saris and Gallhofer (2007:60–76) would classify the questions used in the pilot study as questions based on concepts-by-intuition. The respondents in this study were entirely familiar with the topic and the interviewer could assume that concepts did not need any explanation. Saris and Gallhofer (ibid.) concede that much has been written about the effect created by the formulation of the request for an answer (see 3.5.1; 3.6.3.1), while the authors add focus on the linguistic procedures concerning the formulation of requests. Furthermore, they use the term concept-by-intuition in relation to assertions, while the interviews and IIQs in this study generated questions only. However, their definition of subjective variables is apt to the questions asked in interviews and questionnaires. Although the interview questions and many of the survey questions were open-ended, the information could only be obtained from the respondents because it already existed in their minds.

The questionnaires over the three year period did not undergo a fundamental change, but the questions underwent many subtle changes. Questions were modified in each survey for either linguistic or curricular reasons. The following section 3.4.1 identifies such changes.

3.4.1 *Variant questions*

During the three years of the study the questions in subsequent questionnaires were modified for linguistic reasons and in line with curricular changes (3.1.4.1). Curricular changes in turn affected the syllabus design, which subsequently affected questions. Three questions are shown in Table 8 to demonstrate how they changed during the pilot study. Question a in the table about TM software was changed for several reasons, mainly curricular: it was not included in IIQ2a because TM had not yet been taught. It was included later in the year in IIQ2b, but the wording was changed (linguistic reason), based on responses in IIQ-PS to make the question more relevant for a wider number of respondents. This process of precision and improved targeting

of questions continued in the following questionnaires. Whereas the first question might be beyond the experiential scope of some respondents, the final questions 'Will you continue to use TM after this module?' and 'Have you used TM for translations in other modules?' are more restrictive and concrete. The latter questions could be asked because the modules had been reversed to enable increased TM use during the course. Curricular changes affected not only the timing of the questionnaires (two questionnaires per year after IIQ-PS), but they also had consequences for the content of the questionnaires, as explained. Changes also had a knock-on effect on syllabus design.

Changes to questions under the heading of Readings in the questionnaires (see Table 8) were a) dictated by time, namely which preparatory reading had been advised at the time of the submission of the questionnaire (curricular), b) modified (made more or less specific) depending on the results of the previous questionnaire, or c) rephrased to obtain a more accurate response and higher validity (linguistic). Question 13 in IIQ-PS (Appendix 1) inadvertently contained two questions (If you have read any follow-up readings, have you found them interesting/helpful/too long?) and was discontinued because of the lack of validity in the responses: students might not have read any of the follow-up readings and could therefore not respond factually. The changes in Table 8 were dictated by syllabus changes: in the second and third year two separate reading folders (compulsory and optional) were combined, and questions were based on the responses in the previous years. Similar to the curricular questions (a) in the following table, there was a change in wording that could be best described as specificity. The objective of these changes was to raise the validity and reliability of the responses. One question in the IIQ3 questionnaires includes the title of the reading that is in sharp contrast to the question in IIQ2b, which is an inquiry into the percentage of overall readings studied by the respondents.

IIQ-PS	IIQ2a	IIQ2b	IIQ3a	IIQ3b
a) curricular				
How important do you rate CAT tools for your future as a translator. Briefly state why. (i.15)	N.A.	Will you continue to use TM after completing your degree? Yes/No/Don't know (10)	Will you continue to use TM after this module? Yes/No/Don't know (7)	Have you used TM for translations in other modules? Yes/No (6)
b) syllabus				
Have you read today's readings? Folder 1; Folder 2 yes/No (i.11)	Have you read today's reading? Yes/No(vi)	How much of the weekly readings have you read? all – more than 50% - less than 50% - none (4)	Did you read last week's article? (Hartley, Technology and Translation) yes/No (8)	Have your read today's article? (Garcia) Yes/no (7)
c) linguistic				
Which word best expresses your feelings about the module: (choose one) interesting – boring – discouraging – challenging (i.6)	Which word(s) best express(es) your feelings about the module (multiple answers possible): interesting – boring – easy – difficult – as expected – unexpected – other: (v)	Which word(s) best express(es) your feelings about the module (multiple answers possible): interesting – boring – easy – difficult – as expected – unexpected – other: (4)	Which word(s) best express(es) your feelings about the module (multiple answers possible): interesting – boring – easy – difficult – as expected – unexpected – other: (4)	Which word(s) best express(es) your feelings about the module (multiple answers possible): interesting – boring – easy – difficult – as expected – unexpected – other: (4)

Table 8 Variant questions

3.5 Pilot study survey

Only students attending the T&T module were subjects of the data collection. IIQ-PS contains thirty main questions. The questions are categorized under six headings: Module, Readings, Assignments, CAT tools, Internet Resources, Instruction. The choice of titles is based on the assumption that the headings will be familiar to the respondents. In the data analysis the responses to the questions are organised in the

following categories: 1) student approach to syllabus, 2) professional skills and competences, 3) student approach to non-teacher-centred learning (3.1.2.1). The questionnaire is the first step in the data collection process, and IIQ-PS questions are piloted as part of a three-year study. The refined questions in surveys IIQ2 and IIQ3 in the two years following the pilot year are a complementary resource for the collection of primary data in the three categories (see 3.5.1.1–3.5.1.3). The rationale for the final format of the questionnaire is explained in section 3.1.4.1 and its subsections.

3.5.1 *In Itinere pilot study questions*

IIQ-PS (Appendix 1) consists of 30 main questions. In addition there are 13 sub-questions, which gives a total of 43 questions for analysis. The total of open-ended and closed questions is illustrated in Figure 1, which shows that five questions are open-ended and 39 questions are closed. The imbalance of open-ended questions in favour of closed questions was a deliberate choice in the design to increase the potential reliability of responses in a predominantly qualitative survey.

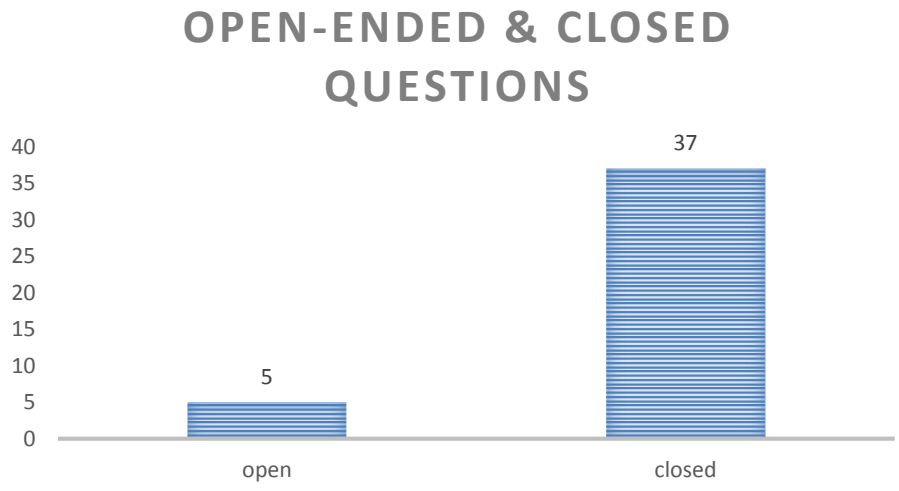

Figure 1 Ratio of open-ended and closed questions in IIQ-PS

Although closed questions are considered to provide mainly quantitative data, this does not apply to IIQ-PS. Numerical questions combined with Likert-scale questions only constitute nine out of 33 questions of which the five Likert-scale questions are

strictly opinion-related (Figure 2). The following question (IIQ-PS:15) is an example of a closed Likert-scale question followed by an open-ended sub-question: How important do you rate CAT tools for your future as a translator? (High–Moderate–Low). Briefly state why (sub-question).

The three research questions (3.2) about the students' learning approaches, their acquisition of professional competences and skills and the role of the syllabus in the learning process are covered in categorical questions about a) the students' responses to syllabus requirements, b) quality and quantity of the student's task preparation, and c) the students' response to learner independence. These categorical questions constitute the largest pie slice (Figure 2). Although they are not factual or quantitative, they are closed to increase reliability and to reinforce the qualitative tenure of this study. For instance, the categorical questions are opinion-related and can be broken down into three further categories (Figure 3): yes-no questions, positive-negative questions and multiple categories within one question where the respondent should select only one option. The other questions in IIQ-PS are Likert-scale or numerical (Figure 2).

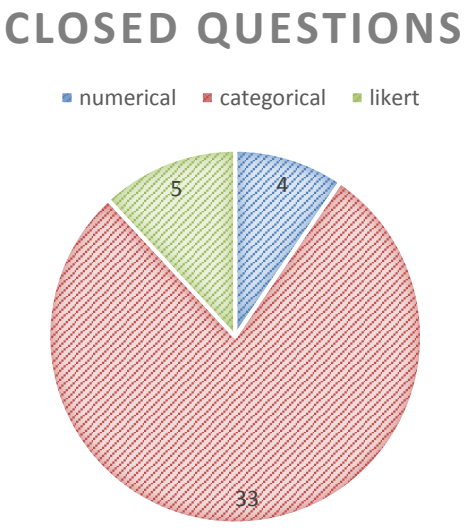

Figure 2 Types of closed questions in IIQ-PS

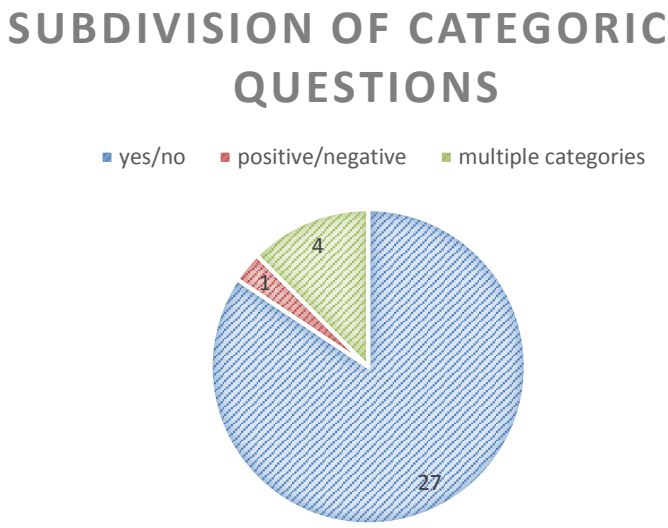

Figure 3 Subdivision of categorical questions within closed questions

The categorical questions in Figure 2 compose the red slice, which is large compared to the adjacent numerical and Likert questions. The blue slice consists of four questions that require numerical answers. Strictly speaking only three out of the four numerical questions are likely to give quantitative data, particularly questions 2, 5 and 23 (Appendix 1) which open with 'how many' and refer to the number of practice hours or the number of translated words. In the penultimate numerical question (29) the students are asked to place a circle round the percentage that matches the relevance of the covered topics to their anticipated career as a translator (the assumption is that the respondents will become practising translators). It is an opinion-related non-factual question. The actual content of the questions is discussed in detail in the following three sections 3.5.1.1–3.5.1.3 with some reference to modifications during this study (3.4.1). The analyses of quantitative data and qualitative data can be found in sections 4.2 and 4.2.1 inclusive.

3.5.1.1 IIQ-PS questions about the students' response to the syllabus

In this section some attention is given to the organisation and layout of questions, and some reference is made to the linguistic procedure (Oppenheim 1992:100–118), which includes the avoidance of potential ambiguity, the clear phrasing of questions, subjectivity, repetition and redundancy. The questions discussed in this section relate

to the syllabus and cover the students' work ethos. Furthermore, they explore the students' perceptions of syllabus requirements and learning approaches. It was demonstrated in Figure 2 that most questions are closed. The following example of a closed question shows that it is primarily factual (the students have eight weeks of experience of the module and should be able to answer the question), that it requires a positive or a negative answer and that it investigates an attitude (to studying), which is less factual: IIQ-PS:3 (Appendix 1):

> Is your T&T practice/study time determined by the pressures of other work? Yes/No

Factual questions are considered easy to design (Oppenheim 1992:100–118). However, question IIQ-PS:3 is an example of a factual question that can be problematic from the linguistic perspective. Firstly, what does the forward slash signify between 'practice' and 'study'? Does it mean 'and' or 'or', or a combination of both? And secondly, how will the respondent interpret practice and study time? Furthermore, what about the ambiguity of 'work', does it refer to paid work, or to studies? Because this question is the third in a series of five (Appendix 1), 'work' is less ambiguous and is more likely to be understood as 'studies'. The objective of the question is to determine whether students have acquired a degree of independent learning. Redundancy and repetition in the phrasing of the question was intentional in order to help the respondent give an answer on a topic they might not have previously considered. Nevertheless, it was decided to omit the question in the following questionnaires, due to its potential lack of clarity. Another example of a closed and factual question is IIQ-PS:4:

> Practice time has increased/decreased (encircle) over the weeks (Appendix 1)

The objective of this question is to investigate if the content of the syllabus allows students to master the taught skills within reasonable time and with a degree of consistency. The reliability of the answer might be affected by the fact that the respondents are unprepared for this question and are unlikely to have kept a diary about their preparation time for the module. The question (and answer) could also be

coloured by their perception of the initial difficulties they encountered in mastering new skills, which is a subjective variable. Troublesome tasks are known to require more time. In spite of potential unreliability of the answers, the question was retained in the following IIQs and modified through a change of layout and the addition of a third option 'remained constant':

> My practice time after class has increased/decreased/remained constant (Appendices 2–5; question 2 or 3)

'Remained constant' adds a selective, more neutral option to the continuum and increases nuance. Two respondents did not answer this question about their use of time in IIQ2a, which almost points towards the requirement to include a fourth option such as 'I don't know'. This might have affected the overall response.

IIQ-PS:6 is a closed question in which the respondents choose from a list of four options:

> Which word best expresses your feelings about the module (choose one): interesting – boring – discouraging – challenging

The question is short and addresses the research concept with the objective of defining the degree of extrinsic motivation. However, the question contains a subjective variable where the answer is already present in the respondent's mind. To obtain more reliability the list was modified and extended in the following IIQs to prevent respondents from choosing options that were emotive:

> Interesting – boring – easy – difficult (instead of 'discouraging' and 'challenging') – as expected (new) – unexpected (new) – other: (new)

There was a linguistic reason for the change from 'discouraging' and 'challenging' to difficult, namely that the majority of the respondents were non-native speakers, and the original terms were considered too obscure. 'Other' was added in order to remove the finite nature of the list. The rationale for 'as expected' and 'unexpected' was to reinforce the third part of IIQ-PS:1: Is it what you expected (based on what you read in the Handbook)? Althought the question is closed, multiple answers are possible.

The following example gives a closed question that requires a yes or no answer only:

> Have you tried to use Studio 2009 independently? (IIQ-PS:10 in Appendix 1)

It could have included an additional 'why' question to define the response. The omission was rectified in the following questionnaires by means of complementary questions about the other translation memory programmes DVX and MemoQ. It was replaced by generic questions about the students' practice and anticipated practice. Questions 7–10 in IIQ2b (Appendix 3) were varied in style: question 7 required a yes/no response, question 8 offered a list, question 9 was an open 'why' question, and question 10 included a short Likert scale with 'don't know' as a third option.

The questionnaires following IIQ-PS contained separate categories on CAT tools and Internet Resources, depending on the module to which they referred. In IIQ-PS the respective questions were combined. In IIQ-PS the heading 'Instruction' had three questions (28–30), which were refined and expanded into six questions about learning behaviour in IIQ2a. In IIQ2b the heading was changed to 'Learning and teaching' and consisted of fourteen questions (11–23 in Appendix 3). In IIQ3a/b the layout was refined and included new headings such as Reflective learning (four questions) and Instruction in Class (four questions). For a detailed discussion of the reasons for these changes see section 3.1.4.1.

In the following two sections the discussion moves from the students' responses to the syllabus, and to individual learning approaches.

3.5.1.2 IIQ-PS questions about the students' preparation

The enhancement of competences and skills through PB learning is at the core of this study. Pym (2003:481–497) supports the idea that students should learn in class what they need to complete their tasks rather than focus solely on the completion, which is the outcome of the task. However, studies suggest that it is the outcome, such as grades, that influences the students' attitudes to studying, as demonstrated by Entwistle and Ramsden (1983:36–37) in the following table:

Learning styles	Related questions in IIQ-PS	Potential outcome/grades
Disorganised and dilatory	IIQ-PS:1–5	poor
Cynical and disenchanted	IIQ-PS:6–9	average
Syllabus-free	IIQ-PS:10–14	above average
Fear of failure	IIQ-PS:26–27	above average
Competitive and efficient	IIQ-PS:23–25	very good

Table 9 Learning styles

Learning typologies cover a wide spectrum, as presented by Biggs (1996) and Land (2006), who define surface and deep learning structures, and troublesome learning respectively. Entwistle and Ramsden's typology (Table 9) was considered to be relevant to the learning approaches consciously or unconsciously adopted by the students in this study. Disorganisation expressed itself in how the students managed their files and folders in TM programmes; cynicism and disenchantment was evident in some of the responses to IIQ-PS:6 about their interest in the module. In the reflective interviews in 4.1, two students discussed their learning styles as 'syllabus-free', where the student used the internet to find answers to questions before she recognised the value of the syllabus, and another student was proud of her learning efficiency, but also expressed motivation which stemmed from a personal fear of failure. The typology thus indicates that the external locus of control can lead to good learning results, which was supported by the students in the interview.

Particular questions in IIQ-PS aim to find out more about the students' learning styles as categorised in Entwistle and Ramsden's (1983:36–37) findings. The heading Readings in IIQ-PS is followed by questions that invite responses and should indicate different learning approaches. In IIQ-PS:11–14 the closed Likert scale (yes/no/I don't know) questions are about suggested homework in preparation for class. The even

questions are factual questions requiring positive or negative answers about the respondents' preparation for class, and the odd questions are opinion questions. The third question in the series aims to discover if the respondents have read beyond the recommended articles, and the final question covers the learning style which is determined by extrinsic motivation, the fear of failure in assessments (Entwistle and Ramsden's 1983:36–37).

The successful attainment of the desired deep approach to learning depends on the student's relationship between their motives and learning approach (Marton and Säljö 1976:4–11). Extrinsic motivation is linked to the surface approach to learning: it concentrates on knowing what is required without necessarily understanding what it is about, or without relating it to the 'real world' (ibid.). A deep approach requires interest and a desire to know more, and it relies on intrinsic motivation. It means that a student may have to proceed from passive and active surface learning (limited to mentioning or describing) to passive and active deep learning (relating or explaining) (Entwistle 2009:34).

The aforementioned set of questions is particularly important to the study in order to understand the students' approach to preparation and independent learning. Modifications to the questions ensued in the following questionnaires in order to improve data validity. Each year the syllabus was adapted in response to the outcome of previous questionnaires (3.4.1) and AR (4.3.1).

IIQ-PS:2 and 5 (Appendix 1) are numerical questions (Figure 2) about preparation time. The objective is to find out how many hours students actually spend studying and practising Translation Memory software and Online resources after class, and how many hours they think they should spend. Both questions are followed by two related questions and the wording is similar. The first question is factual and inquires about quantity (How many hours per week do you spend on average…), while the second question has some additional wording that includes a level of quality (How many hours per week do you think you 'should' spend […] in order to feel comfortable with what you have been instructed?). Linguistic repetition as well as sequential ordering in IIQ-PS aim to increase the validity of responses (4.2.1).

The wording in the factual questions about preparation, or questions that do not include knowledge, motives or attitudes, is direct: for instance, 'Have you read…' or 'How many hours…' and the responses are organised in yes/no answers and a numerical Likert scale (Oppenheim 1992:119–150). Some of the sub-questions are opinion-oriented with a potential conceptual variable, such as the word 'helpful' in IIQ-PS:18 (If so, did you find them [manuals] helpful?). The high number of non-native speakers (hereafter NNS) among the respondents was one of the reasons to progressively modify questionnaires. The objective was to avoid conceptual variables such as 'helpful' and 'worried'. For this reason IIQ-PS:29 (Appendix 1) about the student's 'anticipated career' (conceptual variable) was omitted after the first two questionnaires. The question was replaced by a reflective question (IIQ2b:11 Appendix 3): Will you continue to use TM after completing your degree?, and IIQ3a:8 (Appendix 4): Will you continue to use TM after this module? The difference related to the point in time when the questionnaire was completed, at the end of the first or the second term.

Questions discussed in this section are mainly factual about the quantity and nature of the respondent's preparation during the module. The following section contrasts these factual-oriented questions with opinion-focused questions about the students' approach to learning.

3.5.1.3 IIQ-PS questions about the students' approach to learning

The approach to learning shapes the outcome and, vice versa, the outcome affects the student's approach to learning, which is called the student's strategic approach (Ramsden 1992:38–61). In this study the focus is on the quality of learning rather than the outcome. The success of the PB syllabus relies on suitable approaches to learning rather than outcome. The outcome in effect depends on enhanced translation skills and competences which should not be limited to the duration of the degree course. The objective of questions in Table 10 is to find out more about the students' position with regard to surface learning and deep learning. Entwistle (2009:33) observes that students need to look for the answer (deep learning) and not only acquire the mechanics of learning (surface learning). The question 'Are you worried about the

assignments?' in Table 10 is related to the concept that an assessment is a form of reward that encourages students to learn (Entwistle 2009:85). On the one hand reward encourages students to work strategically, but on the other hand it can also undo (deep) learning. In this respect the question in IIQ-PS:24 'Have you arranged proofreading?' is quite critical: it relates to the students' attitude toward peer review in the revision process of the translation portfolio. The portfolios are not part of summative assessment and the students know that the quality will not affect their ultimate grades. Hence the responses in the questionnaire are indicative of learning approach and style (see outcomes in 4.4). The question was not repeated in later questionnaires when the syllabus removed the option to organise proofreading and incorporated revision as a central activity. Meanwhile, it became a key topic in the FG discussions (4.2.3).

Questions can be organised according to a dual objective, which is to discover the students' intention of learning as well as their learning approach. The responses can be translated into surface and deep approaches, although as Ramsden (1993:51) points out students are not necessarily consistent in their approaches and change them according to the demands of particular modules.

Surface learning	Deep learning
a) Will you (re)read the articles in the folders for your assignment?	h) How important do you rate CAT tools for your future as a translator?
b) Would you have preferred the training to cover all three Translation Memories?	i) Have you read the CAT Help files?
c) How many words of the Durham website have you translated?	j) Have you studied the menu bars + functions of DVX, MemoQ, Studio 2009
d) Are you worried about the assignments?	k) Have you tried a form of Cloud-computing?
e) If so, what worries you about the assignments?	l) Have you arranged proofreading?
g) Would you prefer more instruction and less self-study?	m) Have you arranged subcontracting?

	n) Have you visited a website for translators?
	o) To what extent are the covered topics relevant for your anticipated career as a translator?
	p) Are there any topics you would like to be included in this module which have not been mentioned in the syllabus?

Table 10 Surface learning versus deep learning

Meanwhile the difference between the two approaches is distinct: the surface approach is external, oriented towards the task and its requirement (the learning might not become part of the learner's cognitive structure), while the deep or internal approach concentrates on the problem and the knowledge, experience and interests of the learner (Entwistle and Ramsden 1983:193–213). The questions in IIQ-PS about learning approaches are ranked according to Deep and Surface Learning (Table 10).The questions listed under Surface Learning relate to the completion of module (a, d, e) and homework/task requirements (c), instruction versus independent learning (b, g), while the questions categorised under Deep Learning refer to independent learning (i, k, l, m, n, p), problem-solving (i, n), interest in the subject (j, k, p), and the relationship with the 'real world' (h, l, m, n, o). Section 3.4.1 has explained variants in the later questionnaires. The following section moves on from the questions to the responses in terms of data, and modes of data collection.

3.6 Mixed method approach: qualitative and quantitative data

Qualitative data that develop from quantitative data give a deeper understanding and result in modifications in the syllabus and teaching methodology. This process is known as analytic induction (Silverman 2008:55). Furthermore, Silverman (ibid.) notes that the line between qualitative and quantitative data is less distinct than often suggested. In the study the triangulation of data collection methods is primarily complementary and contributes substantially to the process of theorising about the project-based approach and its outcome.

The views on the mixed method approach vary: Morgan (2007:48–76) conducts research from a stable paradigm, be it qualitative or quantitative, whereas this study uses research models as mental guidelines without fixed parameters. Greene (2008:7–22) argues that different methodologies can co-exist comfortably – complex issues do not respond well to a single framework; they benefit from eclectic approaches, and require various investigatory tools. For instance, the divergent results of the translation portfolios were measured quantitatively (Figure 16) because the underlying causes of the divergence were not perceived until the qualitative FG discussions had taken place. The quantitative measurement followed a qualitative method to confirm a hypothesis about the quality of the translation portfolios that had emerged during the study (4.4). The use of different methods thus opens up new perspectives: it not only confirms or provides additional evidence for findings (3.6.1), but also offers complementary evidence. Greene (2008:7–22) identifies the mixed method approach as a valid third paradigm, rather than as a hybrid version of the qualitative and quantitative methods.

Creswell and Plano Clark (2011:53–106) give many reasons for using mixed methods. The validation of other methods and/or correspondences within triangulation is of particular significance and calls for a convergent (parallel) design in which the researcher compares results of different data. Quantitative and qualitative designs can be compared or related prior to interpretation. The convergent design in this study consists of a comparison between IIQ-PS and subsequent questionnaires, including FG discussions. On the other hand, the shift from IIQ-PS to FG discussions could also be marked as an explanatory sequential design. Quantitative data collection and analysis in IIQ-PS are followed up by qualitative data collection and analysis in the FG discussions (see Creswell and Plano Clark 2011:69). The switch from quantitative to qualitative to quantitative data was not intentional but emerged from action research (hereafter AR): a new hypothesis based on qualitative data in the FG discussions, in which students expressed concerns about motivation and individual learning approaches. Their comments were analysed and linked to their performance in summative essays, which is detailed in section 4.4.1. The quantitative data were taken from the students' summative assessments as well as non-accredited reviews of the

translation portfolios. Hence the mixed methods included an exploratory sequential design, in addition to the convergent parallel and explanatory sequential designs.

The mixed method approach is an *a posteriori* strategy, in other words, its justification relies on empirical evidence that emerged during the study. As previously stated, there are different views on mixed method design, including concerns about its validity. Therefore it is necessary to synthesise the data and code study objectives in the design (Cooper 1998:78–103; 4.2.1). Potential threats to validity should be clarified in the coding or in the description of data (ibid.). As the study progressed, a mixed method design became crucial to validate such threats which manifested themselves in, for instance, incomplete findings.

The T&T module that supplied the data was fluid, and developed in new directions (4.3.1). Hence mixed methods were necessary to conduct effective research. The different methods follow the same pattern of analysis in three phases. The three analytical phases (data description, expansion, and interpretation) lie within each of the methods applied: quantitative or qualitative, convergent or explanatory. The first two phases focus on the main points of the data collection and relate to the research questions. Data description, the first phase, includes the analysis of the transcribed texts of FG discussions; it offers explanations and illustrations of the ways in which the data were organised and coded (see computer-aided analysis in 4.2.1). This method helps to establish key themes, and allows for extension and expansion, which constitutes the second phase. Coding the key themes has three purposes: a) to display the data clearly, b) to categorise and subcategorise data, and c) to make the interpretation meaningful (Creswell and Plano Clark 2011:46). Once themes and categories have been established it is possible to move to the third and final phase, which is to generalise and find coherence in the data results. Coding therefore is merely an intermediary phase or tool to compare and contrast the data results, so as to prepare for interpretation (see 4.2.1; 4.2.2.1). Coffey and Atkinson (1996:117) emphasize that analysis is not a process of deconstruction, but one of generalising in order to theorise. Qualitative analysis in particular, allows for different levels of

reflection, from the general to the specific and from different perspectives, by the student, the researcher, and by the translator and teacher.

The final phase of analysis is dedicated to interpreting the qualitative data and making sense of them. To this purpose, the qualitative analysis is hermeneutic (methods are applied) and interpretive without relying on types or formal models (Coffey and Atkinson 1996:145). The rationale for mixed method data collection is explained in the following section.

3.6.1 *Triangulation as an additional form of validation*

A mixed approach is often substantiated by triangulation, when data are taken from different sources (3.6). The original meaning of triangulation is derived from navigation and surveying, and relies on a hierarchy of evidence in a set order or with a fixed point of reference. In this study triangulation follows on from a hypothesis or hypotheses such as those underlying IIQ-PS in regard to learning styles. A particular issue associated with triangulation is how to explain discrepancies or contradictions; triangulation should not compare results or aim to confirm data derived by parallel methods (Barbour 2007:29–40). The author (ibid.) claims that FG discussions constitute a method that might produce the most authentic set of data. She accepts that her claim might be contentious and she concludes that the best way out of the debate is to consider each method, quantitative or qualitative, as capable of producing parallel datasets. Indeed, different methods such as questionnaires, interviews and FG discussions in this study are discussed in parallel and not in any hierarchical order.

Triangulation enables cross-checking to strengthen the evidence on the one hand and to exemplify the statement on the other (Rudestam 2001:114–5). To support validity, it is necessary to provide fundamentals, in other words, methodological paradigms, such as statistical numbers and non-invasive methods. Therefore, IIQ-PS has quantitative and closed questions as the starting point in this study. It is followed by a couple of interviews in order to question, confirm, enhance and expand data (3.6.3.2). The initial interviews were replaced by FG discussions after the pilot study. A FG discussion is a group interview that takes advantage of the communication

between the participants with the purpose of generating research data. Instead of a one-to-one interview with the researcher, it allows the participants to respond to each other in a variety of different ways; commenting, asking questions, listening and responding to multiple points of view. Kitzinger (2008:22) lists the advantages of a FG discussion over and against one-to-one interviews: it highlights the respondents attitudes, abilities and skills and in particular in this study, the framework of understanding; it encourages the respondents to generate and explore their own questions, as well as develop their own analysis of the problem under discussion, it provides an insight into group dynamics which might affect outcomes, it encourages open discussion and the expression of criticism, it enables the expression of ideas, views, and experiences that might not be developed in an interview, and also the illumination of the researcher's perspectives though debate in the group.

The mixed-method framework, constructed to answer the research question is a bottom-up approach. It identifies themes emerging from the data in the different methods and thus analyses to what extent the PB syllabus leads to an enhancement of competences and skills. The aggregated themes should ultimately constitute a theory. A mixed approach may lead to data triangulation, in other words, 'mapping' one set of data upon another (Silverman 2006:17) or allowing the data derived from various methods to complement each other. For instance, where IIQ-PS responses lack detail or prompt further inquiry, FG discussions and later interviews fill the gap. In the study, quantitative and qualitative research techniques complement each other and thus generate data triangulation. There were instances when a) initial qualitative research (to explore a particular field) led on to quantitative study and b) quantitative data in IIQ-PS (Table 11) that set the parameters of the field were followed up by qualitative study to probe further (Silverman 2008). On the one hand, the succession of qualitative research followed by quantitative research is exemplified in 4.4.1 where quantitative assessment data (summative essays) are used to determine why non-accredited work (translation portfolios) showed a relatively poor quality. On the other hand, quantitative data in IIQ-PS to identify the extent to which the syllabus covers vocational requirements are complemented by further qualitative research in FG discussions, which is defended in the following section.

3.6.2 *Validity of qualitative data in the study*

The hypothesis that the project-based syllabus, supported by an appropriate level of learner independence enhances the student's professional competence (3.2) is validated by the analysis and interpretation of the collected data that are described and discussed in a variety of methods. Its legitimisation is provided in the methodology on the one hand and by agreement in the student domain. The former is easier to demonstrate than the latter, and it should be noted that agreement of, and by, students is more likely to be generated from a sound teaching methodology and pedagogy. Validation of the appropriateness of the PB syllabus and independent learning is established in the responses to the questionnaires and confirmed by subsequent FG discussions, interviews and email exchanges.

Section 3.6.3.2 explains why it was decided for predominantly logistic reasons to discontinue the interviews. Subsequent FG discussions provided an abundance of data, after which it became desirable to introduce semi-structured interviews to focus on particular aspects that needed particular attentions, such as learning behaviour. This series of interviews was conducted after the three-year study (see 4.1). The mapping of sets of data on top of each other in this study has become a synthesis which generates evidence. For instance, evidence acquired at a particular moment such as IIQ-PS becomes the starting point for generating new evidence. New evidence generated in two subsequent interviews (3.6.3) is then incorporated in the previous evidence generated by IIQ-PS. This is repeated after any subsequent data collection, including, for example, FG discussions and interviews. IIQ-PS becomes a benchmark and following data are incorporated in IIQ-PS evidence. During the process, the researcher needs to safequard validity.

Particularly in predominantly qualitative analyses such as interviews and FG discussions, the researcher needs to make inference rules clear and indicate when, and if, suppositions are met (Cooper 1989:104–156). A rule of inference in the study is that if the PB syllabus encourages and enhances translator competence and skills (premise), then all students who follow the PB syllabus will acquire improved translator competence and skills (Summary and conclusions). Inference requires the

researcher to be explicit about assumptions and inferences, secondly to address issues that endanger validity, and thirdly to using multiple methods (Cooper 1989:104–156). The three conditions are met in the study: an example can be found in section 4.3.1, where it is shown that IIQ-PS and the subsequent interviews have an unexpected outcome, and therefore do not entirely prove the premise that the PB syllabus encourages, or enhances learner independence. Incorrect assumptions as well as environmental influences (4.1) can affect validity. Such instances are addressed and verified by means of triangulation. Another instance is explained in 4.4.1, when the quality of the translation portfolios does not match the anticipated outcome of independent learning. In sum, the study is not so much trying to generate a new theory, but aims to verify an emergent theory (Glaser and Strauss 1967:21–158).

3.6.3 *Rationale for interviews*

Two reasons for conducting interviews as a follow-up to a survey can be to probe further and to rephrase questions which have not been answered fully. A third reason, which is to ask questions that had not been asked in the preceding questionnaire lay behind interviews which were conducted with two students several months after IIQ-PS. Background and further details to the interviews are given in section 3.6.3.2.

3.6.3.1 Interviewing techniques and strategies

Exploratory interviews (containing new questions), or depth interviews (probing based on previous questions or rephrasing them) can help the researcher develop further ideas or research hypotheses. Saris and Gallhofer (2007:60–76) approach interview techniques in a slightly different way to Oppenheim: they focus on the micro elements which constitute questions. Rather than analyse the interview (see Oppenheim 1992:65–80), Saris and Gallhofer (2007:60–76) study the survey items (the questions) to distinguish the various components. The authors suggest that in an opinion survey (cf. IIQ-PS), an item can contain an introduction, a motivation to encourage the interviewee to answer, information about the content, information about a definition, an instruction, and a request for an answer. Open-ended questions were asked in the

face-to-face interviews, which are discussed in 3.6.3.2. The questions did not need an introduction, because the respondents had been involved in the processes that were addressed in the questions. An element of motivation in the questions to encourage response was not considered necessary either, as respondents who had agreed to participate in the interviews had shown motivation by giving their consent to be interviewed, in contrast to some students who had not responded to the invitation. Although the participants were familiar with the topic of the interview, which was about the T&T module they had attended, some informative background was needed so that they understood that the objective of the interview was to discover further details about IIQ-PS responses to the syllabus.

3.6.3.2 Qualitative interviews

Interviews, either face-to-face or by email, as well as FG discussions, give IIQ-PS additional validity. Several characteristics of interviews, as identified by Noaks and Wincup (2004:80) are applicable to the pilot study. Two students were interviewed successively on 22 July 2010 and they were asked identical questions. The interviews followed a semi-structured and open-ended pattern. In semi-structured interviews the interviewer probes and builds a rapport with the interviewees, meanwhile focusing on the aims of the project, while in the open-ended interview, the interviewer is flexible, engages with the interviewees and listens actively (ibid.). In comparison, in a FG discussion the interviewer stands back from the discussion and is a facilitator who allows group dynamics to develop freely. Although real-time interviews can be guided, the outcome cannot always be controlled. The interviews were held in a coffee shop due to a shortage of suitable classrooms, and although the environment was relaxed which facilitated the flow of the interviews, a recording could not be made and only notes were taken by the interviewer. For extrinsic (logistic) as well as intrinsic reasons (outcome) the interviews were not repeated and they were followed up by FG discussions (3.8.2).

The objective of the interviews was to give IIQ-PS added validity by asking further details. The following questions were asked:

- Should the TM part of the module be contained within one term or run over two terms?
- Was the practice material in the syllabus appropriate for the (translation) tasks?
- What were the dis/advantages of translating from English into the second language (L2)?

The first question relates to the acquisition of competence and skills, while the second and third questions are inquiries into the students' views of the syllabus and learning approaches. The two latter questions are directly related to the PB nature of the syllabus that aims to raise the students' awareness of their approach to independent learning. They are covert by nature, because although the students were informed about the purpose of the interview as part of their teacher's research, the questions lacked an introduction concerning the underlying objective of the questions to discover their learning approaches. These questions were refined in face-to-face interviews after the three-year study (3.8.2).

3.6.4 *A rationale for qualitative data*

This study relies mainly on qualitative data and the proportion of quantitative data is small (only four out of forty-three questions in IIQ-PS are numerical, as illustrated in Figure 1). Pope (2008:63–81) offers a simple explanation for the difference in the analysis between qualitative and quantitative data: the analysis of quantitative data follows the completion of the collection stage. It is not possible to return to the activity of data collection or to modify the process. In comparison, the collection of qualitative data during the interviews and FG discussions (in this study) allows the researcher to intervene, to prompt and direct during data collection. Moreover the researcher can probe further during for instance, FG discussion and interviews based on comments and responses made by participants and respondents. During the data gathering process, the researcher thinks about what has been said, which means that the analysis has already begun. Pope (ibid.) observes that the purpose of qualitative data is to generate and develop analytical categories and theoretical explanations. The categories (called nodes in computer-aided analysis) that emerged from FG discussions in the study were not pre-planned (4.2.1).

In this study qualitative data analysis is best suited to test the students' response to the PB syllabus and teaching methodology. It moves through different stages of data management, such as questionnaires, recordings, transcripts, followed by a stage of description and explanation. It is distinct from quantitative data analysis in that it looks for naturally emerging themes from the data. Initially, the theory underpinning this study was inductive to some degree: the PB syllabus and teaching methodology rely on the premise that they enhance both academic and vocational translation skills. However, during the study new interpretations and theories emerged that were deductive rather than inductive. For instance, from IIQ-PS:28 it appeared that thirteen out of fifteen students would have preferred more instruction and less self-study, which led to the supposition that independent learning was not familiar to all. A wholly quantitative analysis would not have suited AR: it would have been inductive and finite.

A further argument for qualitative data analysis in the study is that it enables the researcher to view qualitative data from different angles and move backwards and forwards in a non-linear fashion between data and emerging interpretations (4.2.1.2). The categories in IIQ-PS were set up deductively to explain the data, which also explains why they were modified in subsequent questionnaires after the pilot study (3.1.4). The categories were data-driven in a thematic fashion. Data can be organised according to commonalities, relationships and differences prior to analysis (Pope 2008:69). The thematic approach infers searching for grouped themes within data. This method produces bottom-up grounded theory in which the initial theory is created by generating and clarifying concepts in the data analysis. Grounded theory is based on and comes out of a thematic analysis. In section 3.1.2 it is explained that the sample in the pilot study could not achieve full saturation, one of the conditions of grounded theory, because a one-year degree course does not allow for comparative analysis or follow-up. Therefore, additional methods were applied in the following two years to test the hypothesis that project-based learning offers new pedagogical resources to teach, and to learn about the complexity of professional translation. This element of flexibility is a feature that does not conflict with qualitative analysis (Glaser and

Strauss 1967:161–183); on the contrary, it is a much more creative approach that may lead to new theories.

3.6.4.1 Focus group as a qualitative research method

A year after the interviews in the pilot study, FG discussions were held with select groups of students, who had been involved in the management of the portfolio translation projects. All discussions were transcribed and permission was sought from the students so that data from FG discussions could be used for the purpose of this study (3.7). It is argued that FGs do not a represent a standard qualitative research method, but that they function as a supplementary method (see Bloor *et al*. 2000:1–19). FGs, however, have particular features that lend themselves perfectly for qualitative research. Barbour (2008:132–188) highlights their characteristics, uses and abuses, or challenges in order to appreciate their highly productive and qualitative method for data collection. Furthermore, she (ibid.) observes that they provide an insight into process rather than a focus on outcome. The author emphasizes that FG discussions should not be used to create a consensus on a hypothesis or an anticipated outcome.

In this study the FG discussions were conducted in order to find out about the nature of the students' learning process without a focus on the results of their learning. Any researcher who leads the discussion will nevertheless have an agenda: in the pilot study there were planned open-ended questions, but they functioned as triggers to set off the discussion. They were not planned as open-ended questions that should be discussed at length. Table 11 demonstrates how some of the questions either emerged spontaneously or were rephrased in the parallel discussion. The reason for the planned questions was to give the discussion a semi-structured framework. (FG discussions emerged from IIQ-PS and were held in the second and third years). The parallel discussion did not include all questions, because they were either inappropriate or had already been covered, and some comments triggered new questions. In FG 1 questions 1, 5 and 6 were planned, the others were spontaneous. FG 2 is a parallel discussion and not all planned questions needed to be asked:

Focus Group Discussion 1	Focus Group Discussion 2
(2nd year of study) 13 June 2011 Duration 54 minutes	**(**2nd year of study) 16 June 2011 Duration 45 minutes
Planned question 1. If each one of you could take the microphone and say in turn how you benefited from the Project Management (PM) activity	**Planned parallel question** 1. How did you benefit from being a PM?
Spontaneous questions 2. What had you learnt by the end of a year of PM?	2. **Not asked**
3. You as one of the project managers ran the team almost on your own – how did you find that, convenient or inconvenient?	3. **Not asked**
4. What happened to the revision task at the end? Was it completed?	4. **Not asked**
Planned questions 5. What about reversing the order of the two modules and starting with translation memory. Would that improve the situation?	**Planned parallel questions** 5. What about reversing the order of the two modules and starting with translation memory?
6. Should the project management team change its members after one term?	6. Should the project management team change its members after one term?
	Spontaneous question 7. Should we offer placements to members in class?

Table 11 FG Questions on personal benefits of the project management activities

The degree of structure and spontaneity in a discussion as well as its balance depends on how the researcher leads the discussion. There are also other factors, which might influence form and content of the discussion. Barbour (2008:132–188) suggests that participants may firstly be saying what they think the researcher wants to hear, and secondly, they may consider peer group disapproval before they express their opinions, which questions the validity and/or reliability of the answers. The participants in the FG discussions in this study did not have detailed knowledge of the

researcher's objective, so that it was unlikely that they would tailor their answers. As to peer-group pressure and fear of disapproval, it should be noted that the students had worked together in workshop sessions of two hours for nine or eighteen weeks. In addition, most students that participated in the discussions belonged to project management teams which had collaborated closely – it was therefore assumed that they knew each other's opinions.

Morgan (1993:3–88) also refers to the rather unsettled position of FGs in qualitative research. He clearly identifies and categorises what he calls myths about FGs: they 'appear' to be cheap and quick. It is demonstrated in Chapter 4 that this was not the case during this study: the transcriptions required much time, and considerable effort and organisation was needed to find a suitable number of participants to meet at the arranged venue at the agreed time. Morgan (ibid.) does not mention 'spontaneity' in the FG (see Barbour 2008), but discusses 'naturalness'. Whereas Barbour (2008:132–188) claims that the FG could be placed midway between observational fieldwork and one-to-one interviews, Morgan (ibid.) describes the FG discussion as more natural than surveys and less natural than observations. In this study, FG discussions take up a middle position between highly natural AR and controlled questionnaires.

3.6.4.2 The transcription of focus group discussions

A total of three FG discussions were held during this study, the first one after both parts of the T&T module were completed in the second year, the second and third at the end of either part in the third year (Appendices 9–11). The transcriptions include all speakers and it is indicated where speech is inaudible and an interpretation is given of missing data. Participants are identified by numbers as far as possible. Although it cannot be guaranteed that the identification of individual participants is accurate, this should not affect the data as such. The transcription is not as precise as would be required for discourse analysis. Unfinished or interrupted speech, as well as interjections, such as 'mm', 'eh', have not been transcribed. Although Bloor *et al*. (2000:58–73) claim that speech should be transcribed as it occurs and not 'tidied up', laughter and interjections were not considered relevant to the expressed opinions and

they have only been included occasionally. It should be noted that the participants were sitting in a circle and had to wait for the microphone to be passed to them before they could speak, which meant that utterances were completed before the microphone was passed on, and that there was some time delay during the handover of the microphone and a subsequent lack of immediacy in the responses. Occasionally, the microphone was not passed to a participant, which led to a slight degree of inaudibility in the recording. Furthermore, most participants were non-native speakers, which meant that their speech was often slow and deliberate and well-considered. Native speakers were more likely to take the microphone rather than wait for turns. There was also some unfamiliarity with recorded FG discussions, and as a result turn-taking was slow and ordered at the beginning of each recording. The microphone would be passed to a neighbour as a matter of fact, and only when the participants relaxed did responses become more natural and did response time shorten.

Identification after the discussion and during transcription was made more difficult because in order to maintain anonymity, names were not mentioned during the discussion. Bloor *et al*. (2000:58–73) suggest that a distinction should be made between identified and unidentified speech. However, in this study the content of all utterances was more important than their linguistic format or the relationships between the participants.

3.7 Ethical issues

In order to assure research and data integrity, the policy and code of practice of Durham University has been followed closely. The five questionnaires in this study were approved by the committee of ethical conduct of the School of Modern Languages and Cultures. Research ethics are often considered equal to the impact the researcher might have on the respondents (O'Leary 2004:41–55). Ethical research methods require that the researcher uses official channels and protocols, which in this research process consisted of a research ethics monitoring and approval form managed by the School. It included a signed agreement that distance to the subjects would be maintained in order not to take advantage of individuals. Ethical clearance was

acquired in writing from the School for each version of IIQ (Appendix 6). The following sections give details of the ethical process.

3.7.1 *Students as respondents*

Immediately prior to answering the questionnaires, respondents were informed verbally by the researcher about the purpose. They were told that there was no obligation to complete the questionnaires if they did not wish their anonymous responses to be included in the research analysis. Out of the 140 students who completed the questionnaires (five in total), one student did not return the questionnaire. In the case of emails, students were asked for permission for their responses in emails to be quoted or incorporated in this study. None objected. Recorded FG discussions and interviews were preceded by a verbal request for the material to be used for research purposes, as well as the option to withdraw (Appendix 10). Students were also given the opportunity to attend the discussions without participating. One student chose this option and became an observer. The interviews opened with the students signing a form of consent.

The researcher's openness about research is paramount for students to respond well. There needs to be personal interest, choice, information and understanding on the side of the students as well as clarity on the side of the researcher with regard to the nature of the action, its purpose and correctness. Researchers need to ask themselves a) whether their relationship to the respondents affects the quality or quantity of the response and b) if the respondents deserve their moral consideration. In other words, what is the researchers' justification for their research? Does it have intrinsic, independent value or does it have instrumental value for others?

3.7.2 *Quality assurance requirements*

In the statute of the Quality Assurance Agency for H.E. in the UK the core principle reads 'Quality assurance is all about guaranteeing the standards and quality of educational provision'. [http://www.qaa.ac.uk/Publications/InformationAndGuidance/Documents/What-is-quality-assurance-text-version.pdf]. Hence, the core

objective of quality assurance is to enhance the student learning experience. Quality assurance requires research to add value, and to be reflective and evaluative. The aforementioned document also states that the students' involvement in and influence on the educational experience can be achieved through offering feedback on the programme by for instance, filling out questionnaires and surveys about the course, and by contributing their views through FGs. The questionnaires and FG discussions in this study served these functions but not by initial design. The questionnaires were planned for the researcher to learn the students' views in order to enhance both teaching and learning experience. The FG discussions emerged from the questionnaires and proved to be an asset in the process. The emerging data were rich: they allowed the students to express their views as well as inform the researcher how (well) the syllabus and programme were functioning.

3.8 Qualitative research and its limitations

The survey in the pilot year and following years is called random because the students were not selected. It involved the complete cohort of students available at the time of the questionnaires. The disadvantage of this approach is that it is not possible to exclude deviants. Deviant respondents were included in IIQ-PS, but they were not part of further questionnaire activities, such as FG discussions, when the sample of respondents became purposive. Such a process of sampling is a form of criterion sampling, where students are selected to match the criteria of the study (Rudestam 2001:87–204). After the pilot study, the researcher determined which data needed further probing. In the second and third years, the participants in FG discussions (3.6.4) were selected among students who had run project management activities. Their responses generally related to their experiences of revision activities or database building (2.4.4). Member checks were substantiated by returning to respondents in order to obtain validity and reliability of the findings. This was not achieved by submitting the findings to the students, but by asking in-depth questions associated with the findings (3.6.3.1). Interviews and FG discussions offered voluntary

information and the researcher could probe further. The pilot study thus became a study of inquiry.

Random selection was part of a series of limitations in this study. Because the outcome of the teaching methodology was not known at the time of data collection, samples of students could not be selected according to pre-defined criteria. To resolve this difficulty, Strauss and Corbin (1998 cited in Rudestam 2001:87–204) propose several forms of sampling at different stages of a study. Hence, there was a progression from questionnaire to a limited number of face-to-face interviews in the pilot study, followed by FG discussions in the next two years. The decision to move from face-to-face interviews to other sources of data collection was related to validity: the number of available students was not sufficient to validate the outcome of the interviews. Examinations and vacations restricted availability, and there were ethical reasons: students that were not invited to the interview might consider the activity prejudicial. Furthermore, selection created a limitation because students who had appeared to have difficulty managing the process-oriented approach did not respond to the invitation to be interviewed.

Limitations of qualitative research are set not only by the availability, willingness and attitude of the respondents, but also by open-ended questions and their unpredictability. For this reason triangulation and cross-checking by other methods than questionnaires are indispensable to overcome limitations and to validate results (3.6.1). Computer-aided analysis is one of the methods; its advantages and drawbacks are discussed in the next section.

3.8.1 *The application of computer-aided analysis*

A computer-aided analysis (hereafter CAA) programme QSR NVivo was used to analyse the first set of FG discussion data. It is a qualitative software package that helps the researcher to code data and can thus improve qualitative data validity in the analysis. The arguments in favour of software analysis are its clear organisation, ease of retrieval, objectivity (of selection), and completeness, which increase validity. Subjectivity depends on how the researcher manages, organises and labels the selected

data. The software lists all occurrences of the concepts/words/utterances it is instructed to find. The user can play with the data, change the categories, try different analytical approaches and thus the software facilitates a greater depth of analysis (Phelps *et al.* 2007:207–217). It supports two kinds of research approaches, theory building as well as the descriptive/interpretive approach, which are both applied in this study. Data collection in the descriptive/interpretive approach aims to achieve an understanding into the situation (Phelps *et al.* 2007:207–217.). For this purpose the software helps to examine the transcripts for topics or themes, it breaks the text into segments and attaches keywords or codes, and links segments according to themes (Phelps *et al.* 2007:207–217). The utterances in the transcriptions of the FG discussions (3.6.4; Appendices 9–11) were entered manually into the programme and were given rates of frequency in percentages by the software. The labels of the categories are set up by the researcher. This type of coding is called open or axial coding (Creswell 2007:237): one of the codes is identified by the researcher as the central phenomenon. The next step is to return to the database, the FG discussion, to determine what caused this phenomenon to occur, which actions were employed by the participants in response, what context or environmental circumstances might have influenced the strategies (by the students) and what consequences resulted from these strategies. Sections 4.2.3.1 and 4.2.3.2 illustrate how participants in the FG discussions describe what actions they needed to take in the revision process to turn around unsuccessful revision procedures.

The criticism of CAA tends to concentrate on the way it codes, or categorises, and labels themes. Coding is sometimes described as a process of data simplification and reduction which potentially complicates the analysis, because it expands, transforms and reconceptualises data (Coffey and Atkinson (1996:29). Moreover, the coding process can be subjective in that it allows the researcher to select and create categories and subcategories, in conformity with the objectives of the research. The labels of the nodes (labels of categories) depend on the starting point, either from the student's perspective (academic grading, enthusiasm, egotism), or from the researcher's standpoint (academic knowledge, professional competences, learning approaches) which was adopted in the study.

CAA was only applied to the first set of FG discussions. The application of NVivo in the FG discussions in the third year was not considered appropriate mainly due to curricular changes, as indicated in 3.1.4.1. Similar to IIQ-PS in the first year, the FG discussion in the second year was split into two discussions in the following year with focus and questions in line with the respective modules, translation memories or online resource. Meanwhile, the second module Online Resources was affected by an additional curricular change, which was the introduction of an Intercultural Project Management module in the degree, which meant that the number of students attending the second T&T module decreased by 25% and those who had opted for the module Online Resources were not primarily interested in project management. Interestingly, references to 'project management' in the FG discussion during the second term were made by the researcher (Interviewer) only, and in the third discussion the focus shifted to terminology related to a lack of interest in overall project management. This was in stark contrast with the first FG discussion in which the node project management attracted the most references (see 4.2.3; Figure 10).

Consequently, the FG discussions in the third year were treated as independent entities with emergent themes (see Appendix 12) (4.2.3.2). Although the researcher determines the categories and nodes, it would have been difficult to find commonalities in the second and third year FG discussions. Because the researcher was trying to map data concerning particular translator competences and skills, it was decided to treat the first set of FG discussion as a suitable benchmark and to measure relevant utterances in the following FG discussions against it in order to achieve continuity and validity. It was clear that the second and third FG discussions might produce deviating numbers of references within the nodes, which was likely to undermine the quantitative validity of CAA. The researcher therefore opted for the qualitative value of the utterances and matched the references the three discussions had in common.

NVivo searches for quantitative validity and it is retrospective. Although a new CAA analysis of the three discussions combined was considered, it risked taking the research into a different direction. AR requires a forward looking approach to data.

For instance, if students no longer require the project management experience, the module would need to be adapted (see 4.2.3.3), which was performed in the following year (4.2.3.3).

3.8.2 *Research design and refinement*

In the course of the three-year study some incompleteness of data was observed. In the pilot-study year limited interviews with open-ended questions were held immediately after IIQ-PS and they were intended to fill in gaps. The researcher took notes during the interviews, but considered the process incomplete and unsatisfactory. The pilot study was not and could not be longitudinal due to the limited time of one or two terms during which the researcher could collect data from a particular cohort of students. The group interviews in the form of FG discussions in the second and third year of the study were less inhibitive to students and included more students covering a broader range of competences and skills. Furthermore, the interaction between students provided data that were richer compared to the face-to-face interviews in which the interviewees were responding to the researcher, their teacher and not to peers (3.6.3.2). Moreover, the FG discussions were recorded digitally and transcribed, which enabled a more satisfactory data collection. Face-to-face interviews (4.1) were resumed in 2012–2013, the year after the study was completed, and they were well structured. They were recorded in a suitable room and transcribed, and the same questions were repeated to each student. They were part of ongoing AR and their objective was to probe further into issues that had emerged during this study, or into research questions that had not been answered satisfactorily. The questions and rationale of a few interviews following IIQ-PS are discussed in detail in the following section.

3.8.3 *Additional face-to-face interviews*

The first set of interviews in the pilot study contained direct and personal questions about the students' responses to the syllabus (see 4.3.2). In the following set of interviews, held after this study, three students were asked indirect questions about the

syllabus (independent variable) and their learning approaches (dependent variable). The objective was to establish which professional translation skills needed to be taught and how to create the appropriate learning environment (see Kiraly 1995).

The students in these supplementary interviews were selected carefully to include a variety of learning backgrounds and ethnic origins. In regard to language proficiency (independent variable), the English student considered herself bilingual as she was educated in international schools (and then took her BA degree at Durham University); the Chinese student was monolingual and this was her first year abroad; the Indian student was multilingual (English was her lingua franca) and this was her first experience as an international student. The interviews were held in May 2013 after the submission of translation portfolios and essays, but prior to the return of grades and feedback, so that responses were not affected by the students' results. Academically, the three students were good students; they were conscientious and produced work above the pass level. A fourth student who had expressed uncertainty about the syllabus and learning requirements during the module had not responded to the invitation.

Prior to the interview it was explained to the students what was involved in the interview, the purpose of the work and the researcher/interviewer's commitment to preserving the anonymity of the participants. They were given the opportunity to ask questions about the research and they had each signed a consent form. Ethical approval of the interviews had been granted by the School.

Each student was asked the same questions, although not necessarily in the same order, depending on the course of the interview. There were two sets of three questions in the interview. The first set was about the student's relationship with the topic of the module, and the second set of questions was an inquiry into the student's learning process (Appendix 13). The rationale behind these interview questions was to assess the level of understanding the three students perceived to have achieved and to assess the pathways they had chosen to reach their goals. The outcome of the data analysis relates directly to the benefits of the PB syllabus in translator training.

Concluding remarks

This study is based on the theory that a PB syllabus will enhance professional translation competences and skills. It is inductive and arrives at conclusions based on examples, and therefore it is understandable that the theory evolves as data are collected (Rudestam 2001:107). Incomplete sets of data are common in empirical research and can destroy justification and representativeness of a study if they are not addressed (Molenberghs *et al*. 2007:371–388). During the pilot study, data collection was envisaged to be longitudinal, but the intensive one-year postgraduate degree was better suited to a mixed method approach. The IIQ-PS questionnaire was the foundation of data collection but became part of a mixed method approach and ongoing AR. Consistent with the nature of AR, particularly during the interactive FG discussions, this study intensified its examination of the students' learning approaches in relation to the T&T module. The success of the PB syllabus relied on a suitable learning approach without which an enhancement of translation and translator competences and skills would be difficult to achieve.

The questionnaire in the pilot-study year was set up to investigate the students' approach to the syllabus, the PB teaching methodology as well as their personal learning. In the following two years the questionnaires were modified for two reasons: to improve the quality of the data and to acquire a deeper understanding of the students' learning approach to the teaching methodology. For instance, direct questions about competences and acquired skills were considered redundant, or replaced by inquiries into learning approaches. The inquiries in the questionnaires, interviews and FG discussions were purposefully set up to ascertain where the syllabus was successful in achieving the learning objectives (3.1). In comparison to the other methods of inquiry FG discussions can be data rich and can move research into unexpected directions: they do not allow a tight structure or control and the researcher is an observer.

The different methods of data collection were integrated in AR in the second year of the study. Data had emerged from the IIQ-PS which deserved more and deeper investigation. Environmental circumstances and conditions, the availability of subjects

and timing (after the third term had ended) led to the decision to discontinue the initial interviews. However, when these limitations were addressed in a second set of interviews during AR, but after the three-year study, the data were rich and satisfactory. The FG discussions were a practical response to limited participation of subjects in the initial interviews, but also followed on from questions and data in IIQ-PS and following questionnaires. AR became the umbrella of the mixed methodology of data collection in this study: it provided a form of data quality control and an assessment of the teaching methodology, which are detailed in the analysis in the following chapter.

Chapter 4

4 Data Analysis

The objectives of this study are to measure the effectiveness of the syllabus that underpins the project-based (hereafter PB) teaching method and to discern what steps students need to take in order to achieve independent professionalism (see Introduction). In examining the literature in Chapter 1, the following questions were discussed:

- where current teaching methodologies fall short in preparing trainee translator students
- which theories support PB teaching
- how students actively engage with the construction of their knowledge
- how they interact with the syllabus.

This chapter analyses the data gathered in relation to these questions. The data are described, analysed and interpreted, so that they can provide the information as to what extent the PB syllabus combines theoretical background and practice; how the process-oriented PB approach benefits the student, and how the syllabus assists the students in the construction of proactive knowledge as well as in the development of translator skills and competences.

The analysis of the data consists of three distinct phases: 1) a description of the data typology, 2) in-depth analysis, and 3) interpretation. The initial data, mainly qualitative, were gathered through the In Itinere Questionnaire Pilot Study (hereafter IIQ-PS), followed by a variety of qualitative data collection methods: interviews and focus group (hereafter FG) discussions. Certain quantitative data were derived from IIQ-PS questions (4.2.1; 4.2.4), and others were based on the outcome of assessments

in the final year of this study (Figure 16). The description of the data (first phase) consists of the explanation of the background content from which the data arise. The actual data analysis (second phase) continues from the description phase (Wolcott 1994:36 in Coffey and Atkinson 1996:9). The researcher expands and extends the data in the description: the expanded description thus functions as a transition phase between objective description and subjective interpretation (third phase), also referred to as complementarity (Creswell and Plano Clark 2011:53–106). The subsequent interpretation phase demonstrates the researcher's understanding and conclusion of what is going on. The principle applied here can be summarised as follow: whereas the data analysis is structured, systematic, and controlled, the data interpretation is free and open-ended. In this study the phases are applied to qualitative as well as quantitative data analysis, and to the mixed method approach, which is discussed in more detail in section 3.6.

The first three sections in this chapter will explain the validity of the data, the type of data, and the impact of the PB syllabus on the teaching methodology. The remaining sections 4.4 and 4.5 consider the process of benchmarking and assessment in relation to benchmarks, and bring findings in the study to a conclusion.

4.1 Response validity in IIQ-PS from an environmental perspective

Environmental influences in this study were the extraneous variables that affected the data. Two kinds of extraneous, in other words undesirable, variables were recognized: those that are beyond the control of the researcher, such as the students' previous educational learning environments and environmental conditions that are generated during the degree course, which can be influenced to some degree by teacher and students themselves. The students' previous educational learning environments can be categorised as teacher-centred or learner-centred. The assumption that with little or no knowledge and/or experience of TM, students are equal in the way they manage the PB syllabus proved incorrect. IIQ-PS contains indirect questions on learning behaviour (see Table 12), but there is also one direct question which asks if the

students would prefer a teacher-centred approach under the heading ‘Instruction’ Table 12). The almost unanimous positive response may correlate with the students’ previous learning background, which may have been teacher-centred. The effect of different educational backgrounds on the PB syllabus and pedagogy is discussed in detail in 4.4.2 and some examples of opinions expressed in reflective interviews after the study are included in this section.

The potential environmental impact on responses in IIQ-PS will be viewed from the academic perspective within the context of the MATS degree at Durham University of one year. The following categories could influence the students’ responses: academic work pressure from other modules, materials used in and for the T&T module, instruction and motivation. Table 12 contains four questions about academic work pressure. There are fifteen respondents to IIQ-PS; the number of responses in the table is given in brackets. The first question ‘Is [a high level of self-study] realistic considering your current workload?’ receives a confirmative response (13 out of 15). The respondents expect a high work commitment in the T&T module and consider it achievable. They agree that one hour a day of self-study is to be expected and acceptable. However, in the following question about the number of hours they spend practising, the responses vary. Two respondents state five hours (which is one hour per workday) and three respondents state seven hours (which is one hour per weekday), which matches the statement preceding the first question ‘This module requires a high level of self-study, at least 1 hour per day’ (Appendix 1). The majority select three hours, which is less time than recommended. This might agree with their response to the following question in which they claim that their practice time is determined by the pressures of other work. If their practice time has increased, as they indicate in the fourth question, this might have happened at the expense of other modules. If this is so, it means that students can and do manage their time, and that the teacher can influence their efforts by addressing their intrinsic motivation to invest time.

Extraneous variables	Questions in IIQ-PS	Student responses
Academic work pressure	This module requires a high level of self-study, at least 1 hour per day. Is it realistic considering your current workload?	Yes (13), No (2)
	How many hours per week do you spend on average on the T&T module outside lecture hours?	1hr (1), 2hrs (2), 3hrs (5), 4hrs (0), 5hrs (2) 6hrs (0), 7hrs (3), 8hrs (1), 9hrs(1), 10+hrs (0)
	Is your T&T practice/study time determined by the pressures of other work?	Yes (12) No (2)
	Practice time has increased/decreased over the weeks	Increased (13) Decreased (0) No answer (2)
Materials	Have you read today's readings? Folder 1 (preparatory)	Yes (8) No (5) No answer (2)
	Folder 2 (follow-up)	Yes (5) No (9) No answer (1)
Instruction	Would you prefer more instruction and less self-study?	Yes (13) No (1) No answer (1)
Motivation	Will you (re)read the articles in the folder for your assignment?	Yes (100%)

Table 12 Extraneous variable influencing IIQ-PS

The PB syllabus enables students to take ownership of their topics in the translation portfolios (personal choice of webpages for translation), which should raise their motivation. Furthermore the authenticity of weekly topics, such as Q&A participation on the ProZ.com web site which contains a translator forum, takes students closer to the workplace and could heighten their interest.

If time pressure is an issue it might explain why some students have not read the suggested academic or professional translator sources. Eight respondents read the suggested preparatory readings (five did not), and five read suggested follow-up material (nine did not). In reflective interviews after the three-year study, several interviewees offered different reasons for not reading the suggested sources, which are closely related to their level of independent learning rather than environmental issues: they claimed they needed to understand the relevance of the articles or chapters to the lecture/seminar/practical sessions as suggested in the syllabus, and one interviewee

responded initially that she had not understood that the sources needed to be read (prior to the seminar):

> Yeah I think the reading I did helped me a lot when I was trying to figure out what was going on in my head in my mind [sic] and actually I did not know that you required us to do some reading that was on the list but I just searched out the internet.
>
> (International student 2013)

It appears that for this particular student it was not clear how to manage the PB syllabus and it was not natural to take personal responsibility for studying the topic. This might be ascribed to the extraneous variable that she came from a different, more teacher-centred environment, which she explained during the interview. In comparison, a home student found the suggested readings 'really' relevant to the topics we were doing in class:

> If I hadn't read them I know that my blog findings [the student's online reflective learning diary] would not really have made much sense. They [blogs] weren't really coherent but the readings provided like either something to question, or they agreed with what I had found, which was promising, so that I think that without the reading I would not have been able to write an essay.
>
> (Home student 2013)

In the interview, the home student explained that she had been educated in international schools which followed modular curricula. She expressed an understanding of the PB syllabus and independent learning. She demonstrated natural interest and motivation, although the mention of the summative essay as a reason for reading the sources (see quotation home student) indicates extrinsic (utility value, see Dörnyei 2000:524) rather than intrinsic motivation (interest value).

In sum, there might be environmental reasons for a relatively low number of students reading the articles or chapters for preparation in advance of seminars, but there are also personal reasons closely related to motivation and associated learner independence. The second reason of the home student for reading the articles can be classified as extrinsic motivation: a fear of failure that drives students to read for assessment purposes. Her reason might explain the positive response to the final

question in Table 12. Environmental circumstance can influence data, but ultimately it is the teacher who guides the students in class. The international student was seemingly unaware of the expectation that articles listed in the syllabus should be read in preparation of class. This can be addressed by the teacher through clarity and explicitness in the presentation of the syllabus, which is available online, and updated in accordance with the progress of the module.

The sections in 4.2 will subject the same data to further scrutiny from the quantitative perspective, over and against qualitative data, categorise qualitative data in FG discussions, and review IIQ2 and 3 in relation to IIQ-PS.

4.2 Qualitative and quantitative data

It has been traditionally assumed that the risk associated with quantitative data is that the hypothesis is tested to such a degree that there is no room for the consideration of a plausible hypothesis or new styles of quantitative analysis, which may lead to the generation of new theories (Glaser and Strauss 1967:185–222). This study consists of mainly qualitative data analysis; quantitative data have generated qualitative data and some qualitative data have been categorised and quantified to generate different points of view and more validity (3.6.2). The data in the following sections were collected to check assumptions concerning the design of the PB syllabus. The hypothesis that the syllabus enhances translator training is induced from close data analysis, in other words, the data do not intend to defend an existing theory.

4.2.1 *Numerical responses in the pilot study questionnaire*

The numerical questions in Table 13 are about the students' professional approach to translation (word count) and their concept of training for the translation profession. The responses in IIQ-PS are not conclusive – overall the respondents ticked a wide range of percentages: one respondent considered the topics totally relevant, half the respondents considered the module 75% relevant to their anticipated career as a translator, while half selected indicated between 25% and 50%. The question was

discontinued in subsequent questionnaires, because the response was inconclusive and the assumption that students would pursue a career in translation could be challenged. Hence the phrase 'your anticipated career as a translator' was changed in the interview question to the more generic term 'employability'. Details of the perceived relationship between the PB syllabus and the translation profession are expanded in 4.3.1.

Questions on the fulfilment of vocational requirements
How many words of the Durham website have you translated? (0–500–1000–2000–2500)
To what extent are the covered topics relevant for your anticipated career as a translator? Indicate the approximate percentage of relevancy: 0%–25%–50%–75%–100%

Table 13 Quantitative data - numerical questions in IIQ-PS

Two out of four numerical questions in IIQ-PS (3.5.1; Table 13) inquire how many words of the Durham website have been translated by the respondents, and to what extent the covered topics were relevant to the students' anticipated careers as translators (IIQ-PS:23 and 29 in Appendix 1). Questions about the number of hours the respondents spent on study and practice time, and how many hours they think they should have spent are visualised in Figure 4, Figure 5 and Figure 6. The y-axis in the bar chart (Figure 4) shows the number of hours students spent studying online resources or CAT tools independently after instruction, and the x-axis shows the number of students (out of fifteen). The range runs from one hour to ten hours and responses are spread across the range from 0 to 10 hours. Four respondents selected three hours of practice per week, and three respondents selected seven hours, which amounts to almost 55% of the class in the middle band. Individual respondents ticked one, eight, nine and ten hours respectively, while two respondents selected two hours of self-study per week. In Figure 5 the blue line repeats the number of hours expressed by respondents in Figure 4, whereas the red line responds to the question in Table 12 about the amount of time they think they need to practice. There are a couple of instances where the lines touch zero on the x-axis, which means that the times on the x-axis were not selected. In the bar chart (Figure 6) the blue bars indicate the actual

number of hours devoted to self-study (see x-axis) and the red bars show preferred length of time per respondent (y-axis). One respondent did not answer the second question about preferred time.

The three diagrams show uncertainty and a lack of consensus among the students, in other words, they do not think they have devoted the right amount of time to practice, and there appears to be little agreement as to how many hours would be appropriate. Therefore, questions need to be asked about the substantial differences in the amount of time spent in self-study, why one student spends one hour per week and another student spends ten hours per week on self-study in the same class, and why students do not think the time spent is suitable. Further questions to be considered are whether or not the responses to different questions should be more aligned and whether or not the tasks in the syllabus need to be redefined to ensure a better understanding of the tools. An improved brief might reduce an excessive amount of time spent on practice. For instance, an average of ten hours of practice per week, which is two hours per weekday, might be appropriate in the first two weeks of the module, but it should not be an average for the whole duration of the module.

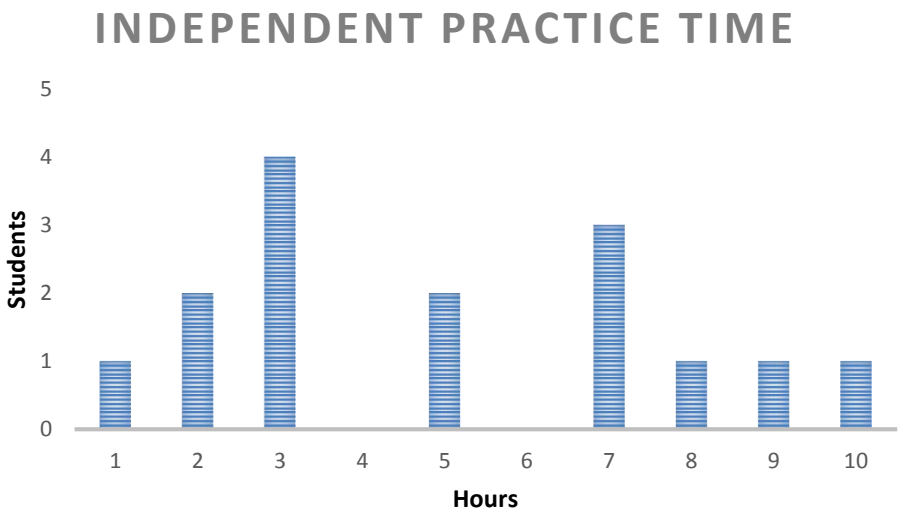

Figure 4 Weekly study hours – Translation Memory and Online Resources

The bar chart (Figure 4) shows that the majority (nine out of fifteen respondents) on the vertical y-axis spend up to four hours per week (horizontal x-axis) practising the tools. The bar chart in Figure 6 shows that only two respondents think they have

spent too much time on self-study and practice, while most students would like to spend more time. The two respondents that would prefer to spend less time practising have actually spent a disproportionately high number of hours, seven and ten hours respectively, and each would prefer to spend four or three hours less.

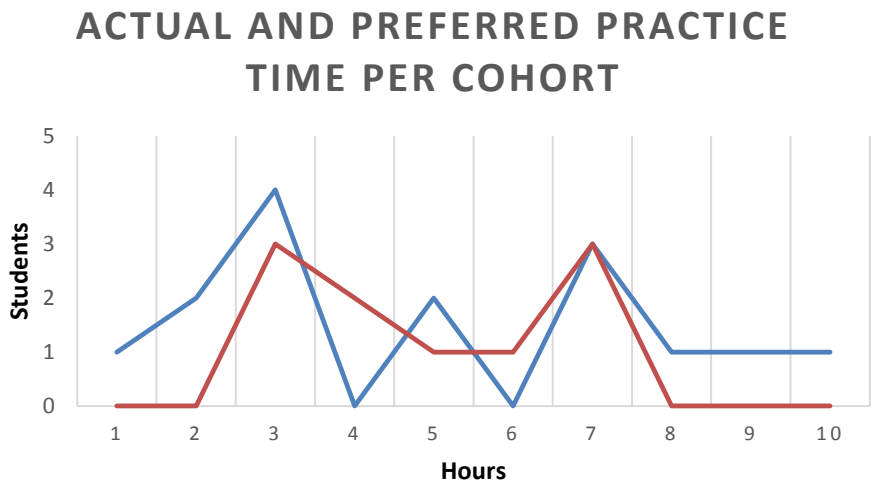

Figure 5 Actual time (blue line) and preferred practice time (red line)

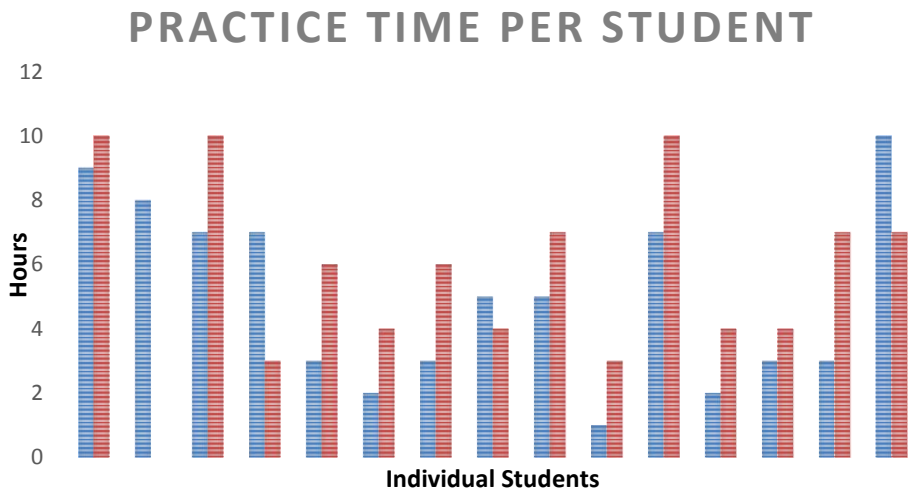

Figure 6 Actual time (blue bars) and preferred time (red bars) per student

Meanwhile there are four respondents across the spectrum that would prefer to spend three to four additional hours per week practising. The remaining respondents would like to add one or two hours of self-study. Overall the line diagram (Figure 5) shows

that there is more agreement on the preferred number of hours they would like to spend, which is between three and seven hours per week, while the actual time spent ranges from one to ten hours.

The sample is too small to draw conclusions that can be generalised. Variables such as previous exposure to CAT tools and online resources have not been taken into account. The variable of time pressure caused by other modules could be related to the responses (IIQ-PS:3 Appendix 1), as well as the responses in the following question whether their practice time had increased or decreased (4.14.1), yet neither variable would account for the wide range of hours spent on self-study. Another independent variable is the chronological order of the modules and tools in the pilot study year. When the students completed IIQ-PS, they were engaged in the practice of the most difficult CAT tool which would require more practice time than the two preceding CAT tools, or the earlier module on online resources.

The conclusion may be that the number of hours the students spend learning independently is controlled by dependent and independent variables (Table 12). However, the disparity within a group would require further investigation and potentially the inclusion of ethnographic data. In this particular cohort of translation students the main language pair is English <> Mandarin (65%), and the remaining 35% is spread evenly across English <>Italian/French/German. Only three students out of fifteen are home students and native speakers of English.

The investigatory and proactive approach to learning associated with the PB syllabus requires the students' personal management of their own learning and progress. The respondents' almost unanimous response that they would prefer more instruction and less self-study suggests that the PB approach (with a high level of independent learning) might not be a familiar learning style to all students. It might explain why some students spend more time on self-study than they need to and yet do not feel satisfied with their competence and acquired skills. It is possible that they do not use their time efficiently, because they have not yet fully understood how they should manage the TB structure. This outcome initiated a gradual restructure of the syllabus in the following years with clear definitions of objectives and tasks, and an

inclusion of goalposts to offer the students a framework that gives them a better grip on the PB methodology and their own learning. The goalposts could be defined as intermediary completion dates, a test, or action points set in the post-task phase.

The amount of quantitative data is relatively small in IIQ-PS but it provides adequate information about the students' level of awareness of syllabus requirements and their own learning approach. The quantitative data in IIQ-PS are supported by a larger amount of qualitative data in the form of closed questions. They also focus on independent learning and understanding of the PB learning method, which will be analysed in the following section.

4.2.1.1 Qualitative data in the pilot study

The questions in Table 14 are taken from the six categories in IIQ-PS. The questionnaire was subdivided into categories with clear headings that would be familiar to the students. From the perspective of the researcher the six headings subsume three categories and supply data about the students' approach to (independent) learning, to the syllabus and awareness of professional competence as a translator. The questions may seem random or trivial: they deliberately intend to probe into the level of independent learning manifested by the students. It should be noted that not all responses add up to fifteen, the number of completed questionnaires. Some questions were not answered. Possible reasons might be that they were missed by respondents, or that the respondents were unable to answer. All questions were yes/no answers, and the omission of the 'Don't know' option was a deliberate decision to prevent respondents from sitting on the fence (Brown (2001:30–70). Additionally, missing responses by some students might be due to absence during a particular session. For instance, a half day of special instruction on SDL Trados Studio 2009 was arranged during the pilot study, but not all students attended. It might be speculatively argued that those students would be less likely to answer the question about practising the programme independently.

The impact of the special instruction could only be measured if students practised independently soon after. Nine out of twelve respondents answered that they had not

practised independently. If the response were viewed strictly as a measure of an appropriate level of independent learning, it could disprove the hypothesis that the PB syllabus encourages independent learning (Matthews and Ross 2010:181–189; see 3.2.1). However, there were environmental circumstances that affected the response negatively: not all students attended the instruction and there were technical problems during one session which caused half the group to receive limited instruction. Nonetheless, the response was not ignored by the researcher and the syllabus was reviewed over the following years. In the third year of the study the TM component was taught in the first term instead of in the second term, and more time and focus were given to the most difficult programme to learn. As a result, students were more motivated to invest their own time in learning how to use this particular software programme (4.2.4; 4.3.1).

One of the questions in Table 14 received an overall positive response, 'Have you visited a website for translators?' (nine out of twelve responded positively). In the following open question six respondents commented that they had visited ProZ.com, three had visited TranslatorsCafe.com and there were individual mentions of yeeyan.org, CIoL (Chartered Institute of Linguists), Yahoo help groups for MemoQ and DVX, translator blogs and a Chinese blog focusing on how to use DVX. From these responses it appears that the respondents will visit websites when they need help and expect personal benefit. They might not fully realize that they have thus participated in translator communities, an activity that supports their translator and translation competences.

Based on these responses the assumption was made that students are willing to explore new avenues when they *see* and *experience* benefit. Questions posted on a translator's forum tend to generate prompt replies, and although some students recognize benefit from academic reading (see comment home student 4.14.1), the benefit may be less visible to others. Increased visibility could be the key to improving low scores of the other responses in Table 14: one third of the respondents has read additional, non-compulsory but recommended articles (listed in syllabus), nearly 50% has consulted CAT tool help files (essential translator skill, mentioned in syllabus and

in class), around 10% has tried cloud computing (essential translator skill, explained in syllabus and presentations in class), and 60% has arranged proofreading for their translation portfolios (indispensable translator competency, mentioned in the syllabus and eventually organised by the project management team). Scores of up to 50% for studying supporting materials, consulting help guides and manuals, trying out new online resources are low, and even 60% for asking a peer to proofread translations in the portfolio are unsatisfactory from a professional translator's perspective. The lower percentages in Table 14 reflect independent learning activities and the students' poor understanding of syllabus requirements. The positive response in respect to more instruction (see 4.1) is probably closely related to the low response. The wish for more instruction equates to more visibility and clarity, in written format (syllabus) as well as verbally in class.

Categories in IIQ-PS	Questions	Responses
module	Have you tried to use Studio 2009 independently?	Yes (3) No (9)
readings	Have you read today's [additional] readings?	Yes (5) No (9)
CAT tools	Have you read the CAT [tool] Help files?	Yes (6) No (5)
Internet resources	Have you tried a form of Cloud computing?	Yes (3) No (12)
	Have you visited a website for translators?	Yes (9) No (3)
Assignments	Have you arranged proofreading?	Yes (8) No (5)
Instruction	Would you prefer more instruction and less self-study?	Yes (13) No (1)

Table 14 Categorical qualitative responses in IIQ-PS

The following section aims to review the responses to the questions in Table 14 in relation to the PB approach and to give a collective interpretation of the students' approach to their learning approach.

4.2.1.2 Emergent qualitative data from the pilot study

In the interviews after the study, a home student (4.14.1) made several observations about her approach to learning that could apply to her peers. She displayed a regulatory locus of control, which is a strategic approach in order to be successful in her summative essay (Entwistle and Ramsden, 1983:36–37), and extrinsic motivation. It was not apparent that she had acquired a deep-learning approach (3.5.1.3) even though she had acquired a fair level of independent learning as a strategist: she was looking for coherence and cohesion within the module, but not necessarily for a personal understanding of the topic. In her answers there were many clues that suggest her motivation relied on strategies, on external locus, and self-regulation. The suggested academic sources on a weekly basis suited her:

> you can kind of digest it more slowly instead of just being given one big set reading list at the beginning of term, because then I think you feel like I'm going to leave it till the end whereas when you are being forced to read, or being suggested to read on a weekly basis it is much more helpful.
>
> (Home student 2013)

In other words, the student prefers a modular, task-based approach. Furthermore, she said she had reduced her quantity of reading to make her essay more focused: 'for instance, 'localisation' [a topic in the syllabus], I knew I did not want to write about it in the essay so I skipped that. I had a quick look what it was and then I left that so that I was more selective, I think' (sic). During the interview she repeatedly referred to her essay, in other words 'assessment' was a major external driver of her motivation. When asked what motivated her to choose her presentation topic, she replied that she found it 'really interesting and I wanted to put that into my essay'. Entwistle (2009:161) emphasizes that different assessment methods not only affect learning styles, but also the effort students put into their learning. The T&T module incorporates two different methods of assessment: one for the essays and one for the translation portfolios. The latter even subsumes a further method, which is peer and self-revision of the translations in the portfolios (4.4).

Most questions in Table 14 are indirect questions about translator skills such as independent software (TM) management, revision and cloud storage to find out whether the students have recognized their importance enough to continue exploring translation software and supporting online resources in their own time. These aptitudes still seem rather remote to the home student; they are not integrated in her experience, which may explain her apparent lack of intrinsic motivation to study them. For instance, when she was asked for her impression of translator collaboration and teamwork as practised in class, she initially replied with 'ehm, well I don't know. I think it may have changed [my attitude to their importance] because I understand that all the collaborative work we did was all kind of simulating a professional environment'. Her use of the discourse particle 'ehm' and interjections such as 'kind of' suggest that she was not sure or had not previously considered the vocational relevance of the activity. After some more discussion during the interview she concluded with 'Yes, I see it more as a positive thing now … it was interesting, yeah'. Awareness of her learning process had been raised during the interview.

Teachers often regard intrinsic motivation as a higher goal, however Newstead and Hoskins (2003:66) suggest that achievement motivation combined with good strategies can be successful. The teacher needs to tap into whatever learner's approach the students demonstrate. A PB syllabus only works if the students know what is expected of them. It needs to be made clear, visible and modular (task-based) with goalposts along the way to enable students to benefit from the range of learning skills encapsulated in the syllabus.

The interviews following IIQ-PS, prior to the reflective interviews discussed in this section, were short and limited as explained in 3.6.3.2. The next section 4.2.1.3 gives a full analysis and explains the transition from interviews to FG discussions.

4.2.1.3 Qualitative responses in interviews

It has been explained in 3.6.3.2 that the objective of two successive interviews with two students, held five months after IIQ-PS, was to add validity to the questionnaire by asking further details about the enhancement of translator competence and skills

and to inquire more deeply into the interviewees' opinions of the syllabus and their learning approaches. The first question was asked in response to the low percentage of students that had practised TM software independently. The T&T component in the second term of the pilot-study year includes the introduction to and practice of three TM programmes. It is a demanding programme and a tight time schedule. Each programme was taught and practised within three weeks. MemoQ and DVX were presented first in order to make the students familiar with the concept of TM before introducing SDL Trados Studio, which is more complex. In summary, both students felt there was not enough time to learn how to use a TM. They said that more time was required for consolidation, and tutorials would be appreciated. Furthermore, both shared the opinion that the TM part of the module should start in the first term and continue in the second term so that there was opportunity to practise translation in TM software in other modules.

There was less agreement in their responses to the second question about the suitability of the material for the T&T module. The website of Durham University is used during both parts of the T&T module. It was considered suitable for teaching TM and online resources, because of its breadth and variety. It covers a great variety of topics (the students choose their own in both parts of the module and create new portfolios), a wide range of formats, such as Word, pdf, Excel, and html, which allows students to experience TM management of different formats. Furthermore, intertextuality and text analysis of web pages help students understand the benefits of TM. In the TM component students are advised to select texts with word repetition, and for online resources they should select idiomatically challenging texts. The links on all the webpages open up a world of possibilities for students to explore. One of the two interviewed students did not think the website was suitable, because it did not supply enough repetition to experience TM benefits, whereas the second interviewee liked the variety and felt it provided good practising material. The former interviewee wanted the teacher to set the same practice material for all. The interviewee did not recognize professional conditions in which the translator accepts assignments and considers the advantages or disadvantages of using the texts in a TM programme. For the T&T module the university handbook states under 'learning outcomes' that the

student will be tested to demonstrate 'the ability to assess technological aids to translation' (MA Handbook Durham 2010). This student wanted the teaching method to appropriate the ST for translation in a CAT tool, which is contrary to PB principles that encourage authenticity and real-time activities.

The third question about the suitability of translating from English received a positive and a negative response. This could be explained from the fact that one student was translating into L1 and the other into L2. The L2 student found the direction too difficult and inconvenient because it distracted from the technology. Neither student expressed an understanding of the difficulties the non-native speaker (hereafter NNS) of English might have understanding the ST (hereafter ST). Both students had been members of project management teams, but they had not been able to connect the value of collaboration when dealing with source text and target text (hereafter TT) difficulties. The data that emerged from this small set of interviews indicate that students do not always have a macroscopic view of learning, or of translation. They want to master skills in the most efficient way. In these interviews, the students do not demonstrate that their scope and horizons reach beyond the degree course.

The following actions were taken after the interviews in the pilot year: firstly, the interviews were replaced by FG discussions in the remaining two years of the study in order to increase the number of participants and to encourage an open and broader discussion, secondly, the syllabus gradually underwent some modifications which included a reversal of the order in which technological tools were taught (4.3.1) and thirdly, the learning objectives, enhanced translator competences and skills, were given more specific target focus. Three FG discussions followed in the next two years. Because the transcriptions provided so much data, it was decided to carry out an in-depth analysis of the first FG discussion through computer-aided analysis (hereafter CAA), a method that is described in the next section.

4.2.2 *Computer-aided analysis*

Qualitative data need to be managed. They are most accessible when organised and stored, and made reproducible and retrievable (Phelps *et al.* 2007:207–237). Over a

longer period of time – this three-year study was followed by another two years (2012–2014) of AR, data collection and analysis – it is crucial to have good organisation, storage and retrieval of non-numeric data. A FG discussion can become unwieldy and more difficult to analyse than questionnaires: it is long, and the nature of the opinions presented in a discussion can be covert and harder to recognize and analyse than those on paper. During the study, each FG discussion was transcribed almost immediately to ensure greater accuracy. However, it was not always possible to identify speakers or label them precisely during the transcription. Poor identification was not treated as a threat to validity, as the objective was to compare data irrespective of the speaker. CAA was considered to be a suitable tool to support the data analysis with regard to FG discussions, partly because of the vast amount of material in the form of transcriptions, and consequently for the aforementioned reasons: organisation, storage, reproducibility and retrievability. Clear categories and nodes created by CAA software allow links to be established between them so that structures emerge. It enables propositions to be made regarding underlying principles, similar to the analytical process that was applied to the interviews in the previous section 4.2.1.3. The labels of the categories set up by the researcher are called nodes. In the study, the following nodes were selected according to concepts that would support the hypothesis that a PB syllabus in TS training will enhance the following skills and competences: Project Management (40), Professional Translation (19), Organisation (14), Independent Learning (29), Communication (22) and Assessment (6). The numbers in brackets following the categories (nodes) indicate the number of references (utterances) made by the participants in a particular FG discussion (Appendices 9–11).

As with most aids, in addition to its advantages, CAA can also have some drawbacks. The following section 4.2.2.1 will give an overview of its benefits and limitations.

4.2.2.1 Advantages versus disadvantages of computer-aided analysis

Although the way in which the nodes are set up might be considered subjective, CAA allows the researcher to change the categories (nodes) and bring out an additional

aspect in the analysis, which is helpful. Coding depends on how the researcher engages with the data, organises and categorises them prior to the analysis and interpretation. Coding merely displays the data, however, for the purposes of analysis CAA has attached keywords or tags to segments of text, thus making them available for inspection; it has stored data in an organised database; it has linked data (nodes and sub-nodes); it has provided content analysis, frequencies, sequences and locations of words or phrases, and data display. CAA has aided the researcher to analyse displayed data or to confirm findings; to theorise, develop systematic explanations of findings, as well as test hypotheses; and to create diagrams of findings and related theories (Miles and Huberman 1994:44 cited in Coffey and Atkinson 1996:166–167).

NVivo identifies patterns and emerging themes from the data, which is helpful in the process of analysis. All nodes were determined and labelled by the researcher. For instance, some nodes were set up with child nodes (or sub-nodes): 'prof. translation' was set up with a child node 'revision' (9 references) in

Figure 7, 'independent learning' has two child nodes: 'motivation' (19 references) and 'individual activities' (as opposed to collaborative activities) (14 references), and 'communication' has two child nodes 'e-communication' (7 references) and 'wiki' (e-platform) (8 references) in Figure 8.

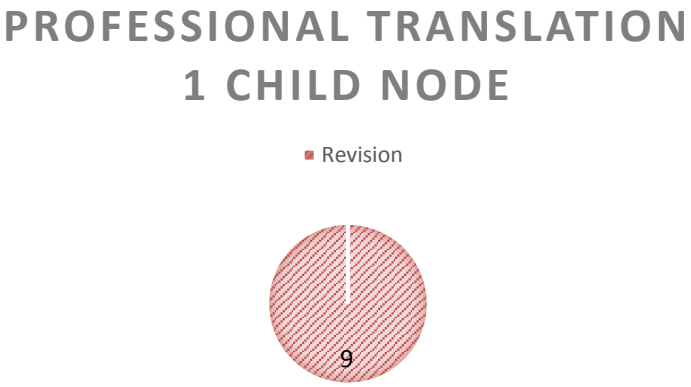

Figure 7 No. references in professional translation

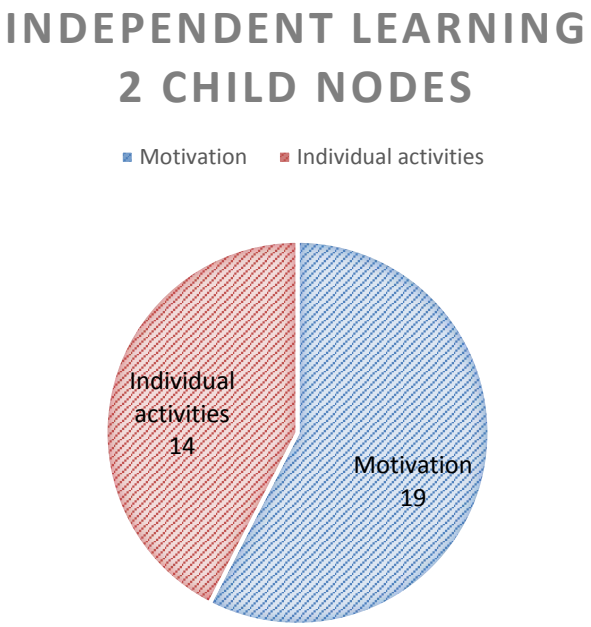

Figure 8 No. references in independent learning

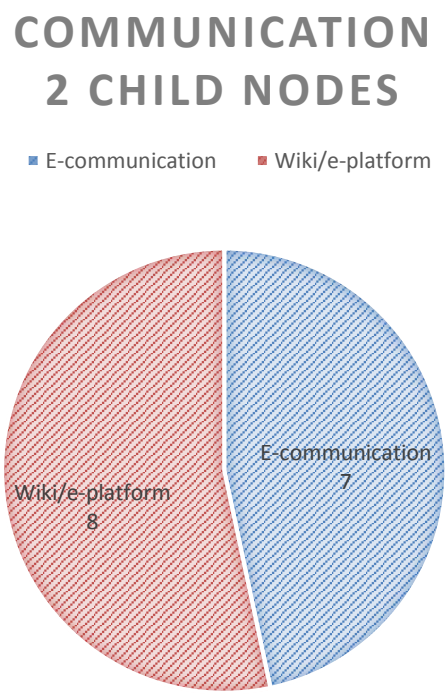

Figure 9 No. references in communication

The child nodes that emerged during the CAA were based on the FG discussion transcript: they reflect the participants' standpoints, compared to the researcher's standpoint in the (main) nodes. The labelling of the nodes (categories) was based on areas in IIQ-PS that deserved further exploration. The decision to include child nodes followed when it became clear from the references (selected utterance in transcript) that particular areas, such as motivation were mentioned repeatedly by participants in the FG discussion. They are introduced into the analysis as child nodes (4.2.3.1). The aforementioned main nodes of the FG discussion are visualised in 4.2.3.

Subjectivity in this study is expressed in the decision not to code particular fields. It is not considered a disadvantage to the study, but it is an invariable that was managed beneficially, because the selection of categories can be manipulated and thus offer different points of view. Cooper (1989:27) suggests that the first rule in building a coding sheet to enable synthesis is to draw out any information that may be relevant. Therefore, it was decided to focus on utterances in the FG discussion that relate directly or indirectly to the PB syllabus. Setting and subjects were not coded: the setting of the study did not change and remained at Durham University between 2009 and 2012. Although variable characteristics of the respondents in the questionnaires, interviews and FG discussions were not intended to be part of the study, it emerged during the study that certain characteristics of the subjects, such as language competence and educational backgrounds, affected data outcome. They were therefore taken into account towards the end of the study concerning the assessment of accredited and non-accredited work (4.4.1).

The method design in CAA was a one-group design (Stock 1994 cited in Cooper 1989:27–29), and it was only applied to FG discussions. However, gradual changes in teaching style and syllabus content (see curricular changes 3.1.4.1; AR 33.6.2, syllabus changes 4.3.1) affected the type of data collection in consecutive FG discussions (Cook and Campbell 1979 cited in Trochim and Land 1982:1–6). Changes prompted by data outcome in IIQ-PS affected the PB syllabus and methodology in the second and third year. Consequently the themes of the FG discussions changed. For instance, the wiki websites improved after the pilot study, because the teacher offered

more guidance, joined weekly team meetings and encouraged a more sophisticated distribution of roles in the teams. Therefore, the FG discussion in the third year of the study focused less on project management and more on the activities of the respective teams. The first FG discussions were about management of the wiki website and procedures, while the following FG discussions focused on terminology and revision management. The discussions reflected subtle changes in the teaching methodology. They were not intended to mirror or supplement or replicate any previous FG discussion. They were part of a logical progression within the AR method framework.

In sum, rational choices were made to reduce the potential negative impact of subjectivity in the coding. The nodes were aligned to research objectives and the child nodes emerged from the main nodes in the first set of FG discussions. They were not planned and the data were not selected to match the child nodes. CAA was used as a supportive tool to manage fundamentally qualitative data as quantitatively as possible in the initial FG discussions. Child nodes were added to view data from a different perspective. Expansion by means of added (child) nodes is part of the description phase in this study, which progresses logically into analysis and interpretation. Hence the researcher tries to take a neutral position. The data are predominantly student-driven, and not controlled, only guided, by the researcher, particularly in the FG discussions. The interpretation is subjective, but the actual analysis aims for objectivity and neutrality in the achievement of which CAA is a helpful tool.

The first set of FG discussions was analysed through CAA, which is discussed in the following sections 4.2.3 and 4.2.3.1.

4.2.3 *Qualitative analysis of the focus group discussion*

In this study, the IIQ-PS was submitted first, and therefore the FG discussion did not have a preparatory function. As a full and independent method it was part of triangulation and its objective was to retrieve rich data after the first survey. The FG discussion was not an extension or preparation of quantitative data, nor did it lead to a strict assessment or outcome of a hypothesis, but it was a process in which the

researcher considered the data, and potentially arrived at a new hypothesis (Creswell 2007; Morgan 1993). It has become a full component of AR research in this study.

In AR, both researcher and participants are in an ongoing process of data collection and data analysis. The sole purpose of AR is to improve the teaching and learning process. The questions are 'what is going on' and 'why is it happening'. AR in this study focuses on correlations between different phenomena identified in the students' learning behaviour. Insight into these links supports the research question whether PB teaching will enhance translator competence. An emerging objective in the AR process is to improve what has caused inefficient learning behaviour. The hypothesis is that unsuccessful independent learning might be due to the student's dependent learning style, or due to the quality of the material and/or the way it is presented in the syllabus, or a combination of the different factors. The evolving research methodology transcends statistical data and includes a variety of methods (triangulation), among which FG discussions. The FG discussions are important to the pedagogy and teaching methodology in the T&T module: they are not only a form of data collection but they also aim to heighten the participants' awareness of their individual learning styles and competences as future translators. The analysis of a FG discussion is sometimes referred to as logical analysis, which means that it is systematic and looks for the interrelation of evaluations rather than focus on universal statements (Bloor 2000:70). There is a risk that in a logical analysis of qualitative data the researcher might lose sight of the larger picture and focus on small extracts of data (see Bloor 2000; Coffey and Atkinson 1996; Creswell 2007). For this reason there is a succession of FG discussions in the study. They generate different themes but they also reinforce and complement each other. The final interpretation also includes data from the questionnaires and interviews.

Any method requires adherence to strict protocols. In the context of this study, the following steps needed to be taken to ensure 'rigorousness of approach'. All participants were informed of the purpose of the research, they were assured data would remain anonymous, and they were given the freedom to withdraw at any time. It was not necessary however to have as a requirement the classification of the

participants, as in this type of AR, particularly the FG discussions, the sample was rather homogeneous. The participants had been invited to participate in FG discussions in their capacity as members of project management teams. In one sense the FG discussion was a continuation of simulated project management and in another sense it gave the participants an opportunity to step back and reflect on their involvement in the activity as well as the outcome of the activity itself.

CAA was used to identify six main themes/categories in the first set of FG discussion held at the end of the second year of the study (June 2011). Figure 10 shows the number of references that constitute a category. They consist of words or concepts expressed by the participants. The numbers help to give the analysis some statistical validity, which will be explained in the following section.

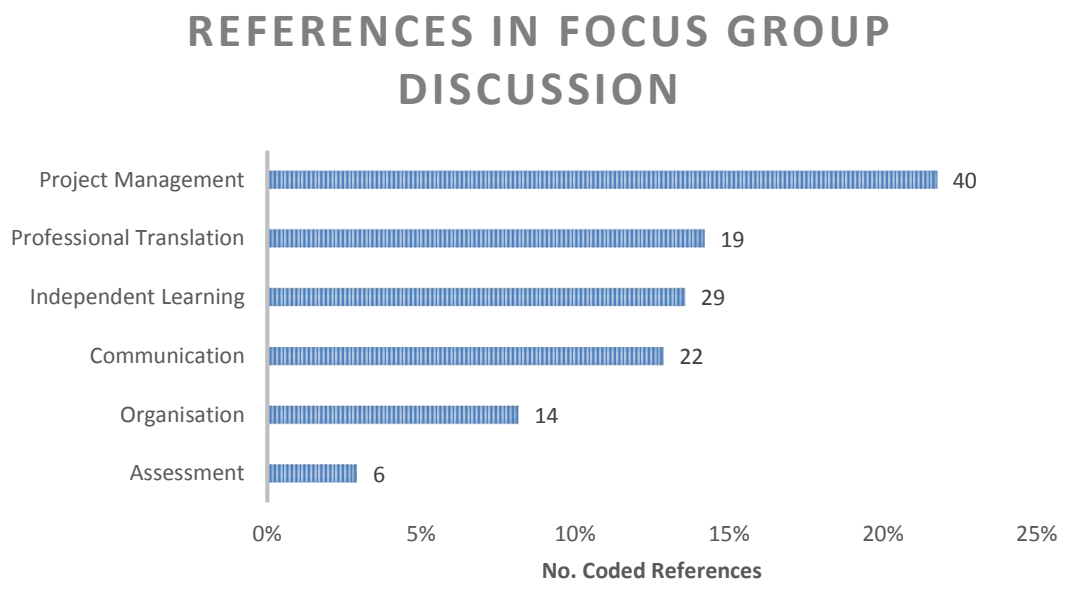

Figure 10 Qualitative analysis of FG discussion in 2nd year of study

4.2.3.1 Focus group discussion on project management

The project management activity (2.4.4) is a problem-based learning component (2.2.4) which was introduced in the syllabus in the second year of the study. This late introduction explains why there were no questions about the activity in IIQ-PS. The first set of FG discussions about the project management activity was held at the end

of the second year in the study. The CAA analysis is based on the transcriptions of two FG discussions with a total of ten participants from two classes (Appendix 9; Appendix 11). Each class had a team of up to five students of which half volunteered to join a FG discussion. The data of both recordings are combined in the analysis and are visualised in Figure 10. Both discussions were attended by five participants: the first group consisted of project management team members, and the second group represented students who had not been involved in the activity as managers, but who were interested in the activity and willing to share their opinions of the process. Some members were not available at the time of the discussion and sent apologies; two of them shared their thoughts on the activity by email (Appendix 10). They were sent a transcript of the FG discussion before they responded to the questions. Their responses are included in the CAA analysis.

The first question was 'How did you benefit from being a PM [project manager]?' This question had been advertised as the topic of the discussion and it received the most comments. CAA scored 40 references, which means that 22% of the content in the discussions in both FGs (including emailed responses) concerns the project management activity (2.4.4). The analysis is mainly interested in the benefits experienced by both groups, members and non-members of the project management teams, and it does not include comments which reflect peer group issues, such as team members who found that classmates did not cooperate, and classmates who felt that the teams were closed and did not include them or communicate well enough. Table 15 contains the following references to project management, which were entered into the CAA programme:

> [it is about] how you organise people and how you plan out the projects

> it is about work organisation being a project manager, but I also benefited from the project management as a student, because we incorporate the project management with translation and because I was in the project, as a manager, so I can see the table of dictionaries of words, and the discussions, and learnt a lot of organisation skills and learnt to communicate with other members and I benefited from the opinions of others, I learnt from the emails when they emailed me back for revision. I learnt a lot from the opinions.

I know the process of project management and how to manage it and work in the team. I learnt how to allocate the job

[when I realized] I wasn't doing it right, I had to ring up others to ask, I think it is important that as a manager you must keep the big picture in your mind all the time.

like when I was a student [not a team member], I just watched what other managers did. I now know what they are doing, the workflow. But before I didn't know how they did it. Now I do in detail, now I have been a project manager.

if I had a problem or I was in trouble I would go to the project management

I always talk to my classmates that study at other universities in the same major and they don't have such kind of things, some universities don't have that kind of experience. Basically, we know what they [project managers] do

I think I would apply [for a project management job] because it does not take much time to become a qualified member of the team, to learn how to use TM or to use Trados, I think a project management team just needs to learn how to organise

Table 15 Excerpts (verbatim) from transcript FG discussion June 2010

In the quotations above selected from the 'professional translation' node, the following terms recur: organisation, communication and professional translation. Some utterances are also included in the other nodes (categories) in the CAA analysis in Figure 10. The node 'organisation' contains 14 (=8%) of all coded references. From the quotations in the table above, it appears that the participants see the project management activity as a way to learn how to manage people and workflow, as a helpful form of collaboration, a source of knowledge and preparation for project management jobs. The node 'communication' with 22 references is closely related (12% of total recorded references): in the quotations in the table above, the participants explain how they learn how to communicate by email and to contact the team when they need support. The node 'professional translation' is given the second highest score of 19 references (=14%). The participants consider the following activities professional: organising workflow, allocating jobs, exchanging emails, dealing with all the transfer stages in the delivery of a translation from administration to allocating

and receiving jobs, organising revision, organising and providing sources (terminology).

All in all, they have acquired an overview of what is involved in the translation process and they have felt part of it. Unawares, they have met the objectives of the PB syllabus: they have enhanced their translator awareness and competence. The following section will look at the child nodes and the more detailed aspects of the FG discussion.

4.3.3.1.1 Subcategories in computer-aided analysis

Selective coding is the final phase of coding the information (Creswell 2007:240). The central phenomenon, the PB syllabus is systematically related to other categories. The child nodes in CAA emerge from the following three main nodes: professional translation, communication and independent learning. 'Professional Translation' (Figure 7) produces a child node with only one activity which is revision. The revision activity is comprehensive and requires a great variety of skills, which are covered by the main nodes in Figure 10. The revision component is an important topic in the first set of FG discussions. In the second year of the study the revision activity developed naturally. It gradually became a collaborative activity which replaced the sourcing and storing of terminology on the wiki website. The wiki in the VLE is a limited e-platform and the students found storage, organisation and retrieval of terminology unsatisfactory (see Appendix 12 part 2). In the second year, the project management teams were encouraged to invest more time in revision because files could be exchanged by email, when uploading and downloading of files proved difficult on the wiki website. However, in addition to logistical reasons for this shift of focus, the general quality of the translation portfolios showed that revision skills were lacking and needed serious attention. The sourcing and storage of terminology continued as a non-collaborative personal activity, although in 2012–2013, the year following the study, a loop back was made to terminology building in TM. It included the discussion of open source TMs and data sharing of terminology (see O'Hagan 2013:504). Practice was restricted to open source materials and non-charging organisations. Access to the

servers of TM programmes would be required to experience data sharing to the full, but subscription costs to the establishment tend to be high.

In comparison with the subcategory 'Revision', the child node 'Communication' (Figure 9) has two components: the Wiki e-platform (8 references) and E-communication (7 references). The participants appreciate the open platform on wiki, where every member in the class can contribute and communicate. The creation and development of the wiki as a simulated LSP server sets high demands on group work and encourages the clarification of roles and duties within the team. The benefits of setting up and managing a wiki website similar to a language server are summed up by one of the project management team members in the following quotation (ad verbatim):

> It gave me an insight into professional communication and maintaining positive and efficient relationships with colleagues. For example, I had to send emails to ask, and politely remind fellow translators to supply me their updated term bases as our projects progressed. Becoming familiar with the etiquette of on-line communication between translators has given me the confidence to communicate effectively with agency and colleagues today. Secondly, I learnt practical business skills, such as how to create an invoice, which have been extremely useful as a self-employed professional. Finally, participating in the project management team gave me the change to develop new teamwork skills that are directly relevant to the translation industry, such as effective online communication with colleagues and experience managing a multi-lingual project
>
> (Response by email in addition to focus group discussion 2010)

In sum, the student has enumerated the essence of the project management activity, which consists of teamwork, communication, business skills and multilingual project management. The student has taken advantage of the PB syllabus and lists the steps that need to be taken and developed in order to demonstrate independent learning and emergent professionalism, the objective of the syllabus.

E-communication constitutes the other part of the child node at 47%. Emails are used for file exchange (uploading and downloading on the wiki website became too complicated). They are also important for problem solving, a valuable learning activity, which is recognized by participants in the FG discussion.

From the researcher's point of view the main node 'independent learning' with two child nodes, individual activities and motivation, is significant in relation to the PB syllabus. The following quotes identify that both areas are of concern to the students:

[team members are] restricted to the individual's activities

[our work depends on] individual will of each student

Yes I really think, it is this thing about responsibility you have to realise that you are part of the project, but as a member you can wait for others to do it, so there is not so much pressure on you.

Like when I was a student [not a team member] I just watched what other managers did. I now know what they are doing, the workflow. But before I didn't know how they did it. Now I do in detail, now I have been a PM.

Table 16 Quotes child node individual activities FG discussion June 2010

In Table 16 the FG participants express firstly, the importance of the individual's input and effort, and secondly an awareness of the individual's contribution to collaborative activities. The underlying implication is that students often do not pull their weight, and the cause might be a lack of intrinsic motivation, as is expressed by two participants:

I think the fundamental issue of this problem [poor quality of portfolios] is that performance looks at project management and our performance does not account to our credits – student care about papers about essays because it has direct influence on the graduation.

The idea is good, as well as the wiki, but the pseudo nature affects motivation. We should be involved in a real project.

Table 17 Quotes child node motivation FG discussion June 2010

The first reference in Table 17 suggests that the success of the activity depends on extrinsic motivation, in the form of assessment results, and the second reference questions the authenticity of what students are doing. Neither reference shows that the participants can relate the activities to professional skills and competences. The team

members were involved in an authentic task, which was improving the quality of their translation portfolios, and enhancing many competences and skills in doing so. Their incorrect perception of their activities is an issue that needs to be addressed by the teacher and an in-depth discussion is to be found in section 4.4.

In the collated analysis of the first set of FG discussions, attention is paid to the components that are a direct outcome of the PB syllabus, and to outcomes that are considered successful by the participants (see previous quote), as well as concerns about the cause of their own poor performance and that of others (translation portfolios). Opposing viewpoints between team members and non-team members are not taken into account in the analysis because they do not impact the outcome of the evaluation of the project management activity and the PB syllabus. In fact the two groups complement each other: team members focus on the activity while the non-team members evaluate the performance of the team, rather than project management itself. The data from both sessions are collated and combined in the analysis in order to provide a broader picture of project management from the perspective of the students. In the project management activities all students can be involved and take on different roles within a project-based learning environment, whether they be a translator, a reviser or a project manager.

Two additional FG discussions were held at the end of each term in the third year of the study. They had different themes: CAT tools (first term) and online resources for translation (second term). Both FG discussions were conducted by six members across the different project management teams. Details are provided in the following section.

4.2.3.2 More focus group discussions in third year of study

In spite of different analytical methods, all FG discussions are complementary to the initial data in IIQ-PS. For instance, in IIQ-PS, the number of students that have arranged for their translation portfolios to be proofread is unsatisfactory: eight have, but five have not arranged proofreading (Appendix 1: IIQ-PS:24). Furthermore, based on portfolio feedback from graduate students in the third year of the study, only around

60% of the translation portfolios are ‘fit for purpose’ (Figure 16). Consequently the teacher’s aim is to raise the awareness of revision and proofreading as a crucial professional skill. The issue is a major topic in the successive FG discussions; modifications are applied to the syllabus design (Table 18). The target of 100% ‘fit for purpose’ portfolios is reached in the year after the study, 2012–2013 (4.4).

The FG discussion at the end of the first term in the third year of the study reflects modifications in the syllabus within the AR framework. Visibility and clarity in the syllabus have been improved. Revision is structured and a framework is presented in the syllabus for project management teams as well as non-members. The high response to communication issues and importance in the first set of FG discussions has led to a clearer description in the syllabus (Table 18).

The revision activity is a task that runs through the entire module. All students are involved, which means that team members who manage the activity have to include their own translation portfolios for revision. The primary objective is to learn about the use of correction and consistency functions in TM software and to compare results in three different programmes. The other objectives are to understand the concept of self-revision and peer-revision as part of workflow, and ultimately to deliver an error-free translation. The revision process in TM, or quality assurance (hereafter QA), incorporates the knowledge of, and expertise in, many technical skills such as translation memory and terminology management, consistency checks, pair matching, code and tag management, import and export of files, and appropriate file exchange by email. The project management team is expected to oversee the workflow and manage revision criteria, deadlines and professional requirements, such as invoices and purchase orders.

Practical session	**Project management team**
Wk 3 • Manage html; hyperlinks; export of translation memory database and termbase for MemoQ • Hyperlink translated files to DUW (Durham University website) • Carry out revision in External View with Track/Changes • Manage consistency and Quality Assurance and AutoCheck • Practise and compare Quality Assessment (QA) in DVX2 • Analyse statistics	Wk 3 • Organise revision agree on criteria • Post samples of Purchase Order and Invoice on Wiki Language Server
Wk 7 • Export html; pdf files • Exchange files for revision in MemoQ • Submit revised file to project management team with invoice	Wk 7 • Proofread and check all completed files and return
Wk 10 • SDL Trados Studio 2009 – File exchange via project management team • Apply QA • Revision by revisers • Export finished project	Wk 9 • Collect translated files and save as Word files • Send to revisers with revision criteria, request the use of track changes and a return of two files: one in track/changes and the other with accepted track changes (clean file) • Check lay-out and completeness of translated files returned from revisers in a language other than your L1 • Return track/changes translation and provide feedback to translators, invite comments

Table 18 Revision instructions for team and translators

The syllabus posted in the VLE (Table 18) informs all students, project team members as well as non-team members, which activity should be completed (new to the syllabus). The syllabus is updated on a weekly basis to match and support progress. The FG discussion (Appendix 12) in the third year (term 1 – TM) is attended by a good cross-section of team members who represent different language pairs. It emerges that the activity has involved a steep learning curve for all students in class.

Although the team has drawn up criteria and sent emails with criteria and instructions to all students in their revising capacities, it appears that some files were returned without the use of track/changes, or without comments, or contained comments written in a language that could not be read by their appointed project managers. Samples of purchase orders and invoices had been created by the teams and posted on the wiki, and yet the team members had to chase revisers to return them. The team members express their concerns in the FG discussion and conclude that they have made incorrect assumptions, such as the students' familiarity with track/changes and that the instructions they send by email need to be more detailed.

4.2.3.3 Subcategories and findings

The categories in the first set of FG discussions (nodes in Figure 10) are applied to the FG discussions in the third year, and could be summarised as follows:

- 'Assessment' is put forward as the motor to drive revision of translation portfolios and
- 'Motivation' appears to be extrinsic. Because the portfolios do not carry any credits, some students do not apply any form of revision to their work (Table 17)
- 'Independent learning' is frequently mentioned by team members and equates to good organisation skills in the team, but it receives a relatively low rating among students if they do not understand the purpose or what is expected
- Good 'communication' is considered to be the key to a successful outcome of the revision process by all team members
- The overall understanding of 'professional translation' competence is closely related to the responses. Students, who do not cooperate because the activity does not have any credit value, have not expanded their horizons beyond the successful completion of their degree course. Their approach to professional competence is poor, whereas the emailed response (4.3.3.1.1) after the FG discussion shows a positive attitude to the syllabus and a high level of professional translator competence.

The second FG discussion in the third year of the study (Appendix 12) was conducted after completion of the Online Resources component of the T&T module in the second term. The building of terminology databases on the wiki website had been challenging and students, including team members, could not see any personal or professional value: uploading and downloading files was difficult on the wiki, and the number of entries for each specialist field was low. Although the activity was intended to show the students how to build a database, rather than to produce a comprehensive terminology database, the students felt their efforts did not match the outcome, and they were therefore less cooperative in making it a worthwhile learning activity. It was therefore decided (as part of AR) to rebrand this part of the module in 2012–2013, the year after the study, as 'Online resources for terminology' in which terminology became the main focus in a variety of activities, ranging from machine translation to web searches and the use of online corpora. Instead of building collaborative or personal databases, students were shown how to recognize corpora, and how to explore and use resources on the web.

Such changes were decided after it became clear in the questionnaires in years two and three of the study, and from data in FG discussions that there was a wish to understand the essence of professional translation work, but that the PB syllabus needed to be more specific and clear, and that the teacher had to monitor progress as well as set intermediate goalposts. The PB syllabus in the VLE in the years following the pilot study became so specific that it resembled a series of lesson plans (Appendix 14). A new challenge arose, which was to prevent the syllabus from becoming prescriptive, and therefore the number of options was increased. The students were encouraged to make reasoned and not random choices.

Data in the FG discussions were rich and they were used to develop the syllabus. However, to avoid a deflection from the main research question, which centres on the syllabus and the students' responses to its inclusion of professional competences, the following section compares quantitative data in various surveys. In each year of the study, FG discussions followed the survey, and qualitative data were complementary to the surveys (see 4.2.3 and 4.2.3.2.).

4.2.4 *Comparative quantitative survey data during study*

This section compares the responses obtained from the administration of the quantitative elements of the data collection between surveys IIQ-PS in the pilot year and IIQ2a/b, IIQ3a/b in the second and third year of the study. In Table 19 changes in the questions are italicised and underlined. The pilot study contains four questions that produce quantitative results. Table 19 compares the question phrasing in all surveys. Various reasons for changing wording and the position in the survey were explained in section 3.4.1. It should be noted that changes to these questions were prompted by missing responses or low ratings in the data. Particularly IIQ-PS question 4 underwent many modifications, which were exemplified in section 3.4.1.

Pilot study questions	Same questions in following surveys
2. How many hours per week do you spend on average on the module Translation & Technology outside lecture hours on Wednesday? (Please encircle) [options ranging from 1 – 10]	IIQ-2/3:1. How many hours per week do you spend on average on the module Translation & Technology *outside lecture hours/practical classes*? (Please encircle the number of hours) [options ranging from 1 – 10]
4. Practice time has increased/decreased (encircle) over the weeks.	IIQ-3a:2. Practice time has increased/decreased/ *remained constant* over the weeks (please underline).
11. Have you read today's readings? (see 3.4.1)	(see 3.4.1)
28. Would you prefer more instruction and less self-study?	

Table 19 Quantitative questions

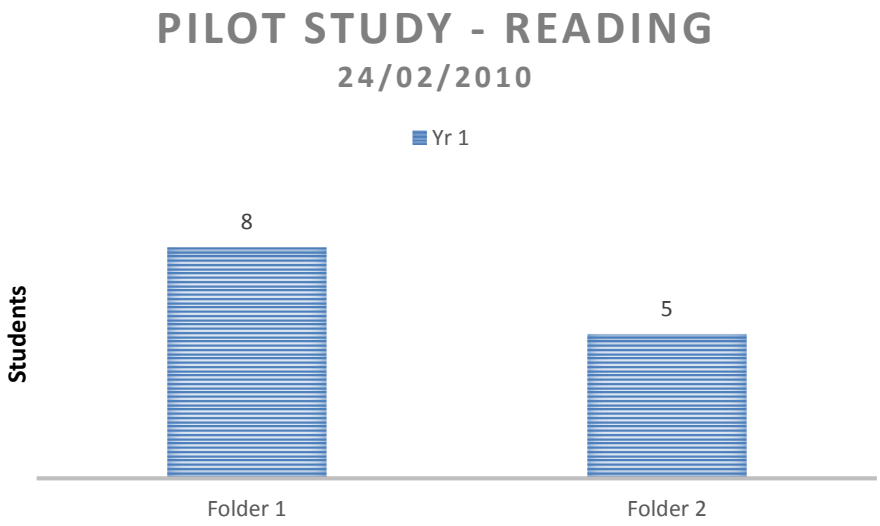

Figure 11 No. students who read material listed in syllabus (out of 14)

Figure 11 shows low numbers in the responses to questions under the heading 'Readings' in IIQ-PS. In the pilot study students are only asked if they have read the recommended article (Folder 1) for that particular day. The response rate of 8 students therefore applies to one occasion only. In the subsequent questionnaires students were asked to give an overall percentage, as indicated in Figure 11. It emerged from FG discussions (see 4.2.3.2) and interviews (see 4.1) that students require more clarity and direction in the tasks. Not all students understood the importance of reading secondary literature before class.

More clarity also accounts for the addition of names of articles and other specifics in IIQ2 and 3. Added detail and direction in the syllabus (see Appendices 7 and 14) during the study may explain the positive change in the percentage of preparation in each group of students per module component in the second and third year of the study. Overall, roughly 50% of each group in each year read at least 50% of preparatory articles before they came to class. However, Figure 12 shows a steady increase in the number of students that came to class fully prepared (100%), which ranges from 17% (4 students out of 24) to 27% (7 students out of 26) and 33% (10 students out of 30) in years two and three (first term) respectively. There is no explanation for the drop in full preparation in the second term of year three to 14% (3 students out of 21), except that their overall level or preparation was lower in comparison.

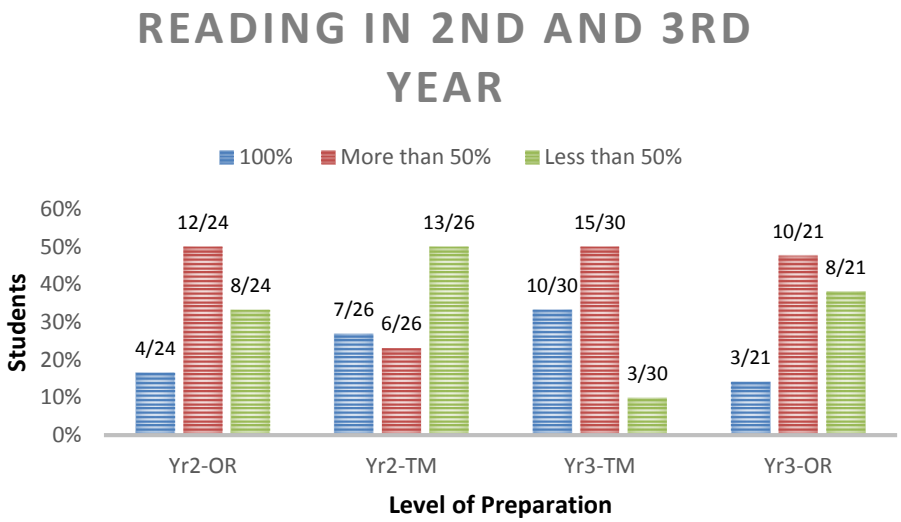

Figure 12 Percentage of reading in years 2 & 3

A comparison between students in the interviews (see 4.14.1) shows that clarity in the syllabus as well as motivation can encourage the students to read supporting academic sources. Hence, the phrasing 'suggested reading' was modified and changed to preparatory reading. In class it was called 'homework', which was understood by international students and accepted as a reminder by home students. Another comment by interviewed students that they needed to know the purpose of particular readings was followed up and explained. Clarity and monitoring are important scaffolds to help students manage a PB syllabus.

A progressive positive line is shown in Figure 13 where 9 out of 21 students indicate a preference for self-study (=62%) at the end of the three-year study, in contrast to 13 out of 15 students (=87%) requesting more tuition in the pilot year. Self-study requires self-motivation and a good comprehension of the tasks. It is a favourable development that reflects on satisfactory changes made to the PB syllabus. It cannot be denied that the majority of students (62%) in year three prefer more instruction, and particularly so in the TM components. However, a figure of 9 out of 21 students (=43%) that do not opt for more instruction is a good development, which implies an improved understanding of the syllabus, as a result of a refinement of the syllabus within the AR framework. Here it should be mentioned that 85% (12 out of 15) of the students in the pilot year were East Asian who had presumably come from

teacher-centred backgrounds. In a transmissionist classroom, the teacher is considered to be the source of knowledge, which is the opposite of the constructivist classroom, in which the students have to build their knowledge. The former typifies the traditional classroom which prevails in East Asia, while the latter typifies the environment in this study in which the PB syllabus is deployed. The challenge to manage students from different educational backgrounds is detailed in 4.4.2

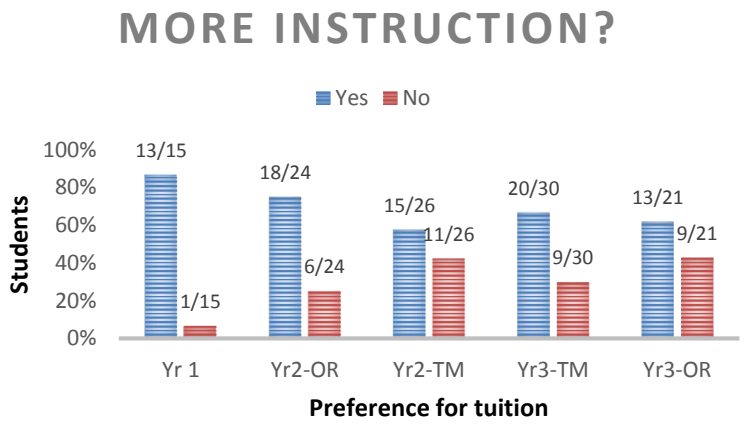

Figure 13 Preference for self-study or more tuition

In contrast to the aforementioned figures which show changes during the study, the data of practice time after class in Figure 15 show relatively little difference between groups and years. On average students tend to spend around four hours a week practising the use of electronic tools in each year of the study. The score is slightly higher for TM, compared with online resources (OR), which is understandable because the majority of the students are not familiar with TM and may need to invest more time. The positive development during the second and third year is more stability in practice time: increase, decrease and constancy show similar scores, whereas in the pilot study a time increase of 100% questions their understanding of the PB syllabus. The third option 'constant' in regard to practice time is absent in the pilot study survey. In the following years, the score for constant time investment rises from 29% to 38% with a dip to 23% during the TM component in the second year.

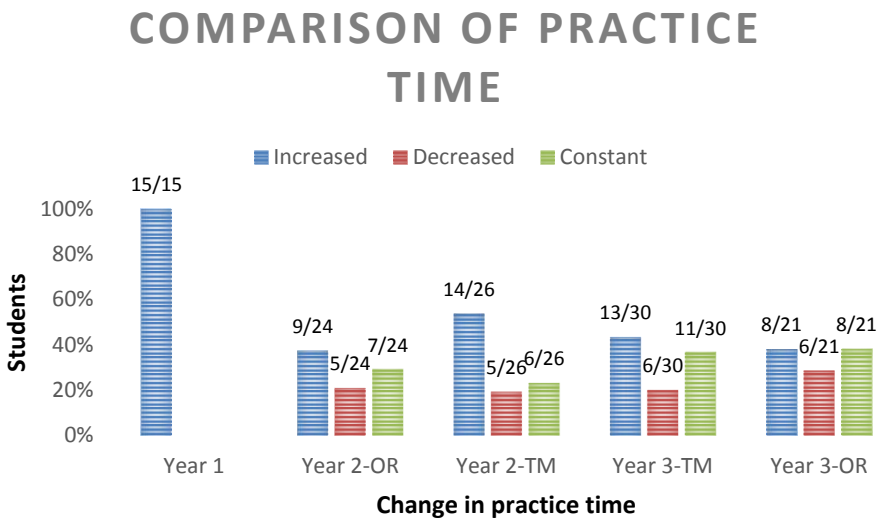

Figure 14 Level of practice time in years 2&3

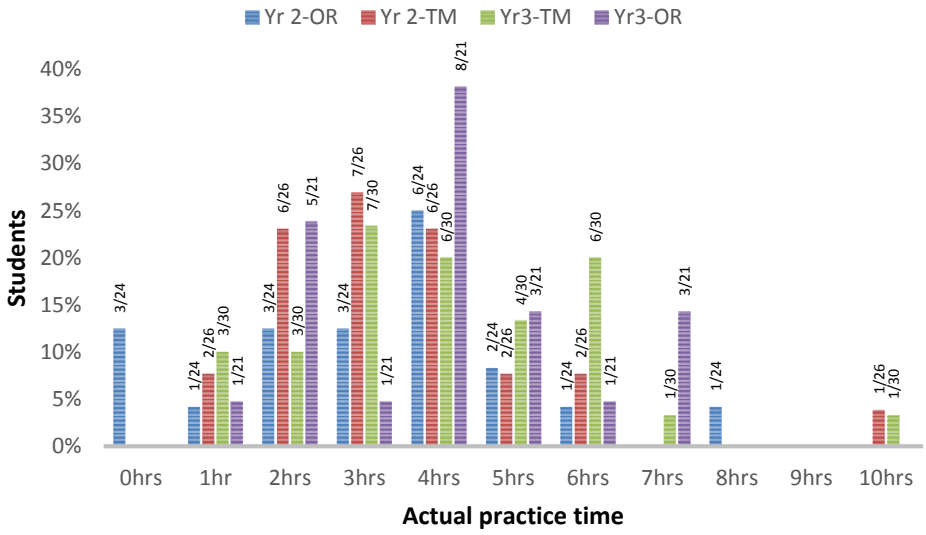

Figure 15 Hours of practice/wk

Finally, some words about Figure 15 which shows the overall amount of practice time per cohort. This diagram should be compared with Figure 4, Figure 5 and Figure 6 in 4.2.1 and the discussion in that section, where the figures express some relatively high levels of time investment in the pilot year. The bars in Figure 15 show the percentages, numbers and totals of students in each year per number of hours of practice per week. In comparison the numbers/percentages in this diagram are more concentrated than in the pilot study. It may be concluded from Figure 14 and Figure 15 that a good time investment of four hours a week and a fair degree of constancy in

time investment during a nine-week module indicate a suitable operation of the PB syllabus.

The modifications in the syllabus during the three-year study emerged from responses in the surveys. The pilot study identifies a lack of detail in the methodology and the measures that are taken as part of action research show improved results in the second and third year of the study. The students are more satisfied with self-study, their preparation for class has improved and their time management is more efficient. The specificity of the PB syllabus increased accordingly. The quantitative data in the surveys point to a close relation in the synthesis between time investment, independent learning (self-study) and understanding. If the students know what is required, and why it is required, they are more able to concentrate their efforts. These quantitative findings indicate what is required to encourage self-study and a higher level of independent learning. Students need to see and understand a clear pattern, which can be achieved through a detailed syllabus and appropriate support from the teacher. A constructivist PB syllabus enables students to build their own knowledge, but not without clear guidance.

4.3 Impact on teaching methodology

Action research and subsequent pedagogical intervention are the drivers of change in this study. The previous section 4.3.2 illustrates how research findings take the researcher back to action: modification to syllabus design influences the rationale for the questionnaires and the analysis of the responses to the questionnaires influences the syllabus design. This loop of feedback, common in AR, has an impact on the teaching method. For instance, the students' negative response to revision of their own work is well documented in the previous sections (4.2.3–4.3.3.3) and action was taken. A negative approach to studying does not lead to good results. It can be caused by environmental factors, or an unorganised approach, which is also referred to as a 'syllabus-free approach': the student does not pay attention to the syllabus (Entwistle 2009:34). The syllabus-free approach does not necessarily suggest an avoidance structure, but rather the student's adoption of a personally responsible attitude that

manifests itself in studying along their own lines and following up their own ideas (see quotes in 4.1). If the student is a confident independent learner, this approach can be adopted in the PB syllabus, which in essence offers a framework and allows students to implement their own interpretations. It is a type of learning that has moved on from generic studying to mastering the subject. At the same time it underpins professional elements in the PB syllabus: a translator has to make many decisions regardless of the framework, the brief, which can vary from general instructions to highly detailed guidelines. Taking ownership and drawing conclusions is labelled as the deep active approach to learning (Entwistle 2009:34). Deep active learning does not only relate to, for instance, personal experiences, but involves giving meaning and explanation to what is being learnt. It is the form of learning best suited to the PB syllabus (see example in 4.2.1.2).

When students do not take ownership of their learning, pedagogical intervention is required. Kiraly (1995:25) comments on scholars who focus their translation pedagogy on the specific skills they think student translators should acquire and therefore neglect essential factors in the pedagogical situation, such as appropriate instruction, role of teacher and student in the learning process and how pedagogical intervention can build professional responsibility and translation confidence. Kiraly (ibid.) stresses the importance of pedagogy. In the 'Results of PACTE's experimental research on translation competence acquisition, knowledge of translation and translation project' (Krakow 2013), the four-year longitudinal study includes the aspect of pedagogical intervention (1.4.7.4.3) as an inevitable independent variable. An explanation of how the findings in the study affected the PB syllabus can be found in the following section 4.3.1.

4.3.1 *Syllabus changes*

What affects the PB syllabus is the outcome. And as the outcome follows the syllabus, the design can only be changed after data have been collected and analysed and the outcome in the form of, for instance, test results is known (2.4.2). Consequently changes in the PB teaching style in the study meet the following requirements (Cook

and Campbell 1979 cited in Trochim and Land 1982:1–6): they are related to the presumed outcome (covariation), they occur prior to the presumed outcome (temporal precedence) and they are the only reasonable explanation for changes in the presumed outcome.

This section and the following sections in 4.4 focus on assessment and how it affected the syllabus. There are restrictions with regard to changing a syllabus. Summative assessments in the degree course are set by the Examinations Board. Assessments obviously do not only mark achievements in the learning progress, but they also determine what students should learn in order to achieve the vocational learning objective. With regard to TS, Kiraly's (2000) constructivism philosophy promotes the students' active construction of their own world knowledge, the establishment of their own objectives and involvement in the evaluation of their own work. Such an evolving pedagogy requires suitable assessment methods which test whether students have succeeded. Consequently, the syllabus must match the established assessment method.

The first syllabus (Appendices 7 and 8), which was designed for 'trainee-translators', was not understood by all: some assumptions needed adjustment and the contents required more transparency. The assumption that students had chosen to study TS in order to pursue a translation career or an associated path proved incorrect (personal communication 2009). The Chinese students (85% of the cohort in the pilot study) confirmed that translators in China, in-house or freelance, are not well paid; job prospects are poor particularly for freelancers and a translator's status is not high either. Moreover, visa restrictions make it difficult for them to find jobs in the UK after they have graduated. Therefore, the assumption that postgraduate students in Translation Studies plan a career in translation had to be modified and the content in the syllabus needed to be more applicable to generic language-related careers. Note that specific career-oriented questions were removed in surveys after the pilot study (for instance, question 15: How important do you rate CAT tools for your future as a translator?). Furthermore, aspects of insecurity and unfamiliarity with independent learning that emerged from FG discussions meant that the syllabus in the third year

included practical assignments, a rebranding of 'tutorials' into 'practical' session, and more clarity about the reading list (Appendices 7 and 8). Moreover, the amount of reading items was reduced, and details were made more specific by adding for instance, URL addresses. Students from teacher-centred backgrounds need more guidance towards learner independence and ultimately the enhancement of professional translator competence and skills. The following comment (unsolicited) in survey IIQ3a exemplifies this observation:

I suggest that before we use CAT tools, we can read some instruction manuals (with picture) first. And before each session, the what, why, the how should be explained more clearly.

(Student 1 2011)

The second part of the comment is a clear request for more clarity and guidance, and the first part which requests the introduction of technical manuals as learning materials indicates that the student had not read the syllabus well or taken ownership of her own learning. The syllabus repeatedly recommends that students consult online manuals for problem-solving, although they need to do so independently, but it never promotes manuals as textbooks or learning material.

The negative views of the translation portfolio because of its non-accredited status, as expressed in the FG discussions, were also taken into account in syllabus modifications. Section 4.2.3.2 describes how revision of the portfolios became a comprehensive task which continued till the end of each term. The findings that led to this modification in the second and third year of the study are discussed in the following section.

4.3.2 *Data validity check*

In 3.2.1 it is explained that validity checks can be applied in four different ways: firstly, a quality check to show how the responses address the research question, secondly to show how the research concepts become operational in the syllabus, thirdly, to show the face validity of the answers, and whether they elicit anticipated

responses, and their convergent validity by checking responses in multiple ways. This leads on to the fourth and final check by means of triangulation. In triangulation the different methods support or validate/verify each other's data. Rigorous data collection procedures (Creswell 2007:35–52) in this study cover the different forms of data in questionnaires (quantitative and qualitative), in interviews and FG discussions (qualitative).

The study is set in a framework of assumptions and findings (to provide a face validity check). Data outcomes lead to an emergent syllabus design. Furthermore, the study is not focused on the researcher: the focus remains on the participants' views. The approach in the qualitative inquiry is one of grounded theory in which some features from other qualitative enquiries are incorporated at a later stage in the study (Creswell 2007:78–79). For instance, the study contains some case-study features: the FG discussions enable an in-depth description and analysis of multiple cohorts of students involved in the same activity. However, it is not a case study, because of the evolving nature of the activities, which resemble, but are not the same as those in earlier syllabuses. The study also includes some features of ethnography: the inclusion of group culture (project management teams) and culture-sharing groups (a variety of educational backgrounds). The link between culture-sharing groups and the analysis of accredited and non-accredited assessments was investigated at a later stage in the study. A dependent variable emerged which had not been anticipated: the disparity of educational backgrounds. The check of its occurrence meets the second validity criterion which is that the researcher needs to monitor the operation of research concepts in the syllabus. For instance, the revision activity had not delivered the anticipated standards. Students discussed this outcome in FG discussions and modifications were applied to the syllabus. The final validity check concerns the researcher who begins this study with a single focus (Creswell 2007:45–46): the enhancement of translator competences through a project-based syllabus. Group responses to the syllabus and the impact of learner styles and different educational backgrounds remain secondary to the research question.

A rigorous approach to the data in all its stages, collection, analysis and evaluation/interpretation, includes a development from a concrete research question about the impact of the PB syllabus to a wider perspective with interrelated themes and more abstract themes, such as the less tangible learner styles. The benefit of AR is that the researcher can follow the students at all times, not only in their responses to surveys, in interviews and FG discussions: the researcher is the teacher who modifies the syllabus in the process. And lastly, a rigorous approach is applied in this study: it is ethical and permission has been obtained from all participants.

Further data checks can be carried out by the researcher in the application of at least two different procedures (Creswell 2007:207–208). The preferred data check would have been a longitudinal study, but due to the nature of each master's degree course of one year, this was not possible. Some attempts were made to contact alumni who had entered employment, but the data were too small to offer any degree of reliability. Therefore, the first data check in this study is triangulation, which makes use of different methods and sources (different groups of students during the three-year study), and the second one is the prolonged engagement and persistent observation in the field (ibid.). During one term, or two terms, it was possible for the researcher to build trust with participants, to learn the culture and check for misinformation. Reliability of data is provided by handwritten responses to questionnaires and transcribed recordings of interviews and FG discussions. Creswell (2007:211–213) also recommends that the actual data collection should meet sound criteria. For instance, the data in this study are research driven and vice versa. Collection and analysis are applied competently, planned in advance, and not ad hoc. The researcher's assumptions, which contain subjectivity, are made clear in procedures as well as in outcomes. For instance, the questionnaires are explicit and students will understand that the questions are about their learning approach. Additionally, the study is robust. The project-based methodology is proven (in, for example, science teaching) and it is theoretically sound. Its application in TS produces grounded theory. And finally, the study has value in that it informs and improves practice in the classroom.

4.4 Academic performance

The primary objective of the qualitative analysis of FG discussions is to assess the approach to learner independence, professional skills and competences in relation to the PB syllabus. Assessment, a new category, surfaced in the FG discussions in the second year of the study. In spite of its low percentage of references in the CAA node sequence (6 references (3%) compared to 40 references (22%) for project management) in Figure 10, assessment is included in the analysis because of its impact on the learner's approach to the syllabus, and vice versa the effect of syllabus design on the overall assessment process of summative essays and non-accredited translation portfolios.

In IIQ-PS the category 'Assessment' is addressed in five questions under the heading 'Assignments' (Appendix 1). Question 26 and sub-question 27 are opinion questions which ask the students about their preparation for the summative essay. The other questions relate to the portfolio and are intricately linked to the summative essay and the students' approach to independent learning. The translation portfolios underpin the summative essays because they supply the data for students to exemplify their assessments of three TM programmes or various online resources. The essay is based on cumulative experiences which the students have demonstrated in the portfolios. From IIQ-PS it appears that in week six (out of nine weeks) five students out of thirteen have completed 1,500 words (out of 2,500 words) of translation in their portfolios, five have translated 1,000 words, three have translated less. Eight students (out of thirteen) have arranged proofreading of their portfolios.

After submission, the portfolios in the pilot study were reviewed by professional translators outside the university and were awarded a pass or fail status according to the reviewers' professional standards. In the following years of the study, the portfolios were reviewed by graduated students who were working as professional translators. Criteria and descriptors were set up by the teacher/researcher. Figure 16 compares the pass rates of essays and portfolios in the pilot study year. The portfolios show an average pass rate of just below 60% which more or less reflects the students'

input towards the portfolios in the responses to questions 26–27 (Appendix 1). The students are advised to translate 300 words per week to practise the relevant activities. In week six (out of nine) the students have translated an average of 50% of their portfolios, whereas the expectation was 75%. Just over 50% have arranged proofreading, whereas 100% would meet professional standards.

In the analysis of the FG discussion, the 'Assessment' node consists of less than 3% of the references. The low level of interest in assessment as a discussion item during focus group discussions matches the relatively low input level in the proofreading of the translation portfolios. This was evidenced and emerged in the responses in the surveys in the pilot year. In the FG discussion the students appeal to the extrinsic motivation of a graded assessment and do not show adequate level awareness of the requirements of professional translation. The students suggest that the level of extrinsic motivation, an independent variable, is the root cause of poor results. Intrinsic motivation, a dependent variable, is not put forward, although it is integral to the independent learning approach.

The responses in Table 20 can be categorised under (lack of) authenticity and extrinsic motivation, which describe the students' explanations of poor quality portfolios.

(Authenticity)

We need tests like a real project, not a pseudo project, we [should] have a complete job: pre translation, preparation, the translation, revision the whole workflow.

(Extrinsic motivation)

But this performance, this academic performance in class has nothing to do with Durham's final credits, so where is the motivation.

But the students think it [proofreading/project management] is nothing to do with me.

Table 20 Student views of non-accredited assessment

In these comments it appears that the participants do not attribute authenticity to the translation portfolio project and they think that results (of the translation portfolios) would improve, if it were a paid job or an activity that would count toward their degree. These comments imply that the participants do not recognize that they are honing and enhancing their competences and skills in translation.

The data value of these comments is mainly for the researcher and teacher. An illuminative evaluation (Richards 2001:223–255) of data refers to the process, the way in which students cope with their acquisition of new learning experiences. The PB syllabus does not always find favour with students from a teacher-centred background, who prefer to listen to their teacher, take notes and work from a textbook (Richards 2001:115–124). Meanwhile, although the technological materials suit concrete learners, it is the analytical learners, particularly those who draw conclusions from new experiences, as well as the communicative learners who enjoy web-based communication (wiki), who feel most at ease. For some students a learner-centred project-based syllabus requires a considerable time of adjustment.

Unfamiliarity with the independent learning style can be a root cause of poor learning approaches. Furthermore, the educational background of the Chinese students is regarded as a covariate that may impact motivation as a variable. Hence the next step in the third year, based on initial findings in IIQ-PS and data from FG discussions, was to continue the exploration of the students' approach to assessment in a quantitative analysis of accredited and non-accredited assessments (4.4.1). The objective of the analysis was to modify the project-based syllabus and the pedagogy in such a way that students would take ownership of their learning as well as their professional competences, particularly in the field of revision.

4.4.1 *Accredited and non-accredited work – some findings*

The anticipated learning outcomes of the syllabus in terms of enhanced revision skills, improved self-assessment, and professional translator competences were not apparent in the overall fit for purpose quality of the translation portfolios. Subsequently, new dependent and independent variables, and covariates had to be considered, which led

to additional quantitative research at the end of the pilot study. The anticipated outcome of the process-oriented syllabus was to experience an improvement in non-accredited translation work in the second term of the pilot year. There was a significant improvement, but only among European students and a negligible improvement among Chinese students (Figure 17). This pattern repeated itself during the entire study in spite of modifications to the syllabus (4.3). FG discussions were used to investigate poor revision procedures of non-accredited translation portfolios.

At the end of the first term in the third year of the study, the results of the accredited essays (Figure 16 - Essay 1) were compared with those of the related non-accredited translation portfolios (Figure 16 - Portfolio 1) to establish if there was any correlation between the pass rates of the two categories. The comparison was repeated in the second term (Figure 16 - Essay 2 and Portfolio 2). The first set of results showed the following correlation of accredited and non-accredited work in Figure 16.

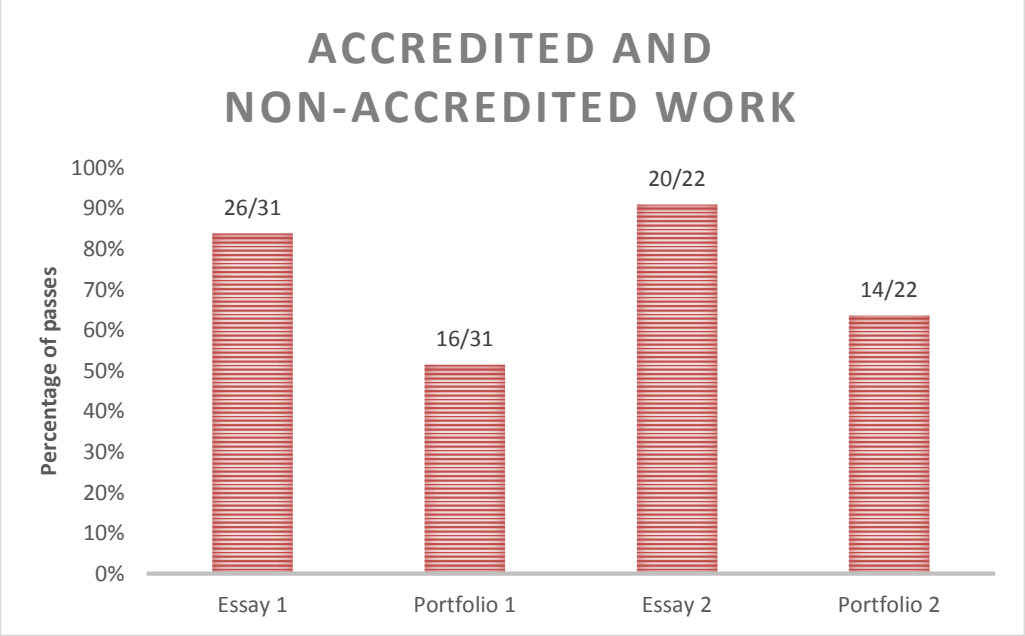

Figure 16 Total pass rates for accredited essays and non-accredited portfolios

The accredited essays in term one (Essay 1) gave an overall pass rate of 84%, while only 52% of the reviewed but non-accredited portfolios were given a pass (fit for purpose). The pass rate thus shows a difference of 32% between accredited and non-accredited work in favour of the former. There was an overall improvement of

accredited as well as non-accredited work in the second term, and particularly the quality of non-accredited portfolios had improved by 12%, compared with 7% of the accredited essays. The thresholds for essays and portfolios were not changed.

The pass rate of non-accredited work improved in the second term and the difference between accredited essays and non-accredited portfolios had fallen from 32% to 27%. As explained in 4.4, the students write their summative essays based on data taken from their portfolios, therefore one might expect a degree of correlation between the categories. This expectation was confirmed in the second term, when the European students showed 100% pass rates for accredited as well as non-accredited work (Figure 17). In comparison, only 50% of the Chinese portfolios passed in the second term.

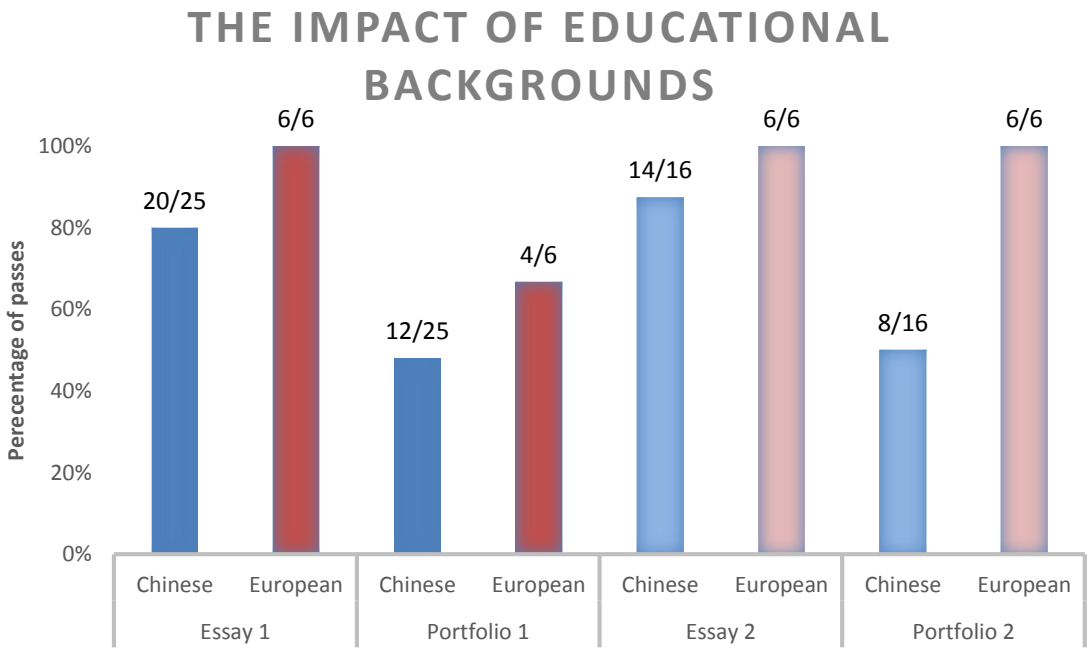

Figure 17 Pass rates for European students (red) and Chinese students (blue)

The pass rate for the non-accredited portfolios in term one was 67% for European students, which rose to 100% in term two, an improvement of 33% on the original pass rate. The Chinese students showed an increase of only 2% to 50% in non-accredited work in the second term, compared with an increase of 8% in accredited work from 80% to 88%. It should be noted that the bar chart only indicates pass rates

and does not show the distribution of marks across the percentile marking system where a pass mark is between 50% and 100%, thus the bar chart does not show how well either group performed. Hence, the 100% pass rate for European students includes students with pass marks of 50% and those with distinction marks of 70% or higher.

The anticipated correlation between successful essays and successful translations was not evident among Chinese students. Some passed their essays and failed their portfolios. Consequently, the assumption was made that translation portfolios were submitted without appropriate revision. The assumption was confirmed in the FG discussions (see Table 20):

I was thinking too that it is may be pressure that really works, if our translations are marked, you think 'I must do it right', 'I must have it revised'. One student had not done her translation so well, and I asked her why, and she just told me, it won't be marked. She said, I had to do it quickly, no matter what the quality is.

(Student 2 2011)

The conclusion that can be drawn is that the European students demonstrated it was possible to improve their own translations independently, that they had taken notice of feedback on their first essays and portfolios, that they had benefited from revision activities set up in the PB syllabus and that their awareness of the importance of revision and self-assessment had thus increased in the second term. Good revision and self-assessment were learning objectives in this module and the European students had displayed an intrinsic motivation to improve, while the following Chinese student apparently placed a higher value on extrinsic motivation 3.5.1.

The pedagogical challenge was therefore to raise awareness of the importance of self-revision and peer-revision among all students, both as a learning objective and as a professional quality. The first part of the challenge was to understand how to encourage students with a predominantly extrinsic motivation to draw on intrinsic motivation and develop and demonstrate deeper learning skills. Some explanations and suggestions are put forward in the following section.

4.4.2 *Collaborative learning and assessment among Chinese students*

A certain amount of ethnographic analysis needs to be included so as to ascertain the validity of the results in connection with cultural differences among the cohorts of learners. Project management and (anonymous) peer-revision are part of a collaborative group activity in PB teaching. Collaborative learning is familiar to Chinese students (Biggs 1996; Chan and Rao 2009; Tang 1996; Watkins and Biggs 1996). However, the transition from authoritative learning to independent learning is not an easy process. Biggs (1996: 50–62) stresses that the Western view that Chinese students favour rote learning, which is memorising facts, is incomplete and incorrect. While in broad terms it may be argued that many European students are educated to explore first in order to develop their skills, traditional Chinese teaching methods believe in skill development first, so that they can achieve a sound end product. They develop their skills through repetitive learning activities. Biggs continues that it does not mean that Chinese students are taught in an authoritarian manner; on the contrary, they follow the Confucius elicitation mode, which allows the student to reflect on questions and discover. Meanwhile, they expect to be guided by the teacher in order to follow what is perceived to be 'the right path' in their current environment. This partly explains why in the data their responses (see Student 2 in 4.4.1) demonstrated a performance-focused approach (the result matters), rather than a process-oriented approach.

Teachers of Chinese students in the UK can and should expect high quality learning, but need to consider monitoring a learning process that offers the students more guidance and consolidation (Chan and Rao 2009:315–350). For Chinese students, endless repetition is not the same as rote learning, but it is a form of reinforcement that is required to learn to master appropriate skills. The repetitive activity needs to be meaningful; it must involve the learner in the learning activity and should be considered part of quality learning (Marton *et al.* 1996:69–84). This recommendation needs to be implemented in the revision activities in the module, whatever kind of assessment is practised. Chinese students are used to working

collaboratively; therefore, the collaborative nature of the revisions in a project-based approach is not an issue, provided it is introduced with clarity. The other issue is how to convince any student (see Student 2 in 4.4.1) that the motivation to improve their skills needs to be intrinsic, which means having a desire to know (3.5.1.2). The temporal aspect of motivation in long-term projects fluctuates during a lengthy learning process, and strategies to improve extrinsic motivation (such as credits) might only have a short-term impact (Dörnyei 2000:524). The pedagogical challenge is to address the student's intrinsic motivation with regard to self-assessment, rather than stimulate extrinsic motivation.

In 2012–2013, the year after the study, the PB syllabus was modified to address this challenge. A repetitive element was introduced so that the second half of the module mirrors the first half: the second set of technological tools follows the same pattern and introduces similar computer-aided translation features and functions. The second half of the syllabus includes suggestions for more advanced study of features and functions of tools, or the introduction of new ones. These activities are optional, and they are intended for students who wish to apply deep learning skills, or for those who are not challenged by repetition. The objective was to increase differentiation in the PB syllabus, to be more eclectic in the teaching methods and to raise the students' awareness of their potential. Visibility and clarity, as suggested and implicated by students in the FG discussions (4.2.4) was introduced in the syllabus, in the pedagogy, but also in the completion process of translation portfolios. Electronic files in the translation portfolios had to be zipped and the folders had to be given appropriate filenames before they could be emailed to the teacher. The target files required hyperlinks to the webpages, the source texts, to facilitate the review process by the reviewers. The portfolios had to be emailed on time and were returned to the students if they were not in good order. Once they were approved by the teacher they were forwarded to the reviewers. This professional practice was continued after the pilot study, but an additional requirement was introduced. The portfolios had to be printed and attached to the summative essays for reference purposes. Cross-referencing from essays to examples in the portfolios was recommended. This kind of visibility contributed to a 100% fit for purpose outcome for all portfolios in 2012–2013, the year

after the study (4.2.3.2). The quality of the translations was no longer perceived invisible in cyberspace, but was noticeable on paper. Essays were also delivered with cross-references, which improved their quality. The link between accredited and non-accredited work had become tangible to students.

In a three-year AR project conducted at Hong Kong University, Gow *et al.* (1996:244–265) studied self-managed learning (cf. independent-learning in this study) among their students and came to the conclusion that their students were no less capable of adopting a deep learning approach than other students, and that it was contextual variables that discouraged their students. They also concluded that institutional changes might be needed to help students draw from inherent intrinsic motivation, and to prevent students from being distracted by work and assessment pressure.

Contextual variables and institutional standards are likely to impact the students' learning experience, and their motivation in a positive or a negative sense. Although HE in Britain tends to follow the liberal approach to curriculum design, ideally there should be some uniform standard which can be followed by HE institutions. The following section 4.5 will therefore compare to what extent MATS in Durham, and the T&T module in particular, meet EMT requirements and 4.5.1 will consider which standards are required in the T&T module to support the learning experience in the positive sense in order to enhance professional translator competences.

4.5 Benchmarking

In 2006 the EMT Expert Group proposed the following competences for professional translators: language competence, thematic competence, technological competence, info mining competence, and intercultural competence, with translation service provision competence at the centre (2.5.1). Elements of most competences are included in the T&T module, although the syllabus can only account for training in three competences in particular: translation service provision, information mining and technological (mastery of tools) competences. Language, thematic and intercultural competences are not included in the objectives of the module, although they are

integral to the comprehensive TB teaching methodology in the PB syllabus. The T&T module performs according to the following translator competence benchmarks:

Translation service provision:

- negotiation with the client (for instance, deadlines, tariffs/invoicing, working conditions, access to information, responsibilities, specifications
- clarification of requirements, objectives of client, agent and other stakeholders
- time planning
- calculation of services
- meeting deadlines, team organisation, dealing with instructions
- working under pressure in collaboration with colleagues
- (virtual) teamwork
- self-evaluations.

(EMT Expert Group 2006)

Production standards that are met by the project management team include:

- ability to define and evaluate translation problems and find appropriate solutions
- mastering techniques and strategies for proofreading and revision
- setting and monitoring standards
- translation workflow.

(EMT Expert Group 2006)

The translation service provision competence has a wide scope. The PB syllabus encourages the project management team to be actively involved in simulated LSP activities, which match proposed interpersonal dimensions, as defined in the skills and competences listed above.

Information mining competence:

- knowing how to identify one's information and documentation requirements

- developing strategies for documentary and terminological research (including approaching experts)
- developing criteria for evaluation of documents accessible on the internet to test reliability (developing a critical mind)
- knowing how to use tools and search engines effectively
- mastering the archiving of one's own documents.

(EMT Expert Group 2006)

Particularly in the field of information mining the PB syllabus evolved in the study to match the aforementioned competences and skills. In the first year the focus was on documentation requirements, search engines and sourcing, retrieving and storing terminology. Poor archiving skills among students led to more emphasis on word processing skills and towards the end of the study the syllabus included an introduction to cloud storage, and reliability checks of web sources.

Technological competence:

- full knowledge of a range of CAT tools and effective usage
- creation and management of databases and files
- ability to adapt to new tools
- ability to produce translations in different formats and for different technical media
- knowledge of MT possibilities and limitations.

(EMT Expert Group 2006)

The students learn to familiarise themselves with three TM software programmes and recurrent version updates. Their adaptation to new tools should therefore be a natural progression. During the study additional tools for different technical media (audio-visual, localisation) could not be accommodated due to curricular limitations in the TS degree course in Durham. In the pilot year, the T&T module was mandatory for most students and it aimed to match the following benchmark:

the curriculum components listed above should be *closely integrated*. This means, for example, that the students should produce their translations using the information/translation technology supplied […] Some sections of the information technology component should be offered right at the beginning of the programme so that IT tools can be used

(EMT Expert Group 2006)

In order to facilitate integration of components, the TM part of the T&T module was brought forward to the first term in the third year of the study (3.1.4.1), so that students could practise the usage of TM in the specialised translation modules in the following term, which may be taught by professional translators who habitually use TM.

Although the team members are primarily responsible for the organisation and implementation of the production activities, their classmates are equally involved in the completion of tasks. The latter receive instructions and requests and have to respond adequately. The team members send purchase orders, and their designated translators and revisers, who are classmates, return invoices. Missed deadlines result in email exchanges which involve both parties. In short, the simulated management structure of the multilingual website translations in the portfolios equates to many features of translation service provision.

The EMT policy defines sets of skills and competences and thus provides a reliable benchmarking process which should cover and unify the training courses in the EMT Network. Undoubtedly selection and definitions can be questioned (Kelly 2007:128–142). In fact, many scholars (Pym 2003, Kelly 2007) put forward the question of whether translation skills can be defined. The answer is maybe not, but the academic years might be the only period in which there is time to reflect on them. Pedagogically it is good to have a framework and the PB syllabus aims to reflect the EMT policy in its integration of skills.

4.5.1 *Benchmarking assessment skills*

Training skills can be tested by professional translator organisations, which set their own quality criteria (Niska 2005:38) and benchmarks. An example of this in the UK

is the Chartered Institute of Linguists, which offers the Diploma in Translation. The Diploma is incorporated, partially, in the Durham master's programme in TS, where students take the first part of the examination as part of the degree course. The inclusion of such examinations raises standards, but it does not allow for a flexible syllabus design. Most market-oriented syllabus models are examination-based, which makes them product-focused. The PB syllabus, which follows a process-oriented approach, represents an alternative to examination-oriented teaching. Nevertheless, it cannot and will not exclude examinations or summative assessments from the curriculum. The Translation and Technology module's summative assessments are based on large translation portfolios, which are not graded and for which students receive feedback only. Garrison (2003:101) stresses that we need to design new methods of assessment to reward the collaborative potential of deep understanding and an increased awareness of the learning process. Traditional assessment focuses on the acquisition of knowledge and facts. Many types of less formal assessment, such as the translation portfolios would not only support, but could also be an integral part of summative assessment. While summative assessment enables the teacher to establish if the learning objectives have been achieved, formative assessment (see 1.2.4), whether individual or collaborative, provides invaluable signposts with pedagogical implications, for instance, when it appears that the students are not performing as expected.

The ongoing revision process of the translation portfolio in the study, which includes the use of CAT tools and integrated peer-revision lends itself to formative assessment. During the latter part of the study, intermediary checkpoints were established by the teacher for students who needed confirmation and visibility of their progress. Revising translations and providing feedback are key practitioner skills, which should lead to a major learning outcome for student translators and professional translators alike. Professional translators experience these tasks as anonymously organised collaborative activities. Therefore, should not translation degree courses accept collaborative work as an inherent and vocational part of their summative assessment? And if they do, should there not be agreement in how the individual and the collaborative components are assessed, and the formative and the summative

assessment are concluded? Would the translation industry not want to have a clear indication of the individual's competences?

Concluding remarks

This study is based on the theory that a PB syllabus will enhance professional translation competences and skills. It is inductive and has arrived at conclusions based on examples provided in this chapter. The research method is eclectic and ongoing, and has produced an evolving theory. The PB theory is substantiated in the PB syllabus, which then evolves, matures, and changes depending on environmental circumstances, such as changes in the translation industry, institutional and curricular changes of direction, as well as students' needs. The mixed method approach to the data collection proved suitable: it is an exploratory sequential design, which expresses itself primarily in the sequential questionnaires during the three year study (see Creswell and Plano Clark 2011). The surveys are exploratory and are complemented by other forms of data collection, such as FG discussion and interviews. They function as convergent parallel and explanatory sequential designs. Not only do they explain the surveys in varying degrees, but they are also aligned with the surveys and interviews. All data combined converge in the following conclusions.

The PB syllabus in T&T complies with many of the translation skills which are proposed by the EMT Network Group 2006. The process-oriented, learner-centred PB methodology supports a comprehensive training programme. It is supported by theories grounded in task-based and problem-based teaching. In accordance with the constructivist philosophy it encourages students to actively engage with the construction of their knowledge. The data indicate that the PB syllabus offers new pedagogical resources to teach and to learn about the complexity of professional translation. The study is not so much trying to generate a new theory but rather aims to verify an emergent theory, which is that the PB syllabus enhances translator competences and encourages appropriate translation skills. From different forms of data collection during the three-year study a picture has emerged how students interact with the syllabus, depending on their learning approach. The teacher-cum-researcher

who is continually involved in AR can guide the students and modify the syllabus accordingly. The students have confirmed in the data that their involvement in project-based tasks gives them familiarity and experience with many essential professional translator skills, such as online communication, practical business skills, teamwork skills, revision and multilingual project management. From the same data it emerges that primary objectives in the pedagogy as well as in the method should be visibility, clarity and transparency so that students understand the content of the syllabus, what they are required to do and for what purpose. The diversity of educational backgrounds challenges the teacher to set intermediary goalposts, to check and give feedback at regular intervals.

The student's learning approach and progression from surface learning to deep learning can be supported by involving the student and drawing on whatever intrinsic motivation lurks in the student. The Confucius elicitation mode allows students to reflect on questions and discover (Biggs 1996). Meanwhile, students expect to be guided by the teacher in order to follow the right path. This philosophy is not only applicable to Asian students. Based on the responses in the data it appears that students, regardless of their educational backgrounds, teacher-centred or learner-centred, are willing to take ownership of their learning when they see and experience the benefits. The data also indicate that students tend to have a microscopic view of learning and translation. They want to master skills in the most efficient way. Pym (1992) defines translation competence as the ability to generate a range of good solutions in the target language, and then to select the best option. This ability is crucial regardless whether it is in a TM programme or in a pen and paper translation exercise. The PB syllabus has the potential to move the student translator from a microscopic view of translation skills to a macroscopic view of translator competence.

Summary and conclusions

Translation competence is

> the ability to generate a series of more than one viable target text for a pertinent source text [and] the ability to select only one viable TT from this series, quickly and with justified confidence.
>
> (Pym 2003:489)

Pym's personal view of translation competence is that it consists of two skills – the ability to generate solutions and the ability to select the best one among those generated. Although it is a rather minimalist view, it is frequently cited in the literature. Both Pym (2012) and Malmkjær (2007:302–306) go to great lengths to define translator competence and give an overview of the complexity of the concept and the wide range of definitions, and recurrent attempts of re-definitions from the 1970s onward. In 'Translation skill-sets in a machine-translation age' Pym (2012) expands and refers to the historical perception of translation competence as a linguistic expression of bilingualism, a competence that is market-driven, a multi-componential ability which is linguistic, cultural, technological and professional, and ultimately a 'supercompetence'. Pym suggests that the theorists embrace the multi-componential idea because it can bring so many new skills, for instance, technological skills into translation training. During the three-year study, set within a Translation and Technology module in higher education, as discussed in this thesis, Pym's minimalist definition and pointer towards multi-componential abilities were helpful because they focused the syllabus and kept translation as well as translation competence at the heart of translator training. This focus was challenged by the high learning curve associated with technological tools, which risked diverting the students' attention from their actual *translation* competence.

The three-year study has investigated the hypothesis that if students are trained to be critical and analytical of the tools they use to produce a good translation, they will be better supported in a translation career. Translation competence in comparison to isolated skills is essential in order to participate in a translation industry, which is becoming increasingly volatile and fragmented (Pym 2003), and where the professional players are not united in their standards. A lack of agreement in the industry (see Gouadec 2007; Pym 2010) might explain the sector's initial enthusiasm for the 'fit for purpose' benchmark because of its inclusive nature. However, in the application of the 'fit for purpose' translation service standard BS EN 15038:2006 academic and professional approaches diverge: the translation industry has multiple agents, including numerous clients as end-users who have different requirements and standards, while in translator training there is only one client and end-user, which is the student (Mitchell-Schuitevoerder 2008; 2011). There is a suggestion that Higher Education can achieve more uniformity through standardising bodies, such as QAA (2.5.2), and unifying policies and documents (see EMT in 2.5) than the industry – at least respectively within the UK context and the European context. The project-based syllabus aims to encompass and address the broad spectrum of requirements and standards that ranges from the translator in training to the translator in the industry.

The thesis has investigated the impact on learning approaches to and potential outcomes of the project-based syllabus, which is designed for an academic degree course with a vocational objective in a research-intensive university. It is an academic requirement in higher education for students who are preparing for a Master's degree to be research-oriented. In order to achieve this goal, vocational knowledge construction needs to be firmly based on theory and on the study of the primary and secondary sources that underpin a course with practical features. Theory in the theoretical modules can be perceived to be troublesome knowledge by students: they are confronted with unfamiliar language, conceptually difficult knowledge and as a result they may present themselves as defended learners, which means that they are not yet open to new and difficult 'problems' (Land 2006; see 2.3). From the focus group discussions and interviews it appeared that students did not always know how to relate translation theories to a practical module such as Translation and Technology

(see responses in 4.1). The challenge was to construct a suitable learning process that would connect the academic and the vocational. This was achieved in the project-based syllabus which encouraged the students to explore and relate. The outcome of such an approach is that the enhancement of critical thinking during their studies will prepare students to make well-founded decisions and choices in their potential careers.

Each chapter of this thesis has contributed to a bird's eye view of the project-based syllabus and the underlying pedagogy. The literature review in Chapter 1 gave the background of the project-based syllabus, its context, and a rationale for its adoption in translator training. It has demonstrated that there are few detailed discussions of translator training grounded in a clear teaching methodology. Meanwhile, the literature review has covered a wide range of process-oriented research, mini-studies of classroom learner-centred activities and experiments at grass roots level within translator training. In addition, it has given much evidence of prolific discussions on the topic of technology for translation: technology has achieved an interdisciplinary function in translation studies (see O'Hagan 2013:503). Translation for technology has become a scientific paradigm, attracting much discussion in the literature, although it does not necessarily include a clear framework of methodology or pedagogy.

Chapter 2 gave an overview of the effectiveness of the project-based syllabus: it has underpinned a defined teaching method in which the student takes self-determined steps to reach the goal of independent professionalism. As such, the project-based syllabus offers uniqueness and an innovative pedagogy which can be adopted in a variety of modules in translator training, and which is not limited to the teaching of technology for translation.

The thesis has based its conclusions in relation to the project-based syllabus on a mixed research methodology, which was discussed in Chapter 3. The empirical inquiry into the project-based syllabus was set in a practical module of Translation Studies at Durham University (UK). It refined and developed several theories and presumptions, rather than setting out to prove a particular theory (see Künzli 2013:53–62) and it took into account the limitations of a study set in a specific special and

temporal context (Durham University, UK Higher Education, 2009–2012). Its starting point was the position of the syllabus on the TS 'map' from where it adopted Kiraly's (1995) constructivist theory and scaffolds, and then adapted and structured constructivism according to a range of problem-based, task-based and project-based teaching methodologies. The research has been an inquiry into the assumption that a project-based syllabus enhances translator skills and competences in translator training. The mixed method of collecting and interpreting both qualitative and quantitative research by means of surveys, interviews and group discussions supported the inquiry and aimed to discover the effect of the syllabus on student learning. Its data collection was to check hunches about anticipated or unanticipated outcomes. The adoption of an action research method allowed the study to continue and some data from interviews held in 2013 after the three-year study, discussed in Chapter 4, have confirmed positive outcomes of the project-based syllabus.

Chapter 4 showed the ways in which the hypotheses were induced from close data analysis. As suggested in section 4.3.2 the study gradually acquired some ethnographical elements, which were expressed in the shared group culture, either because the participants worked in a group or because they shared similar education backgrounds. At that point the focus in the study turned away from theory development to a description and understanding of particular groups (Creswell 2007:228), which in the study were focus groups composed of students who had run in-class project management teams. It was inevitable that features of group behaviour, either individual and personal learning styles, or environmental teacher-centred educational backgrounds would influence the data and their outcome. However, this element of ethnography did not shape the study. It was the syllabus that remained at the core of the study and not the user. In effect, a syllabus cannot function without a user, teacher or student, and it is shaped by them. Simultaneously, it is the syllabus that sets the pattern and drives the teaching and learning.

Although the research was interpretive and inevitably subjective, and thus coloured by both the participants' and the researcher's views, the data analysis had a structured and systematic approach in that it relied on grounded theory. In contrast,

ethnographic and narrative approaches allow participants and dialogue to lead the analysis, whereas the questions set for group discussions, interviews and questionnaires were closely related to the project-based research question in the study (see Creswell 2007: 230–232). All the methods have provided evidence that the project-based syllabus can work. The use of mixed methods in the study, quantitative and qualitative data in the questionnaires, qualitative data in interviews and focus group discussion, and a semi-quantitative computer-aided analysis of the discussions, resulted in an acceptable level of saturation. Core categories (see Figure 10) were saturated and the project-based theory has been now sufficiently formulated (Glaser and Strauss (1967:223–236): the hypothesis that a project-based approach raises the awareness of translation skills and competences among trainee translators has been backed by evidence. Enough proof has been generated to surround the theory with a credibility that increases by means of comparative analyses (ibid.). The focus group discussions after the initial questionnaires were not only sequential methods, but also comparative (see 3.6.2). The objective of the three-year study was to offer a differentiated syllabus, to be more eclectic in teaching methods and to raise the students' awareness of their potential. The outcome of the study is that the success of the syllabus depends on whether the students take ownership of their learning, and whether the teacher offers clear guidance, visibility and sets goalposts.

Taking ownership of learning

The project-based pedagogy is an interactive teaching and learning method, a form of research-based teaching in which students learn the course content as researchers (Griffiths 2004:709–26). During the study, it became clear that the role of the student could be increased and that of the teacher could be reduced during the term in which the modular components were taught. Meanwhile, the teacher acted as the guide and moderator, sometimes even as an initiator, but not as the instructor, particularly during the practical sessions, the core of the module. During the lecture/seminar sessions, there was an element of transmission of information, which can be defined as research-led teaching to satisfy academic requirements. The transmission was shared between

the teacher and students. The transmission of information was learner-centred and organised by the students in their presentations; the teacher provided follow-up. It was explained in section 2.4.2 that the presentations were not only informative, but also had a reflective function; they were not part of summative assessment.

In the first two years of the study, research-based learning manifested itself in the students' presentations of selected academic readings. In pairs, or small groups, the students were required to present three points which they considered essential for translation work, and a demonstration of their application of the key points to the translation portfolios. In 2012–2013, the year following the study, presentations were suspended in the first term, so that the students had more time to adapt to the project-based approach and to explore academic sources. Towards the end of the first term students were asked to find appropriate sources and to lead small discussion groups. Formal presentations commenced in the second term. In the In Itinere questionnaire in the pilot study (see 4.2.1) the responses concerning the reading of academic and professional sources had shown that only 50% of the participants had prepared for class (Figure 11). It appeared that students were not ready to take ownership of their learning. The assumption that students would be independent researchers and prepare themselves for seminars, discussion and the practical sessions proved incorrect. Similarly, the presupposition that the translation portfolios would be completed to a suitable standard turned out to be inaccurate (4.4).

Two factors had contributed to disappointing scores in the students' responses to syllabus requirements, such as the need to carry out regular reading of academic and professional articles: students from teacher-centred backgrounds had difficulty adjusting to the learner-centred syllabus, and students lacked the extrinsic motivation of grades. The presentations and translation portfolios were not assessed but given feedback only. These two factors were not anticipated, and an inquiry had not been set up. Consequently, there were not sufficient data in the pilot study to draw sound conclusions. Action research, among others linked to focus group discussions, complemented the surveys and provided additional data. Subsequently, measures were taken to increase visibility and guidance without undermining the process-oriented

and learner-centred syllabus. The two factors, insufficient knowledge of the pre-grounding of the students, and the absence of inclusion of collaborative work in summative assessments during the study caused limitations to the implementation of the syllabus and had some impact on progress in the present investigation. In the pilot study, the students had not taken ownership of their learning to the degree that was required for the project-based syllabus to support them in their enhancement of their skills and competences.

Analysis of training needs

The pilot study questionnaire yielded much information in terms of the students' reflections on what they needed to learn and what they had not learnt. The responses were not discussed in the analysis in Chapter 4 because of the potential unreliability of answers to opinion questions, nor had the responses been followed up in any of the focus group discussions. Nonetheless, teaching changed in accordance with the analysis and interpretation of responses (see reflective learning in 1.4.8). Meanwhile, the students used the reflective opportunity offered by the questionnaire to give more detail than requested. In particular, they reflected on general areas of personal career, professional and academic development. These reflections were interesting in relation to the design of syllabus, and more specifically to the design of the curriculum they were following. The disparity and diversity of the students' expectations at the beginning of their studies and in their pre-grounded knowledge emerged from responses to questions about their anticipations of the module and their opinions towards the end of it, as expressed in the pilot study questionnaire (see Appendix 1). The differences in student expectations and their prior knowledge base (university registration does not test/check MA candidates' type of knowledge) would suggest that universities should consider administering training needs analysis forms for new MA cohorts. The questionnaire in the pilot study equated to a training needs evaluation, which led on to two changes: more generic questions in the following surveys about training needs in relation to the students' future careers, and subtle changes to the project-based syllabus, particularly in its verbal presentation so that

students (non-native speakers) would understand without further explanation. The assumption that students who attend an MA in Translation Studies arrive with the intention to pursue a career in translation proved unfounded (4.3.1) and associated questions had to be reviewed. Another example of change in line with needs analysis can be found in section 3.1.4 which explained that the title of the second part of the Translation and Technology module was changed to 'Online resources for terminology', not only for logistic reasons, but also with a view to accommodating students who might plan a career in language-related work (from teachers of English to general linguist or project manager) other than translation.

An additional development as a result of the unanticipated data on training needs in the questionnaire was the increased focus in the syllabus on students *learning how to* gain competences, instead of on the competences itself. Raising levels of awareness in respect of skills and competence (1.3.1) was achieved in the Translation and Technology module through the quality raising process of the translation portfolios. Focus group participants gave examples of their awareness of training needs and the ways in which those needs were met in the discussions. Their observations related to group work in particular: they considered communication with peers important, as it taught them many professional skills, such as people management and email correspondence (2.3.4.3; 2.4.3.2; 4.2.2.1; 4.2.3.1). Furthermore, they mentioned the creation of the wiki website as a suitable learning tool: it enabled the dissemination of knowledge and skills through group work in the project management teams (2.4.4; 4.3.3.1.1; 4.2.3.2). The issue of time management was considered crucial in the revision task: revision could not be managed by the project management teams in one week, nor could it be completed collaboratively within the given timeframe by all students in class (4.2.3.1–4.3.3.3). Overall the participants in the focus group discussions were positive and believed that the tasks in the syllabus had challenged the students and confronted them with professional competences which needed further development.

As a result of these findings the revision task was intensified and lengthened in the second and third year of the study, including the use of CAT tools. It was performed

during the entire module. It became one of the main activities that aimed to improve learning approaches and was given as new structure with brought increased visibility and modularity. Visibility expressed itself in clear objectives that were explained, defined, set and achieved. For instance, the translation portfolios were made more visible by the requirement to attach hard copies of the translation portfolios to the summative essays for cross-referencing purposes (see 4.4.2). The students 'saw' their errors, whereas when the translation portfolios were uploaded in 'cyberspace' they were ignored and forgotten – they had become invisible. In the revision activity modularity was achieved by clearly defining the different forms of evaluation in the pre-task phase so that the students could experiment with each technological or human aspect of revision separately during the main task. Revision was broken down into clearly delimited components. The post-task phase consisted of an assessment of human and CAT tool evaluation so that the students could reflect on the process in which they had been the agent. The process and its visibility were major components in the pedagogical challenge to encourage students to improve translation quality. The second factor to affect quality performance, the non-accredited status of the translation portfolios, was also part of the pedagogical challenge (3.6.2; 4.4.1).

Collaborative assessment

Two factors impacted outcomes in the study: firstly, divergent learning approaches in the project-based learning environment and secondly, local academic requirements which did not allow collaborative work to be part of summative assessments. Meanwhile, collaboration is part of the translation process in the industry (see Olohan 2010:42–43). Translations are frequently carried out by teams of translators, and language service providers will have translators and revisers alongside other specialists on their databases to guarantee quality. O'Hagan (2013: 503–518) refers to the increase in collaboration overall, such as on translator platforms, the open exchange of translation memory databases (TAUS), crowdsourcing, and fansubbing, a whole new world of volunteer translators that has established itself alongside the professional translators. The question arises how translator training in higher

education responds to such market forces and how responses are reflected in the assessment of students' collaboration. Moreover, technology has given rise to serious concerns about translation quality, which is shared by both professional translators and translator teachers, but for different reasons. Ultimately, an academic institution wants and is obliged to give an honest representation of their students' competence in translation, whereas the translation industry's focus is on the quality of the translation and not primarily on the translator's competence. The creator(s) is/are generally only foregrounded if the translation does not have the required standard and the industry seeks redress.

The objectives of translation quality assessment are not identical in higher education and the industry: the former focuses on the assessment of the translator's (student's) competence, while the latter concentrates on the quality of the product, the translation. There is another difference between assessment in either field: higher education needs to respect standards which have been set or recommended by national or international Quality Assurance bodies or networks of excellences, for instance, the EMT Network falls in the latter category (see 4.5), or educational bodies such as the Chartered Institute of Linguists (CIoL) (see 4.5.1) and monitored by QAA (2.5.2) which falls in the former category. The translation industry does not have uniform standards (O'Hagan 2013; Pym 2010). Revision exemplifies an area where there is much confusion in the industry. Language service providers set up their own criteria and descriptors for revision and call revision 'proofreading', 'scrutineering' (OCR – awarding body for UK examinations in secondary education) among others, but rarely 'revision'. The translation memory software programmes include review functions, generally known as QA (quality assurance) which range from 'proofreading' (DVX3) to 'run QA', 'resolve errors and warnings', 'review changes and conflicts' (MemoQ 2013), to 'editor view' and 'export/import for review' (SDL Trados Studio 14). In comparison, the Chartered Institute of Linguists (CIoL) uses criteria which have a linguistic foundation. The examiners of translations for the Diploma in Translation (CIoL) are asked to check for comprehension, accuracy, register; grammar, coherence, cohesion and organisation of work; technical aspects, such as spelling, punctuation, accentuation, transfers of names, figures, dates, and legibility (see Guidelines on

Aspects of Performance - Diploma of Translation - CIoL 2014). The project-based syllabus does not aim to resolve differences in conception of revision criteria and standards between higher education and the translation industry, but it can create an understanding among students for the disparity in standards and prepare them for multiple revision practices. Ideally, newly trained translators, well versed in quality standards and revision practice, should have a positive influence on the current anomalous practices in the industry.

The main objective in the revision task in the study was to practise self-revision and peer-revision, and to experience the outcome of either, with and without the use of technological tools. In section 4.4.1 it was explained that individual feedback on the quality of translation portfolios had less impact on performance in the subsequent portfolios than expected: the quality did not improve substantially. In section 4.2.1 it was described how in the pilot study only just over 50% had arranged proofreading of their portfolios towards the end of term, and in the focus group discussions the students explained that poor quality was due to the fact that the portfolios were not assessed. Although the inclusion of collaborative work in summative assessments as a means to raise standards might be considered a valid argument, the following methods would have a more profound impact on deep learning and intrinsic motivation to enhance translation competence, yet not without significant effort by teacher and students.

The translation portfolios were not peer-reviewed during the pilot study. They were sent to professional translators outside the university and the students received individual feedback (4.4). After the pilot year the feedback process was improved and standardised in the second and third year of the study, and yet the feedback was not referred to in any of the focus group discussions. It might therefore be justified to assume that the students had not decoded, internalised, or compared the feedback with their portfolios to identify gaps, or updated their knowledge for possible following portfolios.

Nicol (2013) observes that students do not necessarily learn from feedback, especially if they have not been involved in the creation of the feedback. He continues that they regard feedback as the teacher's responsibility and can be highly critical of

its quality. Alternatively, they can become too dependent on it and work according to its recommendations. Nicol (ibid.) recommends that students do the assignments, review peer assignments and then incorporate changes by redrafting their own work. This process was implemented in 2012–2013, the year after the study, when the portfolios were 100% fit for purpose (4.4.2). The purpose of giving feedback is manifold: students make evaluative judgements and they monitor and evaluate their own learning (see interviews in 2013 in 4.2.1.2). Giving feedback has a high level of cognitive activity: the students cannot remain passive, they apply criteria from different perspectives, the creation of feedback causes students to evaluate other work, and in the process they simultaneously evaluate their own work. Feedback construction has high benefits for critical thinking (Nicol 2013). Giving and receiving peer-revision during the creation of the translation portfolios as it was performed in the revision task during the study (4.2.3.2; 4.4.2) introduced the students to a skill that is much needed in the workplace. One of the tasks in the project-based syllabus included the design of their own set of criteria, which is exemplified in the syllabus in Table 17 in week 3: 'organise revision - agree on criteria'. Students need to be prepared for different kinds of feedback procedures after their studies, particularly because feedback criteria in higher education tend to be used consistently, whereas in the workplace there are fewer comparative standards and hence there is more dissimilarity.

Translation feedback, reviews and evaluations are considered essential components of academic learning and work practice, but how do the worlds of academia and translation assess feedback? In the industry, revisers carry out a revision and complete an evaluation. Revisers are part of the process to deliver an error-free translation. Meanwhile, in higher education a translation that has been given a 65% grade in a summative assessment qualifies as a good translation. In the industry the same translation may not have the required quality to be delivered to the end client. A translation that has been commissioned needs to satisfy the client's or agent's brief and to be error-free. In order to have reached the required level of perfection, the translation will have been reviewed many times and might even have been returned to the translator for revision or a confirmation of the changes. The fact that commissioned

translations are not always accompanied by full briefs, as noted by Fraser (2010:53; see 1.4.9.1), is not an excuse for students and trainers to be content with *very good* translations that are not errorless. The hypothesis in the thesis that the project-based syllabus enhances translator competences suggests that improvement by means of collaboration should be encouraged and rewarded appropriately in the educational establishment's accrediting system. On the other hand, Li's observation (see 1.4.4) that the industry needs to acknowledge apprenticeships or probationary period, is a valid point too. Possibly this is another area in which educational establishments and professional organisations, such as ITI and CIoL, can take the lead.

In the thesis it has been explained that a critical assessment of the activities, processes and tools to create the translations in the portfolios provided the basis for the summative essays. The portfolios were examples of collaborative e-learning, which is learning through technological tools and by using internet. In section 4.5.1 it was explained that new methods of assessment would be welcomed to reward collaborative learning activities (Garrison 2003:101). For instance, feedback could be part of formative assessment. Tang (1996:162–163) proposes that while summative assessments test procedural knowledge as well as mark qualitative learning, the teacher should take a longitudinal approach to assessment to discover where the student stands in relationship to their understanding of the topic. In other words, the assessment needs to be formative before it becomes summative. Her other suggestion is to apply an ecological assessment, which virtually situates the *test* in an *authentic* setting (1996:162–163). The brief in the project-based syllabus for the creation of the translation portfolios included both aspects: firstly, the summative essays required a critical assessment of trialled translation memory features or online resources, and secondly, the activities aimed to be as authentic as possible and to replicate the environment of the language service provider. The feedback on collaborative presentations as well as the translation portfolios with collaborative aspects could be part of formative processes, which would become summative if the students were given the opportunity to resubmit the presentations, possibly in written format, and the portfolios after completion and revision (see Federici 2010:175). In this way, the portfolios would include the gamut of all the processes and tasks in the project-based

syllabus, including peer-revision organised by the students in addition to technological self-revision. Such a revision process should not only produce better quality in the final translations in the portfolio, but it would also replicate the revision stages in professional work settings. The collaborative revision procedures in the project-based methodology could potentially offer better preparation for similar procedures in the translation industry.

Further work

The current literature is indicative of a tension between the academic and the professional view of translation (1.4.9.1), and more research is needed particularly in the field of assessment (1.2.5). Individual (self-)assessment of translation needs to be complemented by collaborative (peer-)assessment in academic settings as is generally practised in a professional environment. One of the questions that would follow the inclusion of this practice as standard in translation training is whether students will change their on-the-job behaviour as a result of project-based collaborative translator training. A longitudinal study, following the students after graduation, would be necessary to validate the hypothesis that such is the case.

Furthermore, a claim could be made for the expansion of blended learning and e-learning in and after translator training. Both types were practised during the study: e-learning within the university's VLE, for instance by email and on the wiki websites, and beyond the VLE through participation on translators' platforms, while blended learning consisted of traditional face-to-face teaching methods and the aforementioned e-learning activities. Particularly the potential of e-learning warrants further research. Students and translators could extend and develop their learning, during their studies or afterwards, by means of online training components.

And then there is the ultimate question: if the project-based syllabus underpins a suitable translator training methodology, where are the course materials and who will teach? The responses on Pym's (2003) online forum differed and respondents thought that translation studies teachers should either be practitioners, or be academically

qualified to teach, or a combination of practitioners and academics. A second online question was whether enough teachers were being trained. At the TS-Doc conference in Vienna in 2008 (1.4.1), it was suggested that doctoral programmes were the most obvious route to train teachers for translation studies. In Newsletter 42 (2013) Gambier on behalf of the TS-Doc Working Group set out the objectives of the proposal for an International Doctorate in Translation Studies: it does not make mention of training for doctoral students who might wish to teach. Meanwhile the industry makes overtures to teachers in translator training environments by offering them interactive webinars focussing on the practicalities of teaching CAT tools in the classroom. The SDL University Partner Program 2014 presents itself as 'SDL University' with the following webinars: 'CAT tool course planning and preparation', 'Methodology for teaching CAT tools courses' and 'Best practice and examinations in CAT tools courses' (2014). Undoubtedly, there is commercial interest in their presentation of these webinars, but the programme also implies a gap in the market and a shortage of training for teachers in the technological branch of translation studies.

The data results in this study are taken from the module Translation and Technology but they are also applicable to other vocational degree course environments. Translator training in its totality deserves further research and implementation of its findings, particularly in teaching methodology and associated teaching resources. The study material in this thesis would be well-suited to becoming a teaching resource. And finally, a comment needs to be made about the absence of machine translation in the discussion. Whereas machine translation was an add-on when the study began in 2009, it has become an integrated function in translation memories by 2014. In translator training where CAT tools are a core component, the function should be taught. Businesses are prolific users of automated translation and at best they will offer their target texts to language service providers for post-editing. Students need to be trained: in respect to commercial translations, Pym's minimalist definition of translation competence could become even more minimalist once competence no longer includes the generation of translation solutions, but only the selection, with machine translation taking care of the translation generating process. This is an area that deserves further study.

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Appendix 1

IIQ-PS – MATS, 24.02.2010, Wk 6, T2[4]

Please answer the following questions with reference to the module Translation & Technology:

Module

1. This module requires a high level of self-study, at least 1 hour per day.

   Is it realistic considering your current work load? Yes □ No □
   Is it what you expected (based on what you read in the Handbook)?
   Yes □ No □

2. How many hours per week do you spend on average on the module Translation & Technology (T&T) outside lecture hours on Wednesday? (Please encircle)

   0 1 2 3 4 5 6 7 8 9 10+

3. Is your T&T practice/study time determined by the pressures of other work?

   Yes □ No □

4. Practice time has increased / decreased (encircle) over the weeks

5. How many hours per week do you think you should spend practising the use of technological aids and internet resources in order to feel comfortable with what you have been instructed?

6. Which word best expresses your feelings about the module:
   (Choose one)

   Interesting □
   Boring □
   Discouraging □
   Challenging □

7. Which word/phrase best describes your feelings about the problems experienced so far during this module, concerning the laptops? (Choose one)

   Resolved □
   Annoying □
   Unacceptable □
   To be expected □

[4] IIQ-PS – In Itinere Questionnaire – Pilot Study; MATS – MA Translation Studies; date 24 February 2010, Week 6, Term 2.

Not too bad □
Very bad □
Did not affect the learning process □
Affected the learning process □

8. How did you find the Wednesday/Thursday Trados training day? (Choose one)

Useful □
Useless □
Interesting □
Boring □
Complete □
Incomplete □
Biased □
Unbiased □
Other:

9. Do you think you learnt enough on the Wednesday/Thursday (please encircle) to manage Studio 2009 independently?

Yes □ No □

10. Have you tried to use Studio 2009 independently?

Yes □ No □

Readings

11. Have you read today's readings?

Folder 1 Yes □ No □
Folder 2 Yes □ No □

12. If you have read any preparatory readings, have you found them

Interesting Yes □ No □
Helpful Yes □ No □

13. If you have read any follow-up readings, have you found them

Interesting Yes □ No □
Helpful Yes □ No □
Too long Yes □ No □

14. Will you (re)read the articles in the folders for your assignment?

Yes □ No □ Don't know □

CAT tools

15. How important do you rate CAT tools for your future as a translator?

    High □ Moderate □ Low □
    Briefly state why

16. Would you have preferred the training to cover all three Translation Memories?

    Yes □ No □

17. Have you read the CAT Help files?

18. If so, did you find them helpful (please tick):

	DVX	MemoQ	Studio 2009
Very			
Moderately			
Slightly			

19. Have you learnt about hotkeys? Yes □ No □

20. Have you studied the menu bars + functions of

    DVX Yes □ No □
    MemoQ Yes □ No □
    Studio 2009 Yes □ No □

Internet resources

21. Have you tried a form of Cloud-computing?

    Yes □ No □
    If so, which?

22. Have you visited a website for translators?

    Yes □ No □
    If so, which one(s)?

Assignments

23. How many words of the Durham website have you translated?

    (Encircle the nearest word count) 0 500 1,000 1,500 2,000 2,500

24. Have you arranged proofreading? Yes □ No □

25. Have you arranged subcontracting? Yes □ No □

26. Are you worried about the assignments? Yes □ No □

27. If so, what worries you about the assignments?

Instruction

28. Would you prefer more instruction and less self-study?

    Yes □ No □

29. To what extent are the covered topics relevant for your anticipated career as a translator?

    Indicate the approximate percentage of relevancy:
    0% 25% 50% 75% 100%

30. Are there any topics you would like to be included in this module which have not been mentioned in the syllabus?

Thank you, Rosemary Mitchell-Schuitevoerder (teacher / researcher MA Translation Studies)

Appendix 2

IIQ2a – MATS, 29.11.2010, Wk 8, T1[5]

Please answer the following questions about the module Translation & Technology:

Module

i. How many hours per week do you spend on average on the module Translation & Technology (T&T) outside lecture/practical classes? (Please circle the number of hours)

0 1 2 3 4 5 6 7 8 9 10+

ii. Is your T&T practice/study time determined by the pressures of other work?

Yes □ No □

iii. My practice time after class has increased/decreased/remained constant over the weeks (please delete)

iv. How many hours per week do you think you should spend practicing the use of technological aids and internet resources in order to feel comfortable with what you have been instructed?

None □ 2 □ 4 □ 6 □ More □

v. Which word(s) best express(es) your feelings about the module (multiple answers possible):

Interesting □ Boring □ Easy □ Difficult □ As expected □
Unexpected □ Other :
……..

Readings

vi. Have you read today's reading?

Yes □ No □

vii. How many of the previous readings have you read?

All □ More than 50% □ Less than 50% □ None □

[5] IIQ-2a – In Itinere Questionnaire – year 2 term 1; MATS – MA Translation Studies; date 29 November 2010, Week 8, Term 1

viii. The readings intend to prepare you for the lecture/practical and subject of the week. If you have read any readings, have you found them (multiple answers allowed)

Appropriate for the topic	Yes	□	No	□	Sometimes □
Interesting	Yes	□	No	□	Sometimes □
Too difficult	Yes	□	No	□	Sometimes □

ix. Will you (re)read the articles in the folders for your assignments?

Yes □ No □ Don't know □

Internet resources

x. Have you changed your style of terminology searches since you began the T&T module?

Yes □ No □

xi. Have you written in the blogs?

Most weeks □ Occasionally □

xii. Do you think writing in the blogs has any personal benefit?

Yes □ No □ Don't know □

xiii. Have you used the Project Management (PM) Wiki during each practical?

Yes □ No □

xiv. What is the value of the PM Wiki to you?

Your own answer: ……

Assignments

xv. How many words of the website have you translated? (total 2,500 or 1,500 for PMT)

(Circle the nearest percentage) less than 25% 25% 50% 75% 100%

xvi. Is the website translation providing you with suitable data for your assignments?

Yes □ No □ Don't know □

Instruction

xvii. This module requires a high level of self-study, at least 1 hour per day.

Is it realistic considering your current work load?
Yes □ No □

xviii. Is it what you expected (based on what you read in the Handbook)?

Yes □ No □

xix. Would you prefer more instruction and less self-study?

Yes □ No □

xx. Did you as a listener find the class presentations informative?

Yes □ Sometimes □ Always □ Never □

xxi. Did you as a presenter find the presentations worthwhile?

Yes □ No □ Moderately □

xxii. Are there any T&T topics you would like to be included?

Thank you,

Rosemary Mitchell-Schuitevoerder (teacher / researcher MA Translation Studies)

Appendix 3

IIQ2b – MATS, 14.03.2011, Wk 9 – T2[6]

Please answer the following questions about the 2nd term of the module Translation & Technology:

Module

1. How many hours per week have you spent on average on the learning about TM outside lectures/practicals? (please circle the number of hours)

   0 1 2 3 4 5 6 7 8 9 10+

2. My practice time after class has

   Increased □ Decreased □ Remained constant □

3. Which word(s) best express(es) your feelings about the module at the moment (multiple answers possible):

   Interesting□ Boring □ Easy □ Difficult □
   As expected □ Unexpected □
   Other : ……..

Readings

4. How much of the weekly readings have you read?

   All □ More than 50% □ Less than 50% □ None □

5. If you have read any readings this term, have you found them (multiple answers allowed):

Appropriate for the topic	Yes □	No □	Sometimes □
Interesting	Yes □	No □	Sometimes □
Too difficult	Yes □	No □	Sometimes □

6. Will you (re)read the articles in the folders for your essay assignment?

   Yes □ No □ Don't know □

Translation Memory (TM)

7. Have you used TM for translations in other modules?

[6] IIQ-2b – In Itinere Questionnaire – year 2 term 2; MATS – MA Translation Studies; date 14 March 2011, Week 9, Term 2

Yes □ No □

8. Which TM do you prefer?

   DVX □ MemoQ □ SDL Studio 2009 □

9. Why?

   ……

10. Will you continue to use TM after completing your degree?

    Yes □ No □ Don't know □

Learning and teaching

11. Have you written in the blogs?

    Most weeks □ Occasionally □

12. Has writing in your blog helped you prepare for your critical assessment essay(s)?

    Yes □ No □ Don't know □

13. Has the Wiki offered you added value?

    No □ Yes □, because ……

14. Was the topic this term what you expected (based on what you read in the Handbook)? Yes □ No □
15. Would you have preferred more instruction and less self-study?

    Yes □ No □

16. Have you, as a listener, found the class presentations informative? Yes □ No □ Moderately □
17. Did you, as a presenter, find your presentation helpful?

    Yes □ No □ Moderately □

18. Have your word processing skills improved over the year?

    Yes □ No □ Don't know □

19. If you had had a choice, which of the following would you have chosen?

    The module, as it is, over two terms (30 credits) □
    Half a module – internet-based tools (15 credits) □
    Half a module – technological tools – TM (15 credits) □
    What change, if any, would you suggest for next year's students?
    ……
    Were you planning to be a translator when you began this MA?
    Yes □ No □ Don't know □

20. Are you planning to be a translator?

Yes □ No □ Don’t know □

21. What did you enjoy most about this module?

……

22. What did you dislike most about this module?

……

END – thank you!!

Appendix 4

IIQ3a – MATS, 5.12.2011, Wk 9, T1[7]

Please answer the following questions about the module Translation & Technology: Module (Technological Tools)

1. How many hours per week do you spend on average on the module Translation & Technology (T&T) (excluding lectures/practicals?)

   Please circle the number of hours
   0 1 2 3 4 5 6 7 8 9 10+

2. Your practice time after class has [increased] [decreased] [remained constant] over the weeks (please underline)

3. How many hours per week do you think you should spend practising the use of technological aids in order to feel comfortable with what you have been instructed?

   None □ 2 □ 4 □ 6 □ More □

4. Which word(s) best express(es) your feelings about the module (multiple answers possible):

   Interesting□ Boring □ Easy □ Difficult □
   As expected □ Unexpected □
   Other: ……..

5. Have you used TM for translations in other modules?

   Yes □ No □

6. Which TM do you prefer?

   DVX □ MemoQ □ SDL Trados Studio 2009 □

   Why?……
   …

7. Will you continue to use TM after this module?

   Yes □ No □ Don't know □

   Readings

8. Did you read last week's article? (Hartley, Technology and Translation)

[7] IIQ-3a – In Itinere Questionnaire – year 3 term 1; MATS – MA Translation Studies; date 5 December 2011, Week 8, Term 1

Yes □ No □

9. How many of the previous articles have you read?

   All □ More than 50% □ Less than 50% □ None □

10. The articles intend to prepare you for the lecture/practical and subject of the week. If you have read any, have you found them (multiple answers allowed)

Appropriate for the topic?	Yes □	No	□	Sometimes □
Interesting?	Yes □	No	□	Sometimes □
Too difficult?	Yes □	No	□	Sometimes □

11. Will you (re)read the articles in the folders for your assignments?

    Yes □ No □ Don't know □

12. Do you, as a listener, find the class presentations informative?

    Yes □ No □ Moderately □

13. Do you, as a presenter, find you presentation beneficial to yourself?

    Yes □ No □ Moderately □

Reflective learning

14. Have you written in the blogs?

    Most weeks □ Occasionally □

15. Do you think writing in the blogs has any personal benefit?

    Yes □ No □ Don't know □

16. Have you used the Project Management (PM) Wiki?

    During each practical Yes □ No □

17. What is the value of the Wiki website in your class to you?

    Your own answer: ……

Module assignments

18. How many words of the website have you translated? (total 2,000 or 1,400 Project Management Team)

    (Circle the nearest percentage)

    Less than 25% 25% 50% 75% 100%

19. Is the website translation providing you with suitable data for your assignments?

Yes □ No □ Don't know □

Instruction in class

20. This module requires a high level of self-study, approximately 1 hour per day:

    Is it realistic considering your current work load?

    Yes □ No □

21. Is it what you expected (based on what you read in the Handbook)?

    Yes □ No □

22. Would you prefer more instruction and less self-study?

    Yes □ No □

23. Are there any other technological topics you would like included?

Thank you!

Appendix 5

IIQ3b – MATS 7.04.2012, Wk 8, T2[8]

Please answer the following questions about the module Translation & Technology (Online resources):

1. How many hours per week do you spend on average on the module Translation & Technology (T&T) (excluding lectures/practicals?)

   Please circle the number of hours
   0 1 2 3 4 5 6 7 8 9 10+

2. Your practice time after class has [increased] [decreased] [remained constant] over the weeks (please underline)

3. How many hours per week do you think you should spend practising the use of online tools in order to feel comfortable with what you have been instructed?

   None □ 2 □ 4 □ 6 □ More □

4. Which word(s) best express(es) your feelings about this part of the T&T module (multiple answers possible):

   Interesting□ Boring □ Easy □ Difficult □
   As expected □ Unexpected □
   Other : ……..

5. Have you applied your newly acquired knowledge of online resources in other modules?

   Yes □ No □
   If yes, which online resources?
   ……

6. Have you used Translation Memory software for translations in other modules this term?

   Yes □ No □

Readings

7. Have you read today's article? (Garcia)

   Yes □ No □

8. How many of the previous articles have you read?

[8] IIQ-3b – In Itinere Questionnaire – year 3 term 2; MATS – MA Translation Studies; date 7 April 2012, Week 8, Term 2

All □ More than 50% □ Less than 50% □ None □

9. The articles intend to prepare you for the lecture/practical and subject of the week. If you have read any, have you found them (multiple answers allowed)

Appropriate for the topic?	Yes □	No	□	Sometimes □
Interesting?	Yes □	No	□	Sometimes □
Too difficult?	Yes □	No	□	Sometimes □

10. Will you (re)read the articles in the syllabus for your assignments?

Yes □ No □ Don't know □

11. Have you, as a listener, found the class presentations informative this term?

Yes □ No □ Moderately □

12. Have you, as a presenter, found your presentation beneficial?

Yes □ No □ Moderately □

Reflective learning

13. Have you written in your blog?

Most weeks □ Occasionally □

14. Do you think writing the Blogs has any personal benefit?

Yes □ No □ Don't know □

15. Have you used the Project Management (PM) Wiki?

During each practical: Yes □ No □

16. If you have, what is the value of your class' Wiki website to you?

Your own answer: ……

Module assignments

17. How many words of the website have you translated? (total 1,600 or 1,400 Project Management Team)

(Circle the nearest percentage)
Less than 25% 25% 50% 75% 100%

18. Is the website translation providing you with suitable data for your assignments?

Yes □ No □ Don't know □

Instruction in class

19. Is the module online resources what you expected (based on what you read in the Handbook)?

    Yes □ No □

20. Would you prefer more instruction and less self-study?

    Yes □ No □

21. Are there any other online resources you would like included?

Thank you!

Appendix 6

Ethical Approval

Sample of Consent Form

School of Modern Languages and Cultures
Research Ethics Monitoring and Approval Form

Ethical consideration and approval is required for learning, teaching and research activities where ethical issues are identified, for example work involving human participants, animals or environmental impact. Within the School of Modern Languages and Cultures, activities involving human participants and their data (such as interviews or surveys) are likely to be the primary focus of ethical review. This form is intended to gather information about proposed research projects by PGT and PGR students and members of academic staff for which ethical approval might be required. It should be completed **if you have identified any ethical issues in relation to your proposed research project (e.g. collection and use of personal data).** If you are unsure whether or not your application requires ethical approval, please contact the Research Office and the School's Director of Research.

- Academic staff who are not seeking external funding for a project should complete the form and submit it to the Director of Research along with an outline (300 words max.) of the proposed research project at least six weeks before the proposed research activity is due to be carried out
- For external funding applications, the form should be completed and submitted with the application when it is submitted for internal review by Director of Research and Head of School
- MA Course Directors and PGR supervisors are responsible for identifying any ethical issues related to research activity by PGT and PGR students and submitting the form to the Director of Research on their behalf. The form should be accompanied by an outline of the thesis (for PGR students) or proposed dissertation/coursework assignment (for PGT students)

Name: **Rosemary Mitchell-Schuitevoerder**

Category: PGR

Supervisor/Course Director: Dr F. M. Federici

Module [PGT only]:

Title of project: Project-based syllabus design

Questionnaire

1. Where will the research take place?*

Durham University; in class

Note: when conducting or collaborating in research in other countries, Principal Investigators should comply with the legal and ethical requirements existing in the UK and in the countries where the research is being conducted.

2. What are the aims of the project?

Data collection re students understanding of and collaboration in a project-based syllabus

3. How many participants are involved?

36

4. How will potential participants be identified?

Questionnaire to be completed by all students anonymously

5. What sort of data will be collected?

Mainly quantitative data; some qualitative dat

6. Will you seek written or verbal consent from your informants regarding project participation and the use of any data that you might generate? If YES, please provide further details. If NO, why not?

Yes, verbal consent when handing out the questionnaire. There will be another similar questionnaire to follow towards the end of the course. Both will be compared and data will be analysed. The purpose is to analyse initial involvement in the module and variance towards the end of the second module for those students who continue.

7. Will you give your informants a written summary of your project and the uses of any data that you might generate? If NO, why not?

No, not at this stage to avoid prejudice and to encourage honest answers, but full details will be provided at the end of term.

8. Will data be anonymised?

YES

NOTE: the provision of an information statement and verbal consent are suitable for informal interviews or surveys where no personal data is collected or the information is anonymised. For full interviews or surveys in which personal/sensitive/confidential data is collected both a written summary of the project and a written consent form is recommended (or an audio recording of the verbal consent process).

9. Will the data be destroyed at the end of the study?

YES

10. If NO, what will happen to the data after the end of the study?

11. For how long will it be kept after the end of the study?

12. Will written consent for the use of data for the anticipated future research be obtained?

Only if necessary (questionnaire data are submitted anonymously and cannot be identified)

13. Are there any other ethical issues arising from your project? If YES, please outline below.

Data in blogs may be used after students have completed their course.
Data from email exchanges may be used after students have completed their course.
Focus group interviews will be held and recorded with a number of students after the module has been completed. Individual consent will be requested in all cases.

Declaration

I have read:
1. The University's document on Ensuring Sound Conduct in Research http://www.dur.ac.uk/resources/hr/policies/research/ensuringsoundconduct.pdf and believe that my project complies fully with its precepts.

2. The Principles for Data Protection (Data Protection Act 1998) http://www.dur.ac.uk/data.protection/dp_principles/

3. The Guidance for Research Using Personal Information http://www.dur.ac.uk/resources/data.protection/100929ResearchDPAAdviceV1.3.pdf

Signed … …….. Date: …14/11/11……

For use by reviewers

Date received:

Approval granted: YES/NO

If NO, please provide further details

Signed …… Date: ……..

Position: ……..

Appendix 7

Syllabuses in 1st and 3rd year of study

Syllabus in 1st year of study

Week 1 (20/1/10)

9-11 – Seminar/Lecture

Aims & Objectives

Creating an understanding of the relationship between translation and technology and its application in a modular project

Preparatory reading

Hartley, T. 2008 (Munday 2009) 'Technology and Translation', pp. 106-127 (**DUO**)

Topics

- Discussion of project; 2 essays; final presentation and weekly presentations
- Machine translation
- Introduction Translation Memory Déjà Vu X (DVX)

Introduction of Task

Durham University Website translation

12.15-15.15 – Tutorial

Task details

1. Translate recipe (duo) in DVX – analyse:
- Helpful TM features
- Personal TM difficulties
- other technology needed, such as online dictionaries, websites (yahoo: help sites)

2. Module website translation
- Durham university untranslated website
- Determine potential difficulties
- Apply MT to a small section (ca. 100 w) – Systran and Google Translate

- Analyse problems/errors by comparison

Week 2 (27/1/10)

9-11 – Seminar/Lecture

Aims & Objectives

Insight into Word features and the internet as a translation resource

Preparatory reading

Appleyard, P. 'Cloud Computing' *ITI Bulletin* (Nov. Dec. 2009) (on DUO)

Presentation : Machine Translation (2 students > theory and application)

Quah, C.K. (2006), 'Machine Translation Systems', Ch3:57–92 (by email)

Topics

- What is cloud computing?
- What are the language features in Word?
- On-line resources

Introduction of task

- Finding terminology resources on the web
- Finding concordance(r)s
- Aligning texts
- Experimenting with Google docs - revise in pairs
  - Analyse dis/advantages of this kind of revision

12.15-15.15 – Tutorial

Task details

Continuation from week 1 with a focus on

- Terminology resources on-line and concordance(r)s
- Aligning texts
- Experimenting with Google - revise in pairs
  - Analyse dis/advantages of this kind of revision

Week 3 (3/2/10)

9-11 – Seminar/Lecture

Aims & Objectives

Making Translation Theories your friend

Introducing another TM : - MemoQ

Preparatory reading

Basnett, S. 'Theory and Practice' ITI Bulletin – May/June 2009 (on DUO)

Presentation: Online resourcing (2 students > theory and application)

Quah, C.K. (2006) 'Recent Development and Future Directions – Translation on the Web; Machine Translation Systems and the Semantic Web', Ch6:164-170 (by email)

Topics

- Translation theory – friend or foe?
- TM MemoQ

Introduction of Task

Application of MemoQ

12.15-15.15 – Tutorial

Task details

- Re-use recipe source text
- Compare DVX and MemoQ
- Apply to part of Durham website
- Consider translation theories in your translation of the webpages

Week 4 (10/2/10)

9-11 – Seminar/Lecture

Aims & Objectives

Establishing the differences between localisation and globalisation and their impact on translation and the translator

Preparatory reading

Massey, N., 'Translation of Italian Recipes: Localisation?' (go x.com)

Presentation: Translation Theories and Translation Technology – friend and/or foe? (2 students > theory and application)

Pym, A. (2010) 'What is a Translation Theory' Ch1:1–6; 6.7.1–6.7.7; 113–5 (by email)

Topics

- Globalisation and localisation
- Introduction of TMs SDL and Trados

Introduction of Task

Another TM SDL-Trados

The website and localisation

12.15-15.15 – Tutorial

Task details

- Application of SDL
- Applying localisation to a sample within the website and collaborating with other languages to analyse the impact on translator and translation

Week 5 (17/2/10)

9-11 – Seminar/Lecture

Aims & Objectives

Learning about the nitty-gritty of professional translation concerning project management and applying it to the website translation

Preparatory reading

www.thebigword.com; Click on most of their links, the 'translation' link, and project management in particular.

Blésius, C, 'Who owns your translation' in Bulletin Nov/Dec 2003, Institute of Translation and Interpreting

http://www.iti.org.uk; go to ITI Bulletin and click on the pdf file

Presentation: Localisation (2 students > theory and application)

Pym, A. (2010), *Localisation*: Ch7:120 138

Blésius, C. 'Who owns your translation' in Bulletin Nov/Dec 2003, Institute of Translation and Interpreting

Topics

- Project management of the translation and by the translator
- Transfers
- Subcontracting
- Purchase Orders (PO)
- Invoices
- Criteria for Quality Assessment (QA)

Introduction of Task

Bringing the website translation into the field of project management

12.15-15.15 – Tutorial

Task details

- Subcontract part of the website
- Draft a PO and invoice
- Apply criteria for QA and negotiate with a proofreader

Week 6 (24/2/10)

9-11 – Seminar/Lecture

Aims & Objectives

Making well-founded choices concerning CAT tools

Preparatory reading

Benis, M. (1999) 'Translation Memory from O to R'

http://www.michaelbenis.com; click on resources and click on the first article as mentioned (His site is a treasure chest!)

Presentation: Quality Assessment of translations (2 students > theory and application)

House, J. (1997) *Translation Quality Assessment. Model Revisited.* pp TBC

Muzii, L. ‘Quality Assessment and the Economic Sustainability of Translation’ (by email)

Topics

- Evaluation of CAT tools
- Speech Recognition (Dragon Naturally Speaking)
- Cloud computing in Google docs (share function) and/or Wiki

Introduction of Task

Arrange collaboration for proof reading and assessment using Google docs and/or Wiki

12.15-15.15 – Tutorial

Task details

- Perform QA in collaboration ; analyse the process and draw conclusions

Week 7 (3/3/10)

9-11 – Seminar/Lecture

Aims & Objectives

Discovering ways to manage your own databanks

Preparatory reading

Mitchell-Schuitevoerder, R. (2009), ‘The Bilingual Dictionary’s New Clothes’, in ITI Bulletin Nov/Dec 2009 (on DUO)

Presentation : Evaluating CAT tools *(2 students > theory and application)*

Quah, C.K. ‘Evaluating Translation Tools’, Ch5: 131-151

Topics

- Terminology mining, storing and manipulating
- Multiterm Trados
- Terminology in DVX
- Lingo software for glossary building
- Macros

Introduction of Task

Suggesting ways to build a personal terminology database

12.15-15.15 – Tutorial

Task details

Building terminology databases personally and in TM

Week 8 (10/3/10)

9-11 – Seminar/Lecture

Aims & Objectives

Learning how to match up different CAT tools and Word files in TMs

Preparatory reading

Austermühl, F. (2001), 'Translator-client communication and information transfer,' in *Electronic Tools for Translators.* St Jerome Publishing, Ch2:18–37 (on Duo)

Presentation: Terminology Management (2 students > theory and application)

Bowker, L. (2003), 'Terminology Tools for Translators', *Computers and Translation.* (ed. H. Somers), Amsterdam : John Benjamins, Ch4:49–65

Topics

Introduction of Task

- Excel, html and the different CAT tools
- Trados file in DVX
- Collaboration among students using different tools, methods, etc.

12.15-15.15 – Tutorial

Task details

- Apply Excel, html in the different CAT tools
- Apply Trados in DVX

Week 9 (10/3/10)

9-11 – Seminar/Lecture

Aims & Objectives

Review and filling the gaps

Preparatory reading

None this week

Presentation (2 students > theory and application)

For those who missed their opportunities

Topics

Completion of website translation

Discussion of presentations (12 March)

Introduction of Task

Evaluation of the website translation process

12.15-15.15 – Tutorial

Task details

Completion of the website translation and electronic submission

Syllabus in 3rd year of study (week 1)

Week 1 (10 October 2011)

AN INTRODUCTION TO TRANSLATION MEMORY SOFTWARE IN GENERAL, AND DVX2 IN PARTICULAR

Aims & Objectives

Defining technological tools

Learning objectives and method for module 1/essay 1(about technological tools)

Understanding how to assess technological tools

Introduction to Translation Memory (TM) software (DVX in particular)

Lecture/Seminar

How to assess technological tools

The Durham University Translation Project (2,000 words)

Project Management (Team): Project manager; terminology manager; website manager; file manager; revision manager

Wiki website

Different file formats (*DUW)

10 reasons for (not) using TM

Preparation for practical session

Set up glossary SL-TL in Excel for InstalledUrinalControls.xls

Go to http://www.dur.ac.uk/greenspace/energy/watersave/

Practical session

Déjà Vu (DVX2) – Create a new project; import/import lexicon/ translate file

Selecting appropriate source texts for TM

Project Management team

Set up Wiki as a Language Service Provider, including title, contact details and links to pages (FAQ, glossary, files, etc.)

Appendix 8

Syllabus samples year 1 and 3 compared

Syllabus sample (A) of week 1 in pilot study year	**Syllabus sample (B) of week 1 in the third year**
	An introduction to translation memory software in general, and dvx2 (Deja Vu Professional 2) in particular
Aims & Objectives	**Aims & Objectives**
Creating an understanding of the relationship between translation and technology and its application in a modular project	Defining technological tools Learning objectives and method for module 1/essay 1(about technological tools) Understanding how to assess technological tools Introduction to Translation Memory ™ software (DVX in particular)
Preparatory reading	
Hartley, T. 2008 (see Munday 2009) 'Technology and Translation', pp. 106–127 (DUO)	
Topics	**Lecture/Seminar**
Discussion of project; 2 essays; final presentation and weekly presentations Machine translation Introduction Translation Memory Déjà Vu X (DVX) Introduction of task Durham University Website translation	How to assess technological tools The Durham University Translation Project (2,000 words) Project Management (Team) Project manager; terminology manager; website manager; file manager; revision manager Wiki website Different file formats (*DUW) 10 reasons for (not) using TM Preparation for practical session Set up glossary SL-TL in Excel for InstalledUrinalControls.xls Go to http://www.dur.ac.uk/greenspace/energy/watersave/
12.15–15.15 – **Tutorial**	**Practical session**

Task details

Translate recipe (duo) in DVX – analyse:

Helpful TM features

Personal TM difficulties

Other technology needed, such as online dictionaries, websites (yahoo: help sites)

Module website translation

Durham university untranslated website

Determine potential difficulties

Apply MT to a small section (ca. 100 w) – Systran and Google Translate

Analyse problems/errors by comparison

Déjà vu (DVX2) – Create a new project; import/import lexicon/ translate file

Selecting appropriate source texts for TM

Project Management team

Set up Wiki as Language Server, including title, contact details and links to pages (FAQ, glossary, files, etc.)

Appendix 9

One FG discussion with PM team members 13.06.2011

[Transcribed from Audacity Recording]

Interviewer (I) and 5 participants (P): project management team members across two classes

I: OK, before we begin the discussion, I'd like to confirm that you understand the purpose of this discussion solely for my research and that your participation in this study is entirely voluntary, that you may refuse to answer any questions and that you may withdraw from the study at any time.

Ps: [Silent consent]

I: Let's begin. If each one of you could take the microphone and say in turn how you benefited from the Project Management (PM) activity.

I: I think it is really about organisation, and how you organise people and how you plan out the projects, and sometimes there might be problems when communication is not all that good between the team members. And also sometimes it is restricted to the individual's activities, they are on holiday or they doing something else, so you can't get… It is all to do with time restraints – some will say 'I'm on holiday'. So it is important which days of the week you have to hand it in.

P I think it is also about the individual will of each student, because sometimes we try to get revision done but the students think it is nothing to do with me and it is fun to me, without revision, sometimes they don't think they need project management, so I think that is one of the difficulties.

P Well, I think the biggest problem is that the students don't quite understand what project management is, because we as project manager take some time to be aware of what it is – it is a process. For instance in the first semester I was not sure what it really is, for instance when we set up the wiki with the Spanish students the process is quite slow, but in the 2nd semester we generally know how to organise that. But the students they don't quite understand, and the blackboard is really good, because we can send emails. And also the platform because we can chat together and when we do the test and the function of it, we then see a problem and we can actually discuss it together. But as to daily use, we can perform that function but the members don't do that, and the test can't force them to. The function is really very good, when we don't do the test, the members don't cooperate. In future all students including the members should take time to know what project management actually is.

P I think the whole thing about project management and wiki is fantastic. But the thing is in this situation is a pseudo project. The core of this is motivation because when you are in a real project it is different, you get paid, but in the pseudo project you might think why bother, because it won't count in the final score, like if I did a good translation. So I think the whole problem is that the project manager or the translator should be motivated.

P Many of the students do not know what PM is and the teacher does not explain explicitly, so secondly we need a real project and not a pseudo project, something like the team translating a film like translating a book and dealing with a publisher. Pseudo properties are not quite useful for being a professional translator.

P I was thinking too that it is maybe pressure that really works, if our translations are marked, you think 'I must do it right', 'I must have it revised'. One student had not done her translation so well, and I asked her why, and she just told me, it won't be marked. She said, I had to do it quickly, no matter what the quality is.

I Issue 1 – no grading, Issue 2 – focus on TMs rather than on the translation. Consequently, motivation needs to be intrinsic, why am I here? University is a pseudo world. The website project mimics an LSP, so. Question: what did you learn by the end of a year of PM?

Selection start 10–18

P Like I just said, the test is a good thing, we need tests like a real project, not a pseudo project, we have a complete job: pre translation, preparation, the translation, revision the whole workflow. What we have found out this year about pm, the students, is just a little bit about PM, the wikis, we can see some dictionaries, some on-line dictionaries, a bit of discussion, so it is not the complete thing. In future, try a small project, an article, a text, workflow.

P First of all, it is about work organisation being a PM, but I also benefited from the project management as a student, because we incorporate the PM with translation and because I was in the project, as a manager, so I can seen the tables of dictionaries of words, and the discussions, and learnt a lot of organisation skills and learnt to communicate with other members and I benefited from the opinions of others, I learnt from the emails when they emailed me back for revision I learnt a lot from the opinions. So I think there needs to be a column for managers to give feedback on their work and to get feedback from the members, so that the members feel part of it and so that they can also receive advice.

P When we do the trials, and we do the revisions together, sts will email back they can't use DVX, so as a manager I can see these things and experience them, who hears there are issues with TMS, it is good to share these things with the members and make it a real platform.

1400 –

P I know the process of PM and how to manage it and work in the team. I learnt how to allocate the job, however the students didn't have enough knowledge about it. Student said blogs are not enough. You need real tasks. There is no connection between technology and the specialised module. Students are asked not to use TM in the specialised module. [Lecturer X] says specialised translation does not allow use of TM because of segmentation.

P About a paid assignment: Clients want formatted translations. TMs are essential. Sts did not use them out of fear that there might be difficulties. Importing and exporting takes time. Further technical issues needed addressing.

[….]

P I think PMs benefit more, because they know what is going on. People don't want to make their voice heard, they don't put their opinions on the forum but I do get some personal emails from them, how do I import this, or do that [23.02] if you ask me what I think it is is that it is personal but it is their nature that they don't want to be on the forum they don't want to be laughed at.

P It is quite clear that each individual I realised that I wasn't doing it right, I had to ring up others to ask, I think it is important that as a manager you must keep the big picture in your mind all the time. If you are just an individual you just wait for things to happen. But if you are a manager you have a lot of things to worry about. That is a big difference.

P Yes I really think, it is this thing about responsibility you have to realise that you are part of the project, but as a member you can wait for others to do it, so there is not so much pressure on you. And another thing is that after I have been project manager I can see the project more clearly. Like when I was a student I just watched what other managers did. I now know what they are doing, the workflow. But before I didn't know how they did it. Now I do in detail, now I have been a PM.

I I don't think that this situation is different to real life if you are working in an agency you are tearing your hair out because your translators aren't delivering on time. For instance they are sending to the wrong format and you wonder why are they asking this because it is all on our website. Don't you agree, aren't you overemphasising the problems in class?

[pause]

I One project manager said, I just gave up at a certain point towards the end because I was the only one who was doing the work and I think it referred to the glossaries. Did you all get that feeling; I'm doing all the work and nobody else.

P Once again this is all about motivation: for instance when you are doing wiki or a glossary, why bother. I don't get paid for this and after I have done it, it won't be used again.

P I just want to add something; towards the end the members didn't participate because we just don't understand what project management is, we Chinese don't actually communicate with the Spanish students very much, so we have different concepts how things should go, so for the first time when they set up a glossary, we set up our own table glossary, both language pairs did their own thing, so I think we should communicate more and work together and members should participate.

P I want to ask something, to what extent do real translators participate when a real project manager sets up a …

I They do not participate horizontally – it always goes back to the manager. There is no contact between translators. […]

P 30.11 I think everybody should know that, because Wiki is an open platform and you can always add something like your opinion to the table, it is open. Generally we can see that the contributors are the project managers and

members just don't know that they can participate, they just don't know and they should know that they can contribute, because everybody can benefit.

P So if the students say that you don't do many things, it is wrong because we did,

P When students have problems with servers or translations they may find it easier to go directly to a friend or two project manager outside the system, by calling her or e-mailing her (=PM)

P There were also problems between project managers belonging to the different language groups (Spanish and Chinese), they did things the others did not understand and vice versa. Communication between the groups was not good.

I You as one of the project managers ran the team almost on your own – how did you find that convenient or inconvenient?

P At that time there were not many tasks, at the end of the first term, there was no revision so no multitasks, so it was merely a case of daily communications. But I do feel that our communications between project managers could be effective, earlier there were some other members and we would have a discussion in class how we would set things up or we would just chat after class by emails and we would agree who would set something up. So I think it is important that you agree among each other who does what on the wiki for instance. Because if everybody does their own thing in their language group, it is not going to work.

I [..] What happened to the revision task at the end? Was it completed?

P Before Easter we set up a database who would revise whose translation and I said can everybody send to it that each revision gets back to its translator, we were responsible for four translations, but they didn't get back that quickly and then the holidays arrived. Probably some were handed in without being revised.

It does take time, but if you're not interested and if you miss class and you don't put more time into it, yeah then it is a problem.

I what about reversing the order of the two modules and starting with translation memory. Would that improve the situation?

P No, I don't think so, you need to start with machine translation because it is easier. {…}

P I see the point but I think it is better to start with translation memory in the first term, because everybody knows about the internet and how we become more familiar with it, but translation memory is new and there are lots of things to learn. As you said I wrote about project management in the first essay but in the second essay I couldn't manage because there was too much multitasking and lots of things how to use it. I had to think about how to write this in my essay. So if I think about it if I wrote about the communication thing, it would not be so academic. And also I would like to add that if we learn about internet resources in the second term, we can combine it with translation memory. Because for instance in the first term we set up our own glossaries and our own dictionaries in Word. If we had learnt to use translation memories in the first

term we could do this more efficiently and we can also do this to test the translation memory.

P I think that combining translation memory and the use of the internet would be more interesting, especially if you learn to use the internet during the second term because what the internet does is it helps you translate, whereas translation memory is more technical.

P I think the swap will only be effective if the students know the basic concepts like what is database, what are the resources you can get from the internet, whereas if you start with translation memories and you say that as a lexicon they will just wonder what is Lexicon, while you may have learnt this in internet resources, so there needs to be some teaching of basic concepts before you start using the translation memory, then you will benefit more from doing this.

I Should the project management team change its members after one term?

P No, I don't think so because it is a whole learning process and it is not until after a while that you can function more effectively.

P Also it takes time to get to know each other.

I Should we offer placements to the members in class?

P Yes I think we can do that because somebody will know more about the internet and somebody else will be more interested in TM. They think that is a better idea, it will also help everybody to participate more in the project.

P I think the focus of project management is different in both terms. In the second term there were more questions so when you are using Cat tools there are more specific questions.

Discussion ends after 54 minutes

Appendix 10

Additional email responses PM team members

13/6/2011

1st email response to [I:] How did you benefit from being a PM?

P: We get the gist of what PM is about before that I had no idea how it worked or what it was about it is in a way like a mock exam

P: We can find other resources

P: Ask for help from fellow colleagues (on CAT tools or on translations)-problematic smts

P: Put effort, do research on ur own

P: I think it is right to offer Project Management to students translating from and not into their native language.

P: PM in class gave me an insight into the importance of PM in the translation industry. Before I thought it was just sending emails while now I know that terminology, proofreading require an efficient infrastructure from the start.

P: Exploring PM /networking of CAT tools early on in the project would be good.

P: PM is all about organisation of people and projects.

P: Students do not see the importance of their role (e.g. in revision)

P: Students don't quite understand what project management is.

P: There is understanding

P: However, the wiki as a platform is good because we can communicate, but it tends to happen only when there is problem. Student members do not cooperate with the team – they need to understand better what PM is about.

P: The idea is good, as well as the wiki, but the pseudo nature affects motivation. We should be involved in a real project.

P: Pseudo wiki is ok u have all the options

P: As a PM I benefit from seeing the tables with dictionaries, the discussion. I learnt organisation skills, communication and much from emails, opinions and revision. There needs to be a column for feedback on the work of the managers.

P: During trials the PMs find out what sts do not understand. There is opportunity for a good platform.

P: PMs benefit more because the others are afraid of making their voices heard. They do however send personal emails with questions to the PMs.

P: If you are a manager you see the big picture and you have many things to worry about. You can't just wait for things to happen.

P: Being a PM involves responsibility.

Response to [I]: One PM gave up towards the end because the others didn't participate]:

P: It is all about motivation – the wiki /glossary will not be used again, so why bother.

P: Communication difficulties between the different language pairs.

P: Communication is important – within the team and between team and members.

Response to [I]: What about reversing the order of the two modules and starting with TM?

P: No, MT is easier and should come first.

P: I think it is better because everybody knows about the internet. If we learn about TM in term 1 we can combine it with internet resources in term 2.

P: It is good, because TM is technical and the internet helps you translate – they should be combined.

Response to [I]: Should the PM team alternate members after one term?

P: No, it is a learning process and it takes time to get to know each other.

Response to [I]: Should we offer placements in the team to the class members?

P: Everyone could contribute through wiki

P: Yes, because everybody can add their specific skills and it will help everybody to participate more in the project.

P: The focus in both terms was quite different – there were more specific questions about CAT tools. The team had to work harder but there was not enough time to complete activities such as revision. Many students left and didn't complete what was required.

2nd Email response to question: Was PM a suitable compensation for a reduced word count of the translation:

I'm happy for you to use anything I've written to you as part of your research.

I agree, although I think the more feedback students get the better. I remember thinking that the amount you asked us to translate was quite reasonable over the year.

However, I think that it should be involvement in project management itself that allows a relaxed word count so that the technical and organisational experience gained from project management can be the main focus rather than the translation itself. Native ability should not affect this, however English native speakers would probably benefit more from the project management, so they should be strongly encouraged to participate in it and thus get the reduced word count anyway. If this is not up their street and they would rather focus on translating, perhaps you could consider the option of seeking out some slightly

more detailed native speaker feedback for what they do submit, or even giving them some other related material to translate into English (although I admit this would have to be done in some careful innovative way that doesn't exclude the student from the wider group project).

From my experiences in first term the project management seemed like it was going well, although still in its infancy in terms of organisation. It sounds like it picked up pace and became more effective in the second term when more translations were in play.

The class gave me an insight into the importance of project management in the translation industry and the need for the right to be effective. Before the class I would have thought it was a simple matter of firing off, e-mails but I now realise that terminology management and ensuring proof-reading require an efficient infrastructure to be put in place from the word go.

I am not sure quite what you went into in the second term, but I would think that exploring the project management/networking potential of the CAT tools early on in the project might be yet another way to prepare students for the demands of project management.

Appendix 11

One FG discussion Non-team members 30.06.2011

[Transcribed from Audacity recording]

Interviewer (I) 5 participants (P): non-PM team class members across two classes

I: OK, before we begin the discussion, I'd like to confirm that you understand the purpose of this discussion solely for my research and that your participation in this study is entirely voluntary, that you may refuse to answer any questions and that you may withdraw from the study at any time.

Ps: [Silent consent]

I: Let's begin.

I: What did you think of Project Management did it have any effect [inaudible]

P1: yeh, I think they were doing their jobs, but like regarding the wikis they were meant to be helpful but when it comes to a word I would like to know the exact translation in Chinese such as accessibility I couldn't find it in the glossary so maybe I think that the glossary should be more helpful, there were a lot of translated vision versions and we need to fix on one. And like other PM when we do revision in class I think it didn't work out, so I don't know if it is our problem or the PM's problem

I: Okay, that is the main question when it doesn't work whose fault is it, is it the class or is it the PM team? [inaudible]

P2: I think anyway that project management is helpful to some extent and that the work we were doing for instance they put all the website project translations on the wiki is and we could see who were doing the same as me, so we could talk with each other to find the same problems and to solve the problems, but as it said before it is helpful or to some extent because I think sometimes they are not very responsible on project management things. And then they just want us to do something and then they all disappear and we don't know what we should be doing the next. I think that is a problem and of course ours is also the class's fault.

I: let's not focus too much on fault. [inaudible] Let's focus on how it actually helped you. When you have to work together sometimes it works, sometimes it doesn't work very well [inaudible].

P3: Well first I think the project management did give me an opinion about how does it work, for instance in the real translation world, I didn't know that there was such a thing, I had never known that before so this team gives me an idea, a concept of how it works. But it don't think it really helped me a lot in my translation, yes, for instance in the glossary, I didn't find a word I was looking for, that was useful to me, but on the contrary I never add any glossary to it, so it is a problem to both sides it is cooperation, it is teamwork end to my knowledge the PM in class 2 works better than in class 1. They really cooperate

well, so and I think the most successful wiki is the one about the essay when we ask questions and the teacher answers it. I can see many questions coming up, so it really is a matter of motivation and of course other team members don't have any questions and sometimes one or two put forward a question and they only answer some, so we can see that the whole team is not interested in the same thing , they are interested in different aspects so that is a problem.

I: I had meetings with them (PM team) and [inaudible]

P3: I agree with other people's opinion and what I would like to add is that if I had a problem or I was in trouble I would go to the project management but I think personally they had more communication with Rosemary. So they are more familiar with the problem and secondly, because they are the project management team so they have responsibility to answer the question, so they have to give us the answer ..

I: and did they

P3: … yes, they did but sometimes they have to focus on their own work, so sometimes yea, if they always answer a question it is very helpful.

P4: I would like to say that the members of project management they are good organisers because they really improve the efficiency of organising students they arrange the groups, and think it is beneficial. However, personally thinking – in class – I do not think that I benefited a lot from project management, because they often discussed things with you, and I think my classmates, non-project team members, they helped me a lot. For instance like Gao Xiaoxiao he helped me, us, many students in our class…

I: with technical problems

P4: … yea yea he is always very kind and friendly and I think those people should be elected to be members. The project management I think one of the criteria I would suggest is that the members of this team should be patient….

I: so we should have a psychological text first before we can allow members to join the team

P4: …[laugther]

I: don't you think you have got to learn

P4: to learn

I: the team has to learn. At the beginning of the year one of the members of the team said they do not know what project management is about, at the end of the year they said they had learnt. It was only at the end that they could see how everything has fitted together and what their role was. So at the end of the year they know but unfortunately you as a class expect from day 1 that the PM team can answer all your questions but they can't because they are not professional.

P1: if they don't can't answer the questions they have to go to you and that is a double work. If they can answer the questions directly on a platform so that everybody can see that would be very helpful and the questions don't have to be on translation they can be on internet tools or TM so maybe that is the most helpful part about project management and I agree with [?}. And regarding

everybody translating the same text I haven't thought about that maybe it would be helpful in one way so should it be you that chooses texts or should everyone decide…

I: *I want to know what you think*

P1 …

because all languages are different, what works in Chinese is not meaningful in Spanish language so languages differ. There is a problem.

P5 *I know it might be like difficult to choose the same text, but I think it is a very good solution to solve the teamwork thing. So I think we can discuss, but discussion might take a long time, so you could choose the texts.*

I […]

P5 oh yes that is a problem

I … if I have to choose the source texts I need to know the languages, so students would have to discuss this in groups and there is no reason why they shouldn't translate the same. Okay, ..they need to work together but I don't think this can be done all the time because if they were going to do revision it would not be possible because everybody had done the same – there needs to be variety because just imagine in revision if everybody was doing the same. It might be different for glossaries where it would be good to work together, looking at difficult terminology but when doing revision you don't want to revise your neighbour's translation which is exactly the same as yours..

P3 I think if we revise each other's texts we can do the same thing because we are very familiar with the source text it can be quite different from the understanding to the truth of terminology and that will save a lot of time and arouse people's attention because if you haven't read the source text yet you have to read it, you have to revise it, it is like you have to do your own work.

I I think, what I am trying to replicate is what happens in real life and if you are a reviser you are going to see a text you haven't seen before and I think you need to be prepared for that and there is a lot of work involved. I's like to put something else to you: because I am teaching technology and because I want you to leave with a good knowledge of the technical side of translating I can't expect your translations to be perfect because I am convince that when you are working with translation memory and the learning process may have a negative impact on the quality of translation because you are concentrating on mechanics of the TM.[…]15:00 I want you to concentrate on the act of translating, and relating to this I want to tell you what the project management team commented on the lack of motivation and co-operation from class members, they felt that your motivation was very low and that the class not you personally but the class was not motivated enough and that the class did not contribute enough towards glossaries and also the revision was not completed, it started but it was not completed, and they said people have their lives, or they are away for the weekend or they have their specialised translation to hand in and

P4 [inaudible — laughter] they have a responsibility to motivate us [pause] actually I don't think they are quite motivated, they don't have the motivation

I think. They just like to do individual work. They didn't give a detailed answer. I'm not very satisfied with them myself.

P5 I think the fundamental issue of this problem is that performance looks at project management and our performance does not account to our credits — students care about papers about essays because it has direct influence on the graduation. But this performance, this academic performance in class has nothing to do with Durham's final credits, so where is the motivation [giggle].

P4 Regarding the glossary the team member they sometimes just send us some e-mails and ask us to add something to the glossary but I think they could also do it after class because this is not enough.

I You have hit the nail on the head, this is the situation, but I think motivation needs to be intrinsic and not extrinsic, for instance will you do a better job as a translator because a particular job will pay you more? Are you happy to deliver a translation with mistakes because they are not paying you as much?

P1 There will be no mistakes but it will be less high standing than the better paid job. I will not make mistakes in the other one. I might think about more beautiful words or some more local expressions like native expressions and do more research on the translation for instance background checking. If I have 24 hours were two jobs I will spend two thirds on the high paid one. Regarding motivation I don't think it is because we lack motivation I think it is because we only received some e-mails telling us to add words on the glossary, but that is not motivating and regarding the glossaries sometimes we have problems for instance 'accessibility' but we need to have someone to ask our opinions to talk about it like to have a formal meeting for a while to talk about this. That is a job project management should be doing.

I In other words more communication between the class and the team would help, wouldn't it. Yes. Another question is ---

P5 --Project management members always sit together, they don't sit with us.

I Do you want me to say 'move', I'm afraid that is not quite my style of teaching. And in real life they don't sit together either. [laughter]..I want the situation to evolve – mutual motivation will be necessary. [pause] Final question: does everybody feel that that you know just enough to apply for a job which requires project management? [pause]

P1 If there is such a kind of job I think I will apply. I think actually we should know more than the other translation students, so…

I Why?

P1 'cause I sometime we – I always talk to my classmates that study at a other universities in the same major and they don't have such kind of things some universities don't have that kind of experience. Basically, we know what they do, although we know might not be familiar with the details.

I Would you apply?

P5 I think I would because it doesn't take much time to learn to become a qualified member of the team, to learn how to use TM or to use Trados, I think a project management team just need to learn how to organise, how to [inaudible]

P4 No, I don't because I don't want to have too much responsibility [laughter group]

I that was not my question – do you think you have enough knowledge to apply?

P4 maybe I would apply but I'm not very confident about it

P3 I don't think we know enough to be a qualified team member but if we have the motivation to be one because we can also learn how to be a good one.

I don't you think from all your comments because you can see which things did not go well that you have learnt enough to do things well yourselves?

Discussion ends after 26 minutes.

Appendix 12

Two FG discussions with PM team members

Dec. ’11 & Mrch ’12

[Transcribed from Audacity recording]

December 2011

6 participants (project management team members across two classes)

About project management, revision, terminology and the Wiki website (topic of module TM)

I= Interviewer

P=Participant

I This is a discussion about project management and if you do not wish to participate t in the recording feel free either not to speak or to switch the microphone off just indicate that you do not wish to be recorded. I will just assume that if there is no objection I will go ahead. Really my first point in the discussion is how well did the revision work go from the project management’s point of view

I There are lots of aspects and it will be very random, we don’t have to be organised in what we say, who would like to start

P1 Yes, I think logistically from the point of view that people are sending e-mails and things like that, yes there was lots of going back and forth like getting people to send revision and things like that, once we got them all it was okay.

I Okay who would like to comment?

P2 I would say that the revision worked well, and we had to wait a while, but that makes sense because the work had to be done after class, but then when the revisions came back and I opened up the files I couldn’t see any track changes. And there were no comments. I think somebody put some comments in Chinese. Which I couldn’t read, so I couldn’t check whether the revisions had been done well….

P1 There were two files I looked at and which came back almost straight away, when I opened up the files I saw one comment in each one

P3 Yes I had the same problem with my revision group, because I got them back quite fast, when I opened up the files, I wasn’t quite sure what they were sending me, so they got sent back and forth back and forth and when I asked if there were any

changes they said no and it became really complicated and people weren't very cooperative and of course we don't know Chinese, which makes it even more difficult

I Does that mean they didn't use track changes?

P3 They did but they said they didn't find anything.[…]

I So basically you didn't receive any revised translations

P3 In a way

P4 In my group they did do revision, but some files were 1,000 words and they didn't have time to do all the revision. I believe they have done some, I think they didn't use that tool to mark it in red to make it obvious, but sure they have done something.

I If you were working in an agency what would you do about this?

P4 Tell them to do revision and to correct all that

I Return the e-mail with instructions?

P4 Yes

I And maybe the instructions in the first place were lacking and I am not blaming you I am just coming to a conclusion

P1 We were quite clear in what we put. Yes we put all the criteria on and we were quite consistent in what we put and we also said it was as much the exercise as the revision so we said that when we received a document of 1,500 words we said that it was more a small document we needed that it was not necessary to have all the revision done and I think that was what confused a few people

I My observation from this is that as a project management, the project manager, you need to be very clear in your instructions it is almost like sending a purchase order isn't it, do this do that and that means that if 1,500 words comes in you simply return it to the translator and say that was not the agreement or that is too much and could you cut it down. But this is a learning process of course. Am I right, you would do it differently as a project manager next time? Give very clear instructions? I would also like to point out there is one way in which you can find out what has been changed and that is by using in track changes the function 'compare documents' and it will then put track changes in for you, so you can actually do it yourself as a project manager. This is interesting for me because I hadn't imagined that this would happen and this is something I will go through another time

P1 It is like we had overestimated how co-operative people would be because they were classmates but they weren't really interested and in future we will have to make the instructions extremely clear

P4 In my group we were very clear about what they had to do but we didn't include the tool in the instructions and that was why some people were confused so some did not quite know what was going on and were not quite sure what they were meant to do….

I Is there anything else you want to add about revision because basically the activity failed in a sense, didn't it? I think we have to conclude that because you didn't receive back the material you had expected so you couldn't draw any conclusions. So there was poor instruction and ignorance knowing that you can actually check what has been changed

I Anything else you want to say about revision?

P2 It is something we should have set in instructions that we wanted for instance 200 words and that would have made it easier was setting the rate, because first we separate for words and then we changed it to hours, but all that didn't make any difference

I Just leave the microphone there, there was a difference between the two revision activities, one was in DVX and one was in MemoQ. Could you comment what you discover that, because the first time did not supervise but it did happen? So what was the difference if we're now looking at the Cat Tool?

[…]

P3 I can't see any difference either way, because I wasn't a reviser.

I Except if you don't use Track changes in MemoQ you don't really see what has been changed.

I Anything to add to this? No? Then we will talk about glossaries. Before I ask any questions is there anybody who would like to say something about glossaries. How did it go, what did you think of it, was it useful, was it hard work, all sorts of things.

P4 In the wiki website, the glossary in the Excel file, I don't think it was clear enough, if you want to find a new word, you had to search, it is not fast enough, it is not efficient enough when we are doing translation

P1 Yes, when we started we struggled to find the right format, we tried to import an Excel and when that didn't work we tried it in JPEG and then we did it in Excel and it looked a lot easier to read but when you tried to search it and it wasn't so user-friendly perhaps.

P4 Yes this was a problem when we try to import it on wiki and someone wanted to download it and now I come to think of it… it was easier to import it, and also I don't like the format of the glossary but for me when they organise the glossary I put it in the order of the text because when I collected all the files from our classmates, they had all done the same thing, so when I… and there are many compound words so when a compound came along, I would put it in the order of the text, but am not sure which was better to put it in the order of the text or the alphabetical.

I Comments on this, I think it is quite essential, quite crucial, what do you think? Should it be alphabetical or chronological? What would you prefer as a user?

P5 […alphabetically …]

P4 If we make glossaries, it is not just for that specific test, we should concentrate on glossaries because we will use them in future texts, so I don't think it is necessary to put them on lines you just put in the new word you don't know

I But then shouldn't it be alphabetical, if you are going to use them in other translations?

P5 Yes, I think we should add all the words in one new excel file, so it is more logical and simple for people to refer to alphabetically

P6 [..]

P5 [..]

P1 Yes, I agree with that. I don't think it is necessary to add lines. We could put them in a column. I find that when I am translating the word would not be exactly in that context. You can't just take it out of context and put it somewhere else.

P5 So I am not sure if the context is necessary in one column in the glossary […]

I You realize you are building a corpus, giving examples and then it would be good to give a URL address, a hyperlink. It would be fantastic so I am thinking maybe we should do that as part of internet resources

P4 Yes, but it is hard to do that in an excel file

I Okay, but we can talk about that and Excel file

P2 But in a more professional environment, imagine you had an html file and it is legal, Chinese, or whatever, you would then have a massive list and you would have to do a massive search [..] but I am not sure if that…

I What about putting hyperlinks in a column in an excel file so that your actual context will be elsewhere? Either on the web or to another Word file. Hyperlinks don't necessary go to the web.

P1 I think we should have given an aim- the situation was similar to the revision case and told people why we are doing it, because initially they were more keen to set up glossaries I got the impression that they all thought we are doing different things so what's the point

I What about Multiterm? You have seen what it does, how it works. Do you think our glossaries should be multilingual or bilingual? Bilingual would work in DVX. Trados accepts multilingual ones. What do you think is the importance for the project management team?

Multilingual or bilingual? What is more efficient from the Project Management's point of view?

P3 Multilingual. I looked at what the others had done and put them all in one file.

I What about the issue of using that file in DVX where you can only add a bilingual? Does it make a glossary useless, what will you do with them. Can anyone think of a solution.

P5[..]

I Can you see that as a PM team, that you can work in two ways, you can be a provider of resources and you can be a manager of file share. So that if you want people to download glossaries you would have to create multiple glossaries, bilingual or multilingual depending on the CAT tool the translator uses, but as a PM you can provide multilingual glossaries for the translator to download. What service do you think you were providing?

P5

[..]

I How much did you use your own Wiki as a Team member?

P3 I used YouTube to understand more about TMs

P? I used it for glossaries or for details about a lecture or for criteria for revision. […]

P6 I have used it several times for course materials or for websites of the softwares and when we were creating our own glossaries I used it several times [..] And since we use the blogs, I think it would be better if we could make the material in the blogs available for everyone to read, it would be good.

I Should blogs become public or should they be closed?

P? I think they should become public, I think we have to do a lot of self-study and when I am doing that I find it annoying because some problems I have with the

software, I would like to know if others have them too. [..] I want to read what others write, it would give me some inspiration

P2 I like the FAQ section. I think it would be good if we had some technical questions, so we need a site where we could share the questions.

I Could I have some more comments about blogs? Is there anybody who would say no I won't write in them if I know that others were going to read it?

P2 […] I think I would like to ask some questions to the tutor in private

I There is a solution to that if we open a site in Wiki which is for students only, which is a chat group. Rather than make blogs public, because it is very much between you and me and I don't know if others should be able to read those comments.

P2 It would certainly open up the blogs

[..]

P? I would like a forum, if I have some particular problem

I Is it like a web list?

P? Yes, [..] Sometimes I will spend one hour on a problem, and it would be good to discuss it with others

I Should it be like a BBS group? Wiki might not be flexible enough. How did you find Wiki?

P? I think Wiki is quite useful [,,] but it is not interactive enough.

P3 I think that students in our group have not realized the importance of wiki, they do not log in so often, they don't take the FAQ seriously on the Wiki so they don't use this function

P2 We as a group don't have a great expertise, so we provided a platform for feedback and do not know much about interaction

I You are one of the users. What is your response as a user? The PMs think the students did not understand how to use it

P6 I found Wiki very useful – I don't know about the others. I like the FAQ [..] but not many people asked questions

P3 I think my classmates wouldn't expect me to have the answers to their questions, just as they wouldn't have the answers to mine – we are all on the same level and that is right, I don't know any more than they do

P4 But that is the point of the Wiki, it is the place where you can find out what questions other students have and you might get a reasonable answer

P5 I think it is important to tell the other students how important Wiki is.

P4 It is important to tell them and encourage them

P6 I have a suggestion; we could start some kind of study group, groups of four and meet once or twice a week. So that I don't spend the whole morning at home trying to solve problems by myself

I Thank you for this. (summary – Wiki as platform – Faq is only form of interaction; as a LSP (explanation) it has not been as successful through lack of instruction (precise emails from PM team) – good as resource, poor for interaction)

[Close 41 mins.]…

Module topic Internet-based Resources

Audacity recording of focus group discussion on Terminology March 2012

7 participants (project management team members across two classes)

I**:** OK, before we begin the discussion, I'd like to confirm that you understand the purpose of this discussion solely for my research and that your participation in this study is entirely voluntary, that you may refuse to answer any questions and that you may withdraw from the study at any time.

Ps: [Silent consent]

I: My first question is: how do you think the online terminology database worked with Wiki.

P1 I think it works pretty well.

I What advantage did it have for you?

P1 We can share the terminology together and if we find a lot of differences between them we can correct them in time, and… that's it

I Any comments about how it went on Wiki?

P2 I found one problem with the online terminology database on wiki. I think the amount of terminology is too small, so the function of it is not…, does not work so well.

I Why do you think that happened?

[silence]

I Why is there so little terminology?

P3 We don't have enough time to put all our selected terminology into it.

I If we had more time, if it were an ideal situation, how do you think we could improve the amount of terminology and make better use of it? Because if there is not enough, it is not be useful, but imagine there is a lot of it, what do you think?

P3 The best way to use it is if – well, eh there are enough engines in the terminology database, it is like when I translate material on a certain topic I can just refer to a Wiki and find some translation and see if it is valid or not, but now I don't think, it is not so good, because I think our classmates are not so eager to get involved and it is not so convenient to add entries into it, because you have to download it first and then edit and upload it and wiki

cannot accept two persons editing it at the same time and I think it is not so convenient

I Do you think the discussion board would work better if we had a dedicated termbase list […] would it operate better ad hoc or should it be organised?

P1 Yes, I think if the classmates will participate in the discussion board more often it will be useful. Because now when we post a question in a week no one answers it, so it is useless.

P4 As for the discussion board, how to I say this, I think all our classmates are occupied with the coming essays and all the work because if we want to post some questions in the discussion board or ask our classmates to add something up in the terminology database, it should be required (short laugh) – yeah, it should be a required work, such as you have to finish this, otherwise something bad will happen to you, then they will do their best to try and put on something, otherwise it is just us, the project manager, who tries to put up something, yeah,…

I Do you think an imitation platform would work better than if having a live termbase on wiki […]

P4 Hmm,

P5 I think that a termbase is better if it was used it in real time so ideally if everyone got a piece of work and were able to add words as they were translating, and make it part of their translation process as it feels more like you are doing … rather than doing something in retrospect at the moment, you do all the work and then you think oh and I need to put it on the termbase. And I think from my experience that that may be why it doesn't get done, but if it could be done during the process, but then again like you said it is rather difficult when more than one person is working in it and you are uploading it but if everyone opened it and worked on it as you put it back in then they could see the other people adding to it at the same time, but I am not sure how that would work and then it would be more useful I think.

I Do you think it would work better?

P6 I think that in terms of the term list that it doesn't really work if we work on different things and it became quite like engineering, a bit of scientific a bit of medical, but it was all mixed up and I didn't see how it would help my translations as such because we were all working on different things. I think if they were different projects, say, even if they were different pieces, if they were translations from one project, like different chapters, yeah, like a heading, maybe like engineering, and one chapter or a webpage and then everyone is on like a different page within that you would still have the same terms, because even when you are uploading […]what other people had put,

it just wasn't relevant, so it actually deters you a bit, going on to it and looking for it.

I Workflow….. Spanish……. Was that useful for you, searching and selecting?

P6 I think it was definitely useful in terms of revision, ehm, because it gave us files to see which one was best and that some people weren't as accurate as others, so that was good to look at other people's and to see things you didn't think of, I think that was useful, but it would need to be made part of the revision process to make people aware that this will happen, so that we will work together on it, otherwise it doesn't get used again.

I Do you then think, let me ask you this question, do you think that because of the limitations of the termlist and also the limitations of the discussion because it wasn't working all that well and maybe picking up what P6 said, that file sharing would have a better result so that you can see what other people have done and so that you can compare.

P5 Yes, I think so, it is just like P7 said, cos' we work on different topics, even though we discuss on the discussion platform, for example, if you work on the topic of engineering and I work on the topic of cosmetics, and I ask a question about cosmetics, you don't necessarily need to answer me, because that doesn't help your work, so I think file sharing..

I In the first few sessions we all had the same topics, but it didn't acutely work better. Or was it just due to the fact that we had to share terminology? Or are there two aspects here in that we are unfamiliar with or unaccustomed to the wiki process of sharing and the other aspect is that there needs to be a common topic … Is that the conclusion?

P7 I think it is like last semester, which wasn't mega successful, but when I was asking everybody to send me updated glossaries regularly, I got a bit more response from that and then as part of the PM team I put them on to wiki and I think that people responded better to that because it was easier, they just had to work on it and email it to me as opposed to downloading something and fill it in and just put it back on again, so I think that minimal effort, like creating minimal effort is probably easier and then getting someone to organise it all, yes it took a little bit of extra work on my behalf but I think that it was better balanced that way, a more efficient balance.

I So you think that case managers might work better, so you are a case manager for this and responsible for students X, Y, Z and you chase them.

P7 Yeah.

I But the freedom of being able to work in your own time just didn't work. And it doesn't really in real life, you have got to produce a translation by four

o'clock in the afternoon and you simply have to work that way, so it is up to the project manager …

P7 Yes, when I sent people emails could you please send me the x projects , I generally got a response

I Are there any questions?

P 5 Yes, regards the terminology data base are they intended for us to use in class – I think there is a good way of asking our classmates. If we are going to translate the same thing … and we separate in different groups… we are responsible for the technology and we are responsible for the physics and each team is responsible for different topics and they have to produce their term lists so that other people can use it because they really need to translate it because if you want look to look the terminology database that is because we need it, but we produce the terminology database after we translate everything. I think that is…

I My thought was that when you are going to revise like this week… but if there were a solid database it would be used, but if there is not very much it is not very likely that it is going to be used.

As to people management, I think it is like you suggest, you are in charge of technology, you are in charge of terminology, engineering and leisure, and […]

Discussion ended after 35 minutes

Appendix 13

Questions in additional interviews after the study

10 May 2013

The first set of questions is about the student's relationship with the topic of the module:

1. The module Online Resources is practical as well as research-based. (Pause – check if student understands the meaning of research-based)
   What do you think of the relationship between its research-based teaching and potential employability?
2. a. What do you think of the required academic reading on a weekly basis?
   b. (How) did your approach change over the weeks?
3. a. What motivated you to choose your presentation topic?
   b. How did you prepare it?
   c. How has the presentation contributed to your learning?

The second set of questions is an inquiry into the student's learning process:

4. What is your view of the formative (portfolio) and summative (essay) assessments in the module?
5. How did you go about the review activity towards the end of the module?
   a. What was the value of receiving the feedback compared to writing it?
6. (How) has your view to collaboration during the translation process changed?
7. (International students) How did you find writing in L2? / (Home students) How did you find translating into L2?

Appendix 14

Excerpt from syllabus in third year of study

Week 2 (25/01/12)

The process from ST to TT via Search Engines, Online Dictionaries and Multilingual Resources

Aims & Objectives

Applying your understanding of the relationship between translation and Online Translation Resources and its application in a DU webpage

Reading

Bare Bones tutorial

Lecture/Seminar

WWW as a translation resource and as a communication platform

- Bare Bones ctd. With more emphasis *on Boolean logic* and its inclusion in searches
- Web forums and e-lists, such as Proz.com, TranslatorsCafe.com
- Referencing your resources; creating a reference hierarchy

Dictionaries (bilingual, monolingual:

- Fr; Es: www.linguee.com/ searches bilingual text online
- Fr: www.granddictionnaire.com/
- It: www.frasi.net/ (406,000 entries)
- Others

Multilingual resources

- http://eur-lex.europa.eu/en/index.htm
- www.un.org/documents/
- Government sites

http://www.bundesregierung.de/

http://www.gouvernement.fr/

Resources in EN

http://www.iuscomp.org/gla/statutes/statutes.htm

http://www.sweden.gov.se/sb/d/3288

- Karen Chung –National Taiwan University:
    - http://homepage.ntu.edu.tw/~karchung/linguistics%20links.htm
    - (all kinds of language/linguistic links, including many Chinese resources)
- EN-ZH medical dictionary www.esaurus.org/index.htm
- http://www.wikipedia.org/

Practical session

Time to do some translation, using your preferred TM and making use of the termbase (note: don't forget to record all your sources while you search!!!!!)

Practical assignment wk 1 ctd.

Try to find the translation in TL of 5 difficult terms (after you have researched the meaning in SL) on the sites for multilingual resources and dictionaries as suggested above.

New assignment

Now open Ethical Investment Policy

- Use an appropriate search engine for a couple of words of which you do not know the meaning
- Try to find the translation of those words with the suggested multilingual/resources and one of your own
- If there is a word/phrase translation in either assignment, which you cannot resolve, choose a translator's website (e.g. Proz.com) by researching their glossaries and ask the PM team to post a term question on the Live terms translation site.

How do the online resources compare with Proz.com?

1. Compare your results in both assignments and assess the reliability of your searches. What are your criteria?
2. What is your personal reference hierarchy?
3. Record your findings in your Blog

Project Management

- Improve the accessibility of your Wiki (merge with previous Wiki 2?), e.g. plan your rubrics/categories according to the syllabus
- Consider how you will organise the Wiki as a platform for communication and as a data base for resources. A discussion board has been set up as a platform for communication. Try it out by starting a thread among yourselves. Inform the class.

Appendix 15

Review criteria translation portfolio

Student Z0

Language

	Fit for Purpose[9] (please tick)	**Not fit for purpose** (please tick)	**Comments**[10]
Grammar			
Lexical choice[11]			
Consistency[12]			
Natural flow[13]			

Overall evaluation:

Fit for Purpose / Not Fit for Purpose

(Please delete as appropriate)

Any additional general comments

[9] Fit for purpose is a phrase typically used in translation revision and means that we need to consider the purpose of the translated text. If it is for information purposes only (such as Durham University Website) the occasional error would not impede the understanding of the translation. However, some translations would need to be 100% correct. E.g. an incorrect date after a meeting has taken place would not matter, contrary to before the meeting

[10] Some random examples/references to illustrate errors would be helpful

[11] Suitable terminological choice in context should take preference over consistency

[12] Consistency is important, but should not affect the real meaning, See 3 above

[13] The reader should not notice that it is a translation. The source text should not shine through

Appendix 16

Project management team timesheet

Date	Time	Activity
12 October 2011	1 Hour	Organising the project management group, collecting initial ideas about how to set up the Wiki
18 October 2011	3 Hours	Setting up the Wiki (Name, Logo, FAQs, Glossary)
19 October 2011	3 Hours	Collecting the glossaries from our group and organising them into one Excel file and publishing it on Wiki
7 November 2011	1 Hours and a half	Collecting new glossaries and organizing them into one Excel file and publishing it on Wiki
16 November 2011	30 Minutes	Organising the revision of the translated DUW files
30 November 2011	1 hour	Sending the reviser with revision criteria, purchase order and invoice, and returning the translator with feedbacks
5 December 2011	20 Minutes	Sending group members emails to send back an excel file with the unknown words of website translation
8 December 2011	10 Minutes	Uploading some materials
In Total	**10 hours and a half**	