

**The Reflection and Self-Assessment of Student
Interpreters through Logbooks:
A Case Study**

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ABSTRACT

The aims of the current study are threefold. The first aim is to investigate how writing reflective journals may facilitate student interpreters' learning process in becoming more reflective and in assessing their own interpreting performance. The second aim is to investigate the relationship between self-assessment and reflection. The third aim is to explore how different scaffolding tools may have influenced the development of students' reflective thinking and their approach to self-assessment.

Initially, educational theories, theoretical constructs on reflection and learner self-assessment were reviewed to examine the concepts of reflection and self-assessment in the context of interpreter training. Empirical studies on the functions of reflective journals and on self-assessment, particularly those carried out in the field of interpreting were explored to help the researcher design the theoretical framework.

As a case study, logbooks were collected from students taking introductory interpreting courses in a translator and interpreter training institute in a British university. The main method adopted for the analysis of the logbooks collected was thematic analysis. The themes which emerged from the data enabled the researcher to explain how writing reflective journals can shape student interpreters' learning process and how scaffolding tools used in the study influence students' self-assessment and reflection.

The study found that the student interpreters in this case study focused more on self-assessment of their interpretation performance in their logbooks. However, this study also found evidence showing that writing logbooks have indeed helped students to become more reflective. The scaffolding tools provided, according to the result of this case study, appear to have significant influence to help some participants to move beyond reflecting on individual learning experience and to think about the learning experience from a long-term perspective.

DEDICATION

For my parents.

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ACADEMIC REGISTRY
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List of Abbreviations

AIIC	International Association of Conference Interpreters
AIS	Advanced Interpreting Skills
APSCI	Applied Professional Skills for Conference Interpreters
CI	consecutive interpreting
CN	Code number
ESIT	Ecole Supérieure d'Interprètes et de Traducteurs
HCI	How to Complete the Logbook
HPI	How to Practice Interpreting
LAC	Logbook Assessment Criteria
PG	postgraduate student
SI	simultaneous interpreting
SLO	Suggestion for Logbook Outline
SN	sequence number
ST	source text
TT	target text
UG	undergraduate student

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Chapter 1 Introduction

1.1 Research background

Over the past three decades, the conceptualisation of “learning” has gone through significant changes. Emergent theories in education psychology argue that knowledge is not transmitted from teachers to learners; knowledge is constructed by learners (Kiraly, 2000). In other words, for learning to occur, learners have to actively take part in the learning process to construct their own knowledge, rather than sitting passively and waiting for teachers to feed them with knowledge. This view implies that education should be student-centred and it challenges the traditional, teacher-centred pedagogical approach in many disciplines, including the field of interpreter training.

“Interpreting” is considered “one of the oldest activities known to man” (Viaggio, 2003), but discussions on interpreter training only began in the 1960s, when the International Association of Conference Interpreters (AIIC) organised the first symposium on teaching conference interpreting, discussing teaching methods and course materials and helping educational institutions to meet the rapidly increasing demand for interpreters (Mackintosh, 1999). What needs to be made clear here is that discussions regarding training of interpreters in this study will focus primarily on spoken language interpreter training, including consecutive interpreting (CI), simultaneous interpreting (SI) and liaison interpreting. Although the researcher will refer to discussions on signed language interpreter training that are relevant to this study, signed language interpreter training is not the focus of the study.

Contributions on how to teach interpreting from first-generation conference interpreters are usually non-theoretical and these practitioners mainly shared their experiences in books like “*The Interpreter’s Handbook: How to Become a Conference Interpreter*” (Herbert, 1952/1960), “*Note-taking for Consecutive Interpreting*” (Rozan, 1956/2005) and “*Training Translators and Conference Interpreters*” (Weber, 1984). These books have become must-read textbooks in many training programmes and they have played an

important role in the training of conference interpreters as teachers could use these books to support their explanation of the practice of conference interpreting, illustrate the skills of note-taking and inform novice interpreters what to expect in the field. In fact, many of the approaches described in these books, such as the entry-level tests, note-taking skills and the type of teaching materials, can still be seen in many training institutions.

Nevertheless, it could be argued that these publications are “experiential and impressionistic” (Sawyer, 2004: p. 20) because they are based on personal experiences, as clearly stated by Weber (1984) himself, who points out that all the approaches described in his book are based on his “twenty years of experience in the practice and teaching of both fields” (p.vii).

Sharing of personal experiences was a prevalent approach among interpreting practitioners/researchers in the late 20th century. At various symposiums on teaching of translation and interpreting, many “practisearchers” (Gile, 1994a) discussed various pedagogical approaches based on their personal experiences or their observation of their students’ performance in the classrooms. In various symposia, interpreting researchers and practisearchers discussed a wide range of topics, such as the teaching of consecutive interpreting (CI) (cf. Mahmoodzadeh, 1992; Alexieva, 1994), interpreting strategies (Ballester and Jimenez, 1992; Kalina, 1992b), analysis and assessment of interpreter performance (Kalina, 1994a; Schjoldager, 1996; Riccardi, 1998) and quality assurance (Pöchhacker, 1994; Riccardi, 1998). Judging from the number of papers and articles published on the topics related to interpreter training, it is clear that interpreter trainers and researchers have been trying to find better ways to train future interpreters.

However, much of the literature on translator and interpreter training has been criticised for lack of rigour in terms of the research methods (Gile, 1990; Gile, 1994a; Sawyer, 2004). Nevertheless, these literature show a clear trend that from the very beginning, the teacher-centred or master-apprentice approach has dominated the field of interpreter training (Moser-Mercer, 2008). Such a teacher-centred approach follows a “lasting tradition of training by

apprenticeship” (Pöchhacker, 2004: p. 177, bolded in the original), focusing on “transfer of know-how and professional knowledge from master to student” (ibid.). The dominance of a teacher-centred approach can be seen from the fact most decisions related to interpreter training are made by trainers. For instance, in some educational institutions, before students enter a training programme, they need to take entry-level tests (Dodds, 1990; Lambert, 1991; Moser-Mercer, 1994; Chabasse and Kader, 2014) that are designed by trainers. Trainers also make decisions regarding the design of the curriculum (Arjona-Tseng, 1990; Ilg and Lambert, 1996; Sawyer, 2004), the course materials (Bowen and Bowen, 1984; Allioni, 1989; Cheng, 1989; Francis, 1989; Martin and Padilla, 1989; Seleskovitch, 1989; Taylor, 1989; Zalka, 1989) and the format of assessment (Altman, 1994; Gile, 1995b; Riccardi, 1998). (More detailed discussion on these issues will be provided in Chapter 3.)

The dominance of the teacher-centred approach in many interpreter training programmes is associated with the belief that only practising interpreters are qualified to be interpreter trainers (Weber, 1984; Mackintosh, 1995; AIIC, 2010). It has been argued that one cannot teach interpreting if one is not “able to demonstrate the skills, just as it would be unimaginable for a choreographer to teach dance without having experienced all the movements” (Weber, 1984: p. 8). Interpreter trainers not only need to be able to demonstrate how to interpret, but also need to be able to teach students how to acquire the various skills needed to become interpreters (Behr, 2015). In addition, it is also believed that, with their experience and knowledge of the interpreting market, practising interpreters can provide students with authentic conference materials (Mackintosh, 1995). They are also the ones who will be able to answer students’ questions about what lies ahead (Camilo, 2004).

Using the traditional, teacher-centred approach, students are instructed, explicitly by their instructors, or implicitly by the design of the curriculum, to accumulate ‘tape hours’ or ‘doing mileage’ (Moser-Mercer, 2008) through extensive practice (Tiselius, 2013). The immediate goals of extensive practice are to fine-tune students’ interpreting skills and improve their performance in

class, but the ultimate aim is to ensure that graduates will be able to handle complicated challenges in the job market.

As trainers take the lead in the training process, student interpreters rely heavily on the trainers' critique of their performance. Interpreter trainers, "as the source of expertise and authority, play the major role in judging and assessing trainees' performance" (Peng, 2006: p. 5). Through the teachers' critique, students learn about the components of good interpreting. Students are taught to be aware of all the components needed for good interpreting. At the same time, students face the possibility that the same standards used to evaluate professional interpreters will be applied to assess their performance. The rationale behind such an assessment approach is that students will be expected to perform as well as any professional interpreters once they enter the job market.

In summary, the traditional teacher-centred approach has been dominant for a long time in the field of interpreter training. In many training institutions, teachers are the ones who decide on the course materials and the assessment methods. Students are taught about the importance of extensive practice and they learn to examine and rely heavily on the teacher's critique. However, as mentioned at the very beginning of this introductory chapter, changes in the conceptualisation of learning have started to challenge the traditional teacher-centred approach to interpreter training.

Some teachers have made efforts to re-examine the existing pedagogical approaches and explore alternative approaches to allow students to have more control over their learning (e.g., Kiraly, 2000; Gorm Hansen and Shlesinger, 2007; Tipton, 2007) and to focus more on the learning process, not just on the end result (e.g., Gile, 1994c; Gile, 1995a; Fox, 2000; Lee-Jahnke, 2005, see more discussion in Chapter 3; Hild, 2014). A common practice used by both translator trainers and interpreter trainers is to ask students to write journals (e.g. Degueldre and Harmer, 1991; Li, 1998; Kelly, 2005; Chen, 2009). Such journals serve as important tools for students to pay attention to the learning process, evaluate their own performance and reflect on the learning experience.

While translator trainers like Li (1998) and Chen (2009) have attempted to explore the benefits of reflective journals through empirical studies, in the field of interpreter training, it is only in the past few years that interpreter trainers have started to conduct empirical studies on reflective journals, as will be shown in Chapter 3. With the relative few studies, it is very difficult for interpreter trainers to know if writing journals will be beneficial for students as they learn to assess their own performance and reflect on the experience. In addition, interpreter trainers also cannot be sure if it is necessary to provide students with guidance on how to engage in reflective activities and how to write reflective journals, and if so, what kind of guidance should be provided. Empirical studies are needed to help interpreter trainers find some answers and show them if they are moving in the right direction if they do ask students to keep reflective journals.

1.2 Motivation and the researcher's position

In addition to the rationale explained above, as the author of the present study, I am motivated to carry out this study on reflective journals due to my own personal experience. While I was studying for my Master's degree in Translation and Interpreting, our teachers of "interpreters' practicum" asked all student interpreters to keep reflective journals to record problems they had encountered, the lessons they had learned from each lecture and their progress (see Degueldre, 1991). At that time, I did not fully understand the teachers' rationale for asking students to keep reflective journals on a regular basis, but I found these journals to be useful to help me pinpoint problems related to my interpreting.

When I later became an interpreter trainer, I also asked my students to keep reflective journals, but I noticed that the students' reflective journals were very different from the ones I had written myself. Students often paid attention to their mistakes without discussing why they had made such mistakes. As a trainer, I had hoped that students would use their mistakes as a point of departure to think about why they had made mistakes and how they intended to improve. Hence, I tried including more guidelines, but students continued to pay most of their attention to their mistakes and expressing their feeling of

frustration in their reflective journals. As a result, I began to wonder if there are alternative ways in which teachers can help students become more reflective. This project provides an opportunity to find some answers to this question.

1.3 Aims and objectives of the present study

Considering the research background and rationale explained above, the present study aims to investigate whether writing reflective journals can facilitate student interpreters' learning process as they learn to assess their own performance and reflect on the learning experience. While the focus will be placed on spoken language interpreters, the outcomes of the study should be applicable for training of both spoken language interpreters and signed language interpreters. More specifically, the first aim of the present study is:

1. To identify evidence provided in reflective journals that can be used to indicate trainee interpreters' development of reflective practice.

The present study also intends to determine the relationship between self-assessment and reflection as manifested in the students' reflective journals. Some researchers have argued that there could be tension between assessment and reflection (e.g., Boud, 1999). For students to assess their interpreting performance, they need to step back and try to examine their performance objectively using various assessment criteria, on the one hand. On the other hand, to reflect, they need to examine their own feelings and talk to themselves about the interpreting and/or learning experience. Therefore, it is necessary to examine if there is any tension between the two tasks for students. Thus, the second aim of the current study is:

2. To investigate the potential relationship between self-assessment and reflection as manifested in the students' reflective journals.

As mentioned in the previous section, without empirical studies, it is hard for interpreter trainers to decide if they should provide guidance to help students learn to assess their performance or engage in reflective thinking through writing reflective journals, and if such guidance is provided, what kind

of guidance is needed. Consequently, the present study also aims to identify evidence in the reflective journals that shows the influence of specific scaffolding tools on students' self-assessment and reflection. Hence, the third aim of the current study is:

3. To identify evidence in the reflective journals that can indicate the influence of scaffolding tools on students' self-assessment and reflection.

In order to achieve these aims, the present study has the following objectives:

- (1) To review literature on educational theories and theories of experiential learning to explore educational theorists' perspectives on the relationship between experience and learning, and define the concepts of learning for the current study.
- (2) To review literature on theories and models of reflection to explore the nature of reflection and define reflection for the current study and identify a suitable theoretical framework that can be used to identify evidence of reflection in students' reflective journals.
- (3) To review empirical studies on reflective journals, including those carried out in the field of interpreter training to understand how reflective journals have been used in educational settings.
- (4) To review literature on interpreter pedagogy to identify prevalent pedagogical approaches in the field and explore interpreter trainers' views on assessment of trainee interpreters.
- (5) To review literature on educational assessment to identify fundamental concepts in assessment.
- (6) To review studies on quality of interpreting and assessment of professional interpreters to help the present study identify core assessment criteria that can be used or adopted for student self-assessment.
- (7) To define the concept of scaffolding by reviewing educators' perspectives and empirical studies on scaffolding.

- (8) To collect reflective journals for the case study and identify a suitable data analysis method to analyse the reflective journals, and finally,
- (9) To use the findings to answer the research questions stated above.

1.4 Structure of the thesis

This chapter has introduced the research background against which this study takes place and the aims and objectives of the present study. The literature review in Chapter 2 provides an overview of learning theories, particularly the different perspectives on how knowledge is acquired and the function of experience in learning. Building on the foundations of these learning theories, different theoretical models of reflection are examined and reviewed for the current study to propose an operational definition of reflection and construct a theoretical framework that can be used to examine students' reflective journals for signs of reflection. In the same chapter, empirical studies on reflective journals are also reviewed and discussed.

Chapter 3 shifts the focus to issues related to interpreter assessment and student self-assessment, starting with an overview of salient trends of interpreter education and assessment, followed by a review of fundamental concepts in educational assessment and a discussion of the challenges to the interpreting community in defining assessment criteria. Studies on quality of interpreting and self-assessment of student interpreters are examined in the same chapter to help the current study define criteria for interpreter assessment criteria and modify the theoretical framework to incorporate components related to assessment.

Using the theoretical framework developed and modified from the investigations in Chapters 2 and 3, Chapter 4 explains the case study methodology adopted by the current researcher, including the rationale for adopting a case study. It also illustrates how the researcher collected logbooks from students studying in a translator and interpreter training institute in a British university and how the course materials provided by the teachers were obtained for the case study.

Chapter 5 presents the process of thematic analysis which was used to generate both theoretical codes from the theoretical framework built in Chapter 3 and data-driven codes from the dataset collected for the case study. Based on the theoretical framework constructed in the previous chapters, Chapter 6 presents the findings and discusses how the students' self-assessment and reflection were manifested in the reflective journals. Discussions of the findings and recommendations for improving interpreter pedagogy are provided in the same chapter, followed by the concluding remarks.

Chapter 2 Literature Review: Learning and Reflection

This chapter will provide an overview of important theories on learning and the discussions of the learning process found in the literature. The aim is to lay a foundation on which to identify the role of reflection in learning and explore the process of reflection. The review of the various theoretical perspectives of reflective practice and empirical studies on reflective journals will help the researcher to establish the theoretical framework to be used for the current study.

This chapter will begin with a review of different perspectives on “how learning occurs” and a discussion of the definitions of “learning” and “acquisition of knowledge”, followed by a discussion of the debates between behaviourists and cognitivists about the influence of experience on learning. Starting from Section 2.6, key theoretical perspectives on “reflection” and “reflective practice” will be examined, including Dewey’s definition of reflection and its role in learning and various models of reflection that derive from Dewey’s concept of reflection. In Sections 2.11 and 2.12, the researcher will provide the definition of reflection for the current study and explain the theoretical framework to be adopted by the current study. After establishing this framework, empirical studies on reflective journals and on the potential influence of scaffolding on students’ reflection will be reviewed, followed by conclusions drawn from this chapter.

2.1 Theories on learning and acquisition of knowledge

Much research has been conducted to understand “how learning occurs”. Developmental psychologists and educational psychologists have carried out numerous studies, using experiments, field investigations, surveys and interviews. However, as pointed out by Roediger (2013), although educational practice has been influenced, to a certain extent, by psychological studies, it usually takes a long time for educators to embrace changes in their own educational practices. Some educators claim that research into learning has not helped them draw conclusions on how to teach effectively (Moore, 2000; Illeris, 2009). Indeed, research into learning has not even been able to

provide educators with a universally accepted definition of learning (Schunk, 2014).

The quest to establish how learning occurs began with early philosophical inquiries. To date, debates about issues like the influence of experience and the source of knowledge continue. In order to understand the origins of contemporary learning theories, this section will begin with a discussion of two main philosophical positions on the source of knowledge, drawing on articles and books on philosophical inquiry.

The philosophical inquiry about the source of knowledge has resulted in different epistemologies. The two epistemologies to be discussed here are rationalism and empiricism.

Rationalism “refers to the idea that knowledge derives from reason without recourse to the senses” (Schunk, 2014: p. 5). Rationalist philosophers make a clear distinction between mind (e.g., thought or reason) and matter (e.g., things we see or hear). Rationalists argue that mind, or reason, is the primary source of knowledge while sensory experiences or information people receive through their senses are all unstructured data to be arranged and interpreted (Bower and Hilgard, 1981; Schunk, 2014). The ability to reason, according to Descartes (1649/2011), is what distinguishes human beings from animals.

In contrast, empiricists argue that “*experience* is the only source of knowledge” (Bower and Hilgard, 1981: p. 2, italic in the original). According to empiricist philosophers, information received through sensory experience forms the basis of our knowledge. In addition to being based on the argument that sensory experience is the primary source of knowledge, empiricism is also connected to several important notions in educational theories, including the notions of association and reflection (Bower and Hilgard, 1981; Schunk, 2014).

The notion of association is central to empiricists (Bruner, 1985), which is why they are often referred to as associationists (Schunk, 2008; Schunk, 2014). This notion originates from Aristotle’s argument that our memory of

one idea or object can often trigger our memory of a connected or associated idea or object (Schunk, 2014). Although not all researchers agree with Aristotle's notion of association (Bruner, 1985), this concept does influence many of the learning theories discussed in later sections.

Empiricists also believe that knowledge is formed in our minds through at least two sources. The first source of knowledge is sensations. As we see, smell, taste or touch, the sensory experiences form the foundation for our idea of the external world. These simple ideas of sensations can gradually be combined into complex ideas.

Another source of knowledge, according to empiricists, is reflection, whereby the mind supposedly can call up from memory several ideas, compare them, and arrive at some conclusion which would be recorded as another association. The idea of reflection was needed to explain how we gain knowledge by abstraction, inference, and deduction. (Bower and Hilgard, 1981: p. 3)

Empiricists believe that abstract ideas are formed through the process of reflection as we recall and compare ideas in our mind and identify common threads in these ideas derived from experiences.

It is often considered that rationalism has influenced cognitivism, whereas empiricism, with its emphasis on association, has had a significant influence on behaviourism (Bower and Hilgard, 1981; Ertmer and Newby, 1993; Schunk, 2008; Schunk, 2014). However, although researchers often use such terms as "behaviourism" and "cognitivism" as if they are completely different schools of thought, there are overlapping concepts among these theories. The concept of reflection, for example, points to the importance of both experience and mind. Hence, Dewey (1910) argues that although our experience plays an important role in learning, experience alone is not enough. A person has to correctly interpret the meaning of the experience for it to become useful for future application (Dewey, 1938). The theories of Dewey will be examined in more detail in Section 2.6.

2.2 Definition of “learning”

One of the reasons why philosophers and learning theorists continue to argue about “how learning occurs” is because learning involves a broad range of variables and, more importantly, we can only infer rather than know that learning has occurred (Schunk, 2008; 2014).

Debates continue on the role of our cognitive structure, the influence of the environment, our response to various stimuli coming from the environment (Schaffer, 2004b), the interaction and bilateral influence between our minds and our experience and how all these factors influence learning. Nevertheless, similarities can be found in the definitions provided in the literature. The general consensus among education psychologists (Bower and Hilgard, 1981; Schunk, 2008; Woolfolk, 2010; Schunk, 2014) is that learning has the following characteristics:

- (a) learning implies change (s) of behaviour or acquiring the ability to perform certain behaviours;
- (b) learning, or changes of our behaviour and/or cognitive change(s) are, at least to a certain extent, brought about by external factors such as the influence of the environment, a new experience or specific practice;
- (c) such behavioural and/or cognitive change(s) will last for a certain period of time. If a changed behaviour only lasts for a very short time, it is likely that no cognitive change has occurred and such behavioural change can probably be referred to as imitation only.
- (d) Such change(s) is not the result of medicine, natural maturation or genetics.

The above aspects of learning and their implications for this study will be discussed in more detail in the following sections, but based on the indicators provided, a feasible definition of learning for the context of this study

will be that learning is a lasting change in behaviour or cognition that is, at least to a certain extent, caused by external factors including experience and practice.

2.3 Behaviourism: learning as behavioural change

The definition in Section 2.2 provides us with a good starting point to discuss the concept that learning implies change(s) in behaviour for an individual. The causes of such behavioural change, according to empiricists (see Section 2.1) are based on sensory information that our body receives from the world around us.

The philosophical beliefs of empiricism influence behaviourists to the extent that behaviourists all share the view that (1) knowledge originates from sensory experience; (2) by putting together simple ideas, the brain can form complex ideas and complex ideas can be reduced to simple ideas; (3) by linking or associating two or more experiences that happen contiguously, the brain can connect ideas (Bower and Hilgard, 1981; Schunk, 2008; Schunk, 2014). Thus, the term behaviourism is usually used as an umbrella term that includes behaviourism, connectionism and associationism (Mayes and de Freitas, 2007).

Psychological studies carried out by behaviourists centre around the issues of forming the association between stimuli and responses, conditioning and reinforcements (Graham, 2008). Learning, for behaviourists, is about changing a learner's behaviour through the establishment of stimuli and appropriate responses and the association can be maintained or strengthened through the appropriate use of reinforcements.

At the same time, behaviourists also stress that complex ideas should be divided into simple ideas and teachers can gradually help students familiarise themselves with these simple ideas. Once learners have mastered the simple ideas, they can then move on to complex ideas. In other words, the connection between the stimulus of a simple idea and the response needs to be established first. When such a connection or bond is in place, learners can then transfer the experience they have learnt to the new and more difficult task (Phillips and Soltis, 1998). Hence, according to behaviourism, learning tasks should be

arranged in sequences, depending on the level of difficulty and complexity, with the simplest one at the beginning, so as to prepare learners for the more difficult tasks later (Mayes and de Freitas, 2007).

Behaviourism places much emphasis on the link between behaviour and sensory experience. When behaviourism emerged in the 1910s, the mainstream psychology at that time focused on abstract ideas of mind and consciousness and used research methods that were criticised as being neither scientific nor reliable. Hence, behaviourists saw the need to challenge the mainstream approach to psychology (Watson, 1913; Wozniak, 1997). The research methods used by behaviourists were primarily experiments and they focused on what could be observed.

In addition, experiments conducted by behaviourists like Thorndike and Pavlov further strengthened the behaviourists' ideas that association with experience is the key to learning. For instance, in one of the animal experiments carried out by Thorndike (1911), he put a cat inside a box and the cat had to pull the right latch to escape from the box to access food. Initially, the cat made several failed attempts, but eventually and often by chance, the cat pulled the right latch and escaped from the box. When such an experiment was repeated several times, the cat quickly learnt how to escape from the box and in the end, it was able to escape immediately after being put in the box (Thorndike, 1911, see also Bower and Hilgard, 1981: p.22, Phillips and Soltis, 1998: pp. 25-26). Thorndike (1911) thus suggests that learning is the formation of association or connection between the stimuli and the response, a view echoed by many behaviourists.

Most behaviourists have concentrated on exploring how external stimuli affect animal and human responses, but the focus on making connections or identifying association between behaviour and external stimuli is criticised by cognitivists. In response to the behaviourists' view that learners are merely recipients of external stimulation, cognitivists argue that learners in fact have to take an active role in learning to construct their own knowledge (Kivinen and Ristelä, 2003).

2.4 Cognitivism: learning as cognitive change

Doubts about the experiments conducted by behaviourists and sustained criticism of behaviourism led to the emergence of cognitive theory. Influenced by the rationalists' concept of knowledge acquisition (Section 2.1), cognitivists disagree with behaviourists' rejection of the existence of mental process and argue that knowledge is acquired through the interaction between the existing structure in the brain and new experiences (Bower and Hilgard, 1981; Ertmer and Newby, 1993; Schunk, 2008; Schunk, 2014).

Cognitivists argue that learners do not just receive information passively through their sensory experiences; instead, they need to process and actively construct concepts and ideas after they have received external information (Mayes and de Freitas, 2007). Thus, learning occurs when the state of knowledge in our brain experiences some changes (Ertmer and Newby, 1993).

Cognitivism is in fact a very broad term that encompasses a great variety of theories, but these theories all agree that "learning is the result of our attempt to make sense of the world" (Woolfolk, 1987: p.234). Most constructivists also emphasise "the necessity for active participation by the learner" (Phillips, 1995: p. 11).

Among all the cognitivists, Piaget's theories have significantly influenced theories of experiential learning and theories on reflection, which will be discussed shortly in Section 2.6. Although Piaget's work focused on children and how children learn and develop intelligence, it has influenced adult education. Hence, it is necessary to briefly discuss Piaget's theory of learning. Piaget also made a distinction between development and learning. For him, development is "a spontaneous process tied to embryogenesis" while learning is "provoked by external situations." (Ripple and Rockcastle, 1964/1972: p.19) In his view, learning occurs through the constant interaction between the mind and the external environment (Piaget, 1953).

Through his observation of children, Piaget proposed a theory to explain how children gradually improve their ability to adapt to the environment and

how their cognitive development progresses (Schaffer, 2004a). Piaget maintained that “the dynamic and continuous *interaction* of child and environment” (ibid. p. 164, italic in the original) is vital for learning and for development of intelligence.

In Piaget’s view, through interaction with the external environment, the child’s intelligence will gradually develop through the processes of assimilation and accommodation (Piaget, 1953). Before explaining these two processes, it is necessary to first explain the concept of schema, which can be seen as “the mental representation of an associated set of perceptions, ideas, and/or actions” (Bhattacharya and Han, 2010: p. 36). In Piaget’s words, the “schema [...] is not limited to functioning under compulsion by a fixed excitant, external or internal, but functions [...] for itself.” (Piaget, 1953: p. 35).

According to Piaget, the process of assimilation is the mental process that a person goes through when s/he encounters and incorporates a new experience into an existing schema (Schaffer, 2004b). In comparison, when we process new information, we may need to adjust the existing schema to fit the new experience, so that the incoming new information changes the original way of thinking. This is what Piaget refers to as accommodation. The dual processes of assimilation and accommodation, according to Piaget (1953), help a child to develop its schemata. With assimilation and accommodation, a person is capable of “selecting, interpreting, transforming and recreating experience in order to fit it in with their existing mental structures” (Schaffer, 2004b: p. 165).

According to Piaget, the process of equilibration, i.e., the human’s need to reach balance, is the key to learning. When our existing schema allows us to solve a problem, the balance or the equilibrium is maintained and there is no need for assimilation or accommodation. However, when we cannot understand or resolve a situation using an existing schema, the equilibrium is lost and we seek to find the balance again through the processes of assimilation and accommodation. “The level of disequilibrium must be just right or optimal — too little and we aren’t interested in changing, too much and we may

be discouraged or anxious and not change” (Woolfolk, 1987). This view echoes Dewey’s theories on reflection (see Section 2.6 below).

2.5 Social cognitive theory: the influence of social environment

The previous sections discussed behaviourism and cognitivism and their explanations of how learning occurs. This section brings in a third perspective on how learning occurs. While behaviourism stresses the importance of external stimuli and cognitivism stresses an individual’s need to make sense of things around him/her, social cognitive theory argues that learning occurs when the brain processes information regarding behaviour and the environment (Schunk, 2008). The triadic interaction between a learner, a learner’s behaviour and the environment (Schunk, 2008: pp.79-80) becomes the focal point of social cognitive theory.

More importantly, social cognitive theory argues that people do not just learn by doing, they also learn by observing others:

By observing others, people acquire knowledge rules, skills, strategies, beliefs, and attitudes. Individuals also learn from models the usefulness and appropriateness of behaviors and the consequences of modeled behaviors [...] (Schunk, 2008: p.78)

In other words, according to social cognitive theory, a learner does not necessarily need to perform a task to learn how to do it (Schunk, 2008). Consequently, the role of teachers, tutors and more knowledgeable adults is very important in the learning process. Piaget’s theory of children’s learning, as discussed in Section 2.4, did not mention the potential influence of adults or someone who is more knowledgeable in a child’s life. The child, as described by Piaget, seems to be solitary and its cognitive capacity simply grows as s/he interacts with objects, not people. In comparison, Vygotsky (1978), one of the pioneers of social cognitive theory, stresses the importance of adult influence and guidance.

Vygotsky (1978) believes that children are also creatures in society and so their participation in the social process and the interactions between children

and others, particularly adults who have more knowledge, will influence children's cognitive development and, ideally, will help improve their cognitive development.

When we talk about adult influence and guidance, we will need to examine an important contribution made by Vygotsky—his concept of zone of proximal development (ZPD). As defined by Vygotsky (1978), ZPD is:

the distance between the actual development level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more able peers. (Vygotsky, 1978: p. 85)

Vygotsky argues that children can benefit from working with adults or someone who is more knowledgeable because, in doing so, they will be able to go beyond their own capacity. The concept of ZPD was later connected to the concept of 'scaffolding', a term first used by Wood, Bruner and Ross (1976) to refer to the support and assistance teachers and tutors provide to children or learners to fill the gap between what they can achieve and their potential development with guidance.

These two concepts are very important for the current study as they highlight the importance of guidance. Later, in Section 2.13, empirical studies on the potential influence of guidance for learners will be examined, but for now, theories on reflection and discussions in the literature regarding the functions of reflection will be examined.

2.6 Reflection: the key to learning from experience

Previous sections have discussed different views on "how learning occurs". The influence of the environment and external stimuli, the cognitive development of our brain and the influence of adults, teachers or peers with better ability all play their roles in learning. As will be shown in this section, some researchers argue that these factors are not comprehensive enough and one more factor should be taken into account. According to these researchers, "reflection" is the key to learning from experience.

The importance of reflection was first brought up by Dewey (1938). According to Dewey, experience is not the source of learning. Rather, one learns from an experience after reflecting on the experience. Dewey further stresses that experience alone does not necessarily equal learning, because some experiences could be damaging to learning and some experiences could lead to bad habits (ibid. p.14).

Dewey (1933) believes that in the process of learning, a person may develop ill-grounded or well-grounded beliefs. If a person simply accepts whatever facts or stories as s/he is told without raising doubts or questions, no reflection is involved and usually no learning will occur in the process. On the other hand, if the person feels doubts, hesitation or questions about the 'given' facts or stories, then, according to Dewey (1910), the person's mind will start working to find some type of evidence or justification so that s/he can reach a logical conclusion to believe or disbelieve the facts or stories.

Hence, Dewey (1910) believes that reflective thought is usually embarked upon when the person experiences hesitation and discomfort in a given situation (pp. 6-9). He believes that reflective thought is "*Active, persistent, and careful consideration of any belief or supposed form of knowledge in the light of the grounds that support it, and the further conclusions to which it tends*" (ibid. p.6, italic in the original).

Reflective thought is important because it is what separates a routine habit from an experience that would lead to learning. Reflection

emancipates us from merely impulsive and merely routine activity. Put in positive terms, thinking enables us to direct our activities with foresight and to plan according to ends-in-view, or purposes of which we are aware....By putting the consequences of different ways and lines of action before the mind, it enables us to know what we are about when we act. *It converts action that is merely appetitive, blind, and impulsive into intelligent action.* (Dewey, 1933: p. 17, original italics)

Reflection is a human being's way of thinking a problem over in order to find a solution to the problem and remove the discomfort. The process of reflection enables an individual to move "from one experience into the next with deeper understanding of its relationships with and connections to other experiences and ideas" (Rodgers, 2002: p. 845). This process involves a series of ideas and is guided by the person's need to remove the feeling of discomfort (Dewey, 1910: p.14). During the process of reflection, the individual constantly determines if an idea is a logical result of the previous idea and each idea is verified until the person reaches the conclusion to believe or disbelieve the given suggestion or observation (Dewey, 1910). It is important to note that, to determine whether something is the proper outcome and to determine whether to believe or disbelieve something, evidence is needed.

Boud, Keogh and Walker (1985c) argue that Dewey's work on reflection has "crystallized what many generations of teachers had known and practised intuitively, namely that there were two kinds of experiential process which led to learning" (p.11), which are "trial and error" and "reflection". Trial and error, the first kind of experiential learning, is basically learning from mistakes.

In the discussion of the behaviourist view of learning in Section 2.3, it was pointed out that learning often resulted from trial and error, as in Thorndike's (1911) experiment where the cat usually made several failed trials before it was able to succeed. Trials that result in success will help establish the association and trials that result in failure will be put aside. However, when a learner learns through the experience of trial and error, the value of this learning will be limited to the scope of the specific problem (Boud et al., 1985c; Roediger, 2013). In contrast, reflection will allow the person to engage in a mental activity to consider "relationships, and connections between the parts of an experience" (Boud et al., 1985c: p. 12). Boud et al. (1985c) argue that reflection can help learners to learn problem-solving skills and thus the learning that occurs after reflection is more effective than trial and error.

What should be made clear here is that the two types of experiential learning are applicable to different situations. Trial and error may be applicable in situations where there are simple solutions. Reflection, in contrast, is applicable in situations where learners may not be able to see clear solutions. They have to review the experience, go over the situation, and consider all the factors before they can find a tentative solution.

As shown in Figure 2.1, Dewey (1910) believes that reflection involves five steps. The five steps are presented in sequence, but, for Dewey, the order of the five steps is fluid rather than fixed.

(i) a felt difficulty; (ii) its location and definition; (iii) suggestion of possible solution; (iv) development by reasoning of the bearings of the suggestion; (v) further observation and experiment leading to its acceptance or rejection; that is, the conclusion of belief or disbelief. (Dewey, 1910: p. 72)

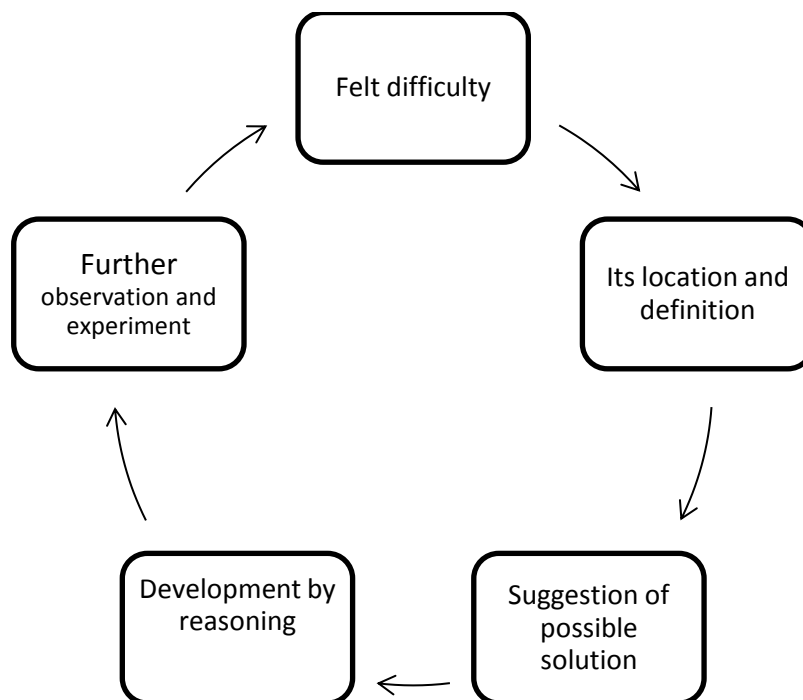


Figure 2.1 Dewey's steps of reflection

According to Dewey (1910), the first two steps are often combined. When an individual encounters a problem and feels the difficulty, his/her mind will start the process of trying to find the solution by defining the nature of the

problem, by trying to pinpoint the origin of the problem or by observation. The “felt difficulty” is a key to trigger the process of reflection (ibid.).

Dewey (1910) also argues that the “felt difficulty” can present itself as a kind of shock to the individual which is accompanied by “emotional disturbance” (p. 74) because the person has not expected to encounter the problem. In such a case, careful observation of the situation, according to Dewey, can help the person to have a better understanding of the nature of the problem and he maintains that “the existence or non-existence of this step makes the difference between reflection proper, or safeguarded critical inference and uncontrolled thinking” (p. 74).

Dewey (1910) stresses that in order for reflection to take place properly, it is important for the individual to go through this process of careful and deliberate observation without making any premature judgement or attempting to try out any solution. Without deliberate observation, any tentative solution will tend to be random and may not be very effective (ibid.). He also explains that “observation alone is not enough” (Dewey, 1938: p. 79). Through deliberate observation, one needs to seek to understand the significance of the event (ibid.). In practice, deliberate observation requires learners to describe what they have observed and Dewey’s point is that description will prevent a learner from jumping to conclusions (Rodgers, 2010).

After deliberate observation, our mind will start “suggesting possible solutions” or making inferences by thinking beyond what is available. According to Dewey (1910), such inference is made by being “speculative” and “adventurous”. However, because it is somehow speculative, the conclusion reached cannot be accepted as the final solution, as more evidence is needed to make a final judgement (ibid. p. 75).

The fourth step in Dewey’s (1910) model is “reasoning”, which means the mind considers the implications of the problem and the tentative solution(s) (ibid.). This process should not start too early, i.e. before careful observation, because accepting a tentative solution too early in the process will prevent the

person from looking deeper into the nature of the problem or the consequences of the adopted solution. Reasoning, according to Dewey, helps the person carefully elaborate the tentative suggestions in the third step and understand possible consequences (ibid.).

The final step, according to Dewey (1910), is an experiment that tries out and somehow verifies the solution chosen after careful observation and reasoning. “If it is found that the experimental results agree with the theoretical, or rationally deduced, results”, then the person will very likely believe and accept that the conclusion is correct (ibid. p. 77). The purpose of reflection and the aim of education, as put forth by Dewey, are to ensure that the individual can make a proper judgement to take each step to a proper degree (ibid.).

The five reflective steps proposed by Dewey form the basis for practitioners or learners to carry out “systematic enquiry into one’s practice” (Furlong and Maynard, 1995: p. 188). While such systematic enquiry is vital for one to learn from experience, one cannot ignore the possibility that

students, in the earliest stages of their professional development, have neither the time nor the breadth of experience to do more than experiment with such an approach. (Furlong and Maynard, 1995: p. 188)

In other words, Dewey’s reflective steps can be seen as an ideal. While learners are encouraged to go through the steps to become reflective and learn from their experience, the reality is that students may not go through all the steps for various reasons, as we will see later in Section 2.14 when empirical studies on reflective practice are discussed.

Dewey’s work has inspired other writers in developing their models of reflective thinking, as will be described shortly. However, Dewey’s notion of reflection is not without problem. For instance, Boud et al. (1985c) have criticised Dewey for downplaying the influence of positive feelings in the process of learning. They argue that a learner’s feeling about a particular

experience, both positive and negative, can influence their reflective thinking and learning. (See Section 2.8 for more discussion).

Another important critique on Dewey's reflective steps is the fact the reflective steps focus more on thought than on action. Without connecting actions with reflective thinking, Dewey's reflective steps may "appear more as a cerebral rather than a practical [...] activity." (Noffke and Brennan, 2005: p.67) because Dewey has not discussed the importance of "action taken as the result of reflective thinking" (Sellars, 2014: p. 4).

The next section will discuss the theory developed by Schön who builds on Dewey's theory of reflective thought and seeks to connect reflection with action.

2.7 The reflective practitioner

The concept of "reflective practitioner" is central to the understanding of reflective practice. Proposed by Schön (1983; 1987) from his earlier work on action research, the concept of "reflective practitioner" has been gaining grounds in the past three decades, partly because Schön's approach "moved the ideas of critical learning beyond the realms of education and developed a model of reflection that was applicable to any form of professional practice" (Redmond, 2004: p. 22.).

Originally, Schön took an interest in theories of reflection as an attempt to challenge the dominance of technical rationality, an epistemology which regards practitioners as "instrumental problem solvers who select technical means best suited to particular purposes" (Schon, 1987: p.3) and who merely apply theories they have learnt in the past. In discussing the limitations of "technical rationality", Schön proposed the concepts of "knowing-in-action", "reflection-in-action" and "reflection-on-action", which will be explained in turn.

According to Schön, practitioners who excel in their professions do so not because they know how to apply appropriate theories or research results

when they encounter uncertainty or difficulty, which Schön refers to as the “indeterminate zone of practice” (Schön, 1987). Instead, they excel in their professions because they have accumulated tacit knowledge, or what Schön terms “knowing-in-action”:

the sorts of know-how we reveal in our intelligent action--publicly observable, physical performances like riding a bicycle and private operations like instance analysis of a balance sheet. In both cases, the knowing is in the action. (Schön, 1987: p. 25)

For Schön, it is very difficult, though not impossible, for the person performing the tasks to explain the “knowing-in-action” or “make a description of the tacit knowing implicit in them”. Hence, it is also difficult for competent practitioners to teach students what they know when they execute a task. In order to help students acquire “knowing-in-action”, Schön suggests teachers and trainers should provide “reflective practicum” which is a practicum that aims “at helping students acquire the kinds of artistry essential to competence in the indeterminate zones of practice” (Schon, 1987: p.18).

According to Schön (1983), “indeterminate zones of practice” include “problematic situations characterized by uncertainty, disorder, and indeterminacy’ (p. 16). The explanation is very similar to Dewey’s argument that feeling of discomfort or confusion can trigger reflection. Like Dewey, Schön (1983; 1987) suggests that a person often starts to reflect when a routine activity encounters an unexpected outcome.

Schön’s suggestion of “reflective practicum” focuses on learning by doing, but, as with Vygotsky’s concept of ZPD (see Section 2.5), Schön also hopes that, through reflective practicum and with the teacher’s help, students can close the gap between their present level and the level to be achieved. In other words, Schön also highlights the important role of teachers and tutors in the learning process.

Schön (1983; 1987) expands Dewey's definition of reflection and proposes the concepts of reflection-in-action and reflection-on-action. Instead of what Dewey refers to as "perplexity, hesitation, doubt" (Dewey, 1910: p.10), Schön suggests that "surprise result" is the trigger for reflection. When reflection is triggered, according to Schön, a learner might reflect after the event to try and make sense of the situation. This is what Schön refers to as "reflection-on-action" (Schon, 1983; Atkins and Murphy, 1994).

On the other hand, experienced practitioners also carry out "reflection-in-action", which occurs while the person is still performing the task. "Thinking on your feet" is another expression that is often used in the literature to explain what Schön means by "reflection-in-action" (Ghaye, 2011). The practitioner/learner sees a problem while s/he is performing the task and so s/he considers different options and possibilities to try and change the situation. The decision made at this stage can still affect the result. As Schön puts it:

In an action-present- a period of time, variable with the context, during which we can still make a difference to the situation at hand- our thinking serves to reshape what we are doing while we are doing it. I shall say, in cases like this, that we reflect-in-action. (Schön 1987, p. 26)

Although Schön's notions of reflection-in-action and reflection-on-action have become very popular with researchers in the past decades (Zeichner, 1987; Powell, 1989; Richardson, 1990; Richardson and Maltby, 1995; McLaughlin, 1999; Kiraly, 2000; Smith, 2001; Ruth-Sahd, 2003; Erlandson and Beach, 2008), many researchers have critiqued the shortcomings of Schön's theory. Eraut (1995), for example, argues that Schön's emphasis on reflection-in-action excludes the necessity for Dewey's deliberate observation (p.17). More importantly, despite the detailed description of various cases identifying what occurs in the reflective practicum and the strategies adopted by the teacher and the learner, Schön fails to describe how and when learners' reflection-on-action changes to reflection-in-action or knowing-in-action (Redmond, 2004). He also does not show the steps involved in the reflection process. Some have argued that Schön's world was

an ideal world where relationships between students and teachers are calm and orderly, whereas this is not usually the situation in reality (Bulpitt and Martin, 2005).

2.8 Reflection in experiential learning

As mentioned in Section 2.6, Dewey's theory of reflective thought has inspired other authors to develop their models of reflection. The model to be introduced in this section is a product of such influence.

Although Dewey (1938) discusses the importance of experience in learning, Kolb (1984) was the first one to use the term "experiential learning". According to Kolb's experiential learning theory, learning is "the process whereby knowledge is created through the transformation of experience. Knowledge results from the combination of grasping and transforming experience" (Kolb, 1984: p. 41). According to Kolb (1984), his work on experiential learning derives from the work of Dewey, Lewin and Piaget (Kolb, 1984: p. 20) and for him, experiential learning theory is not "a third alternative to behavioral and cognitive learning theories, but rather [...] a holistic integrative perspective on learning that combines experience, perception, cognition, and behavior" (ibid. pp. 20-21). Kolb (1984) thus integrates various theories on experience and learning to propose a cycle of experiential learning in which experience and reflection continue to feed back to each other in the learning process (Boud et al., 1985c). This model helps to illustrate the role of reflective activity in the context of learning (Moon, 1999: p. 24).

Before explaining the model in detail, what should be made clear here is that the model as it is presented and cited in much literature on reflection actually derives from Kolb's interpretation of Lewin's mode of action research (Kolb, 1984). Moreover, although Kolb states that his work derives from Dewey's model which, in his opinion, is very similar to Lewin's model "in the emphasis on learning as a dialectic process integrating experience and concepts, observations, and action" (p.22), Kolb does not discuss Dewey's concept of reflective thought in his experiential learning theory. Rather, his emphasis is

placed on Dewey's concepts of "postponement of immediate action" and "observation and judgment" (Kolb, 1984: p. 22).

The concepts of "postponement of immediate action" and "observation and judgment" are brought up by Dewey in a discussion of the importance of thinking in "*Experience and Education*" (1938). According to Dewey:

The old phrase "Stop and think" is sound psychology. For thinking is stoppage of the immediate manifestation of impulse until that impulse has been brought into connection with other possible tendencies to action so that a more comprehensive and coherent plan of activity is formed. (Dewey, 1938: p. 64)

Dewey also stresses that "the crucial educational problem is that of procuring the postponement of immediate action upon desire until observation and judgment have intervened [...]" (ibid. p. 69)

These two concepts were taken up by Kolb (1984) when he designed the experiential learning cycle (shown in Figure 2.3 below), which is composed of four parts. In the cycle, a learner's "reflective observation" helps him process and think about the "concrete experience" and in turn transforms the experience into "abstract conceptualization" which can then be tested during "active experimentation". During the process of "active experimentation", the learner gains another "concrete experience" and a new cycle begins (Kolb, 1984). According to Kolb (1984), the four parts of the experiential learning cycle are four different abilities:

Learners, if they are to be effective, need four different kinds of abilities- concrete experience abilities (CE), reflective observation abilities (RO), abstract conceptualizing abilities (AC) and active experimentation abilities (AE). That is they must be able to involve themselves fully, openly and without bias in new experiences (CE). They must be able to reflect on and observe their experiences from many perspectives (RO). They must be able to create concepts that integrate their observations into logically sound theories (AC) and they must be able to use these theories to make decisions and solve problems (AE). (Kolb, 1984: p. 30)

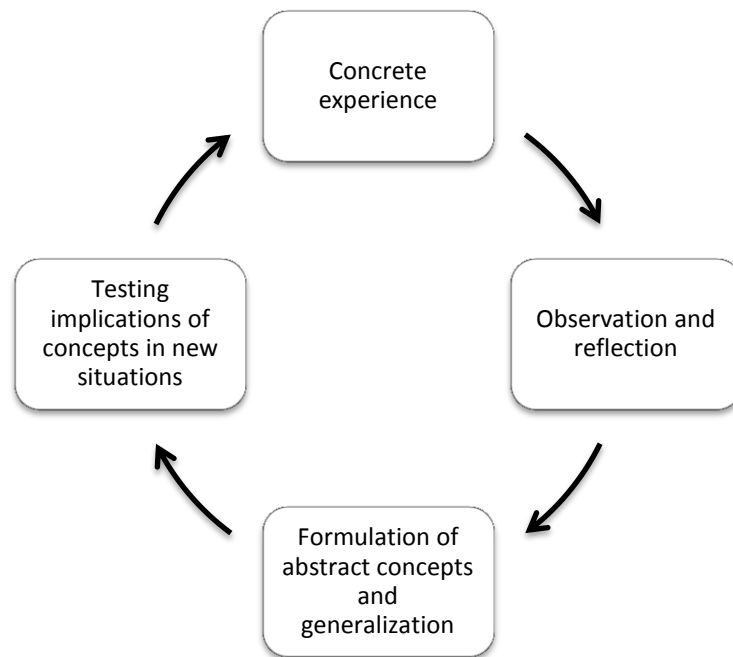


Figure 2.3 Kolb's experiential learning cycle

It is important to note that Kolb believes that a learner's role can shift "from actor to observer" in the cycle (Moon, 1999: p. 24). Hence, the learner can assume the role of an observer to examine the experience objectively and then becomes the actor again, to use the abstract concept generated from the experience.

Although Kolb's model has been applied in various studies, he does not explain in detail what exactly is involved when a learner is engaged in the process of translating the concrete experience into abstract conceptualisation. Hence, as stated by Boud et al. (1985), the model is useful for teachers to plan learning activities, but it cannot really help learners or researchers understand what elements are involved in the process of reflection (p. 13):

Unfortunately Kolb does not discuss the nature of this stage of observation and reflection in much detail. It can appear to refer to the act of associating an incoming idea with one already in the mind of the observer. His scheme has been useful in assisting us in planning learning activities and in helping us check simply that learners can be effectively engaged by the tasks we have set. It does not help, however, to uncover the elements of reflection itself. (Boud et al., 1985c: p. 13)

Miettinen (2000) also argues that Kolb's (1984) explanation of the four stages in his model could be misleading to learners, as they might think that reflection, like observation, is just one of the four abilities and they remain separate, instead of interconnected, activities. Despite these critiques, Kolb's model of experiential learning has been adopted in many educational institutions to encourage teachers and learners to engage in reflective activities (cf. Ash and Clayton, 2004; Abbott and Watson, 2007; Gibbs and Priest, 2010).

Building on Kolb's model of experiential learning and incorporating theories by Dewey (Dewey, 1910; 1933) and Mezirow (1981) (to be discussed in Section 2.9), Boud et al. (1985c) explain the process of reflection more elaborately. They propose that reflection includes at least three important elements: returning to experience, attending to feelings and re-evaluating experience (Boud et al., 1985b). According to Boud et al. (1985):

Returning to experience is simply the recollection of the salient events, the replaying of the initial experience in the mind of the learner or the recounting to others of the features of the experience. (Boud et al., 1985b: p. 26, original italics)

One thing that makes Boud et al.'s (1985) model of reflection distinctive is their argument that reflection does not necessary come from "felt difficulty" or "surprise", as suggested by Dewey (1910) and Schön (1983; 1987). They argue that a positive experience or a successful experience could also inspire learners to re-examine their thoughts about similar tasks (Boud et al., 1985c: pp. 19-20). For this reason, they maintain that "attending to feelings" is an important step towards reflection. Positive feelings from the experience are beneficial to the learner as they would be more willing to engage in reflective activities whereas negative feelings may become a hindrance, because learners might not want to return to the experience again.

After the first two stages, learners can then move on to the third stage: "re-evaluating experience". The purpose of "re-evaluating experience" is for learners to think about what they have learned from the experience; how to

integrate the new knowledge into their existing knowledge and how to apply this knowledge to other experiences:

Re-evaluation involves re-examining experience in the light of the learner's intent, associating new knowledge with that which is already possessed, and integrating this new knowledge into the learner's conceptual framework. It leads to an appropriation of this knowledge into the learner's repertoire of behaviour. This can involve a rehearsal in which the new learning is applied mentally to test its authenticity and the planning of subsequent activity in which this learning is applied in one's life. (Boud et al., 1985b: p. 27)

The model proposed by Boud et al. (1985) aims to promote reflection in learning, but Boud (1999) also stresses that the model should not be used as if it is a recipe to be followed. Reflection requires learners to engage deeply with their own experience. The theory to be discussed in the next section offers another perspective on how reflection can help learners.

2.9 Levels of reflection

The theories and models discussed so far concentrate on the interaction and connection between experience and learning and the role that reflection plays in strengthening the link. The consensus is that reflection is an essential process in experiential learning. Mezirow (1981; 1990b; 1990a) believes that, in addition to the function of reflection, what educators should pay attention to is actually the different levels of reflection.

For Mezirow (1981; 1990b; 1991), the type of reflection that aims to help learners perform a task better or improve problem-solving skills is not the same as the type of reflection that enables learners to evaluate "how or why we have perceived, thought, felt, or acted" (Mezirow, 1990a: p. 6). Influenced by the ideas proposed by the philosopher, Jürgen Habermas, Mezirow believes that there are different levels of reflection because there are different kinds of knowledge. The type of reflection that has been discussed extensively in previous sections is all related to what Mezirow (1990b) terms "instrumental learning", when learners are focusing on "learning how to *do* things" (Mezirow, 1990a: p. 8, *italic in the original*). Learners can have practical and hands-on

knowledge, so that they are capable of carrying out a job or a given task. Hence, according to Mezirow, it is possible to “measure changes resulting from our learning to solve problems in terms of productivity, performance, or behaviour” (ibid. p. 8), firstly, by establishing a consensus of how to analyse the problem-solving process and secondly, using empirical data to check if the applied problem-solving strategies have in fact been effective (ibid.).

When learners reflect during instrumental learning, Mezirow (1990a) argues, they are reviewing the assumptions guiding the process or procedures when they perform a task or solve a problem and they are also re-examining the strategies they have used during the process (ibid. p. 7). For instance, what is the nature of this problem? What is the cause of this problem? What went wrong during the process? What can be done to fix it? In other words, we are thinking about our thinking process. According to Mezirow (1990), this type of reflection is similar to metacognition (Flavell, 1979), a term that is used by Flavell to refer to an individual’s “think about thinking” or “one’s knowledge concerning one’s own cognitive processes” (Flavell, 1976: p. 232, quoted in Ku and Ho, 2010)

According to the hierarchy proposed by Mezirow (1990b), the highest level of reflection is “critical reflection” (Mezirow, 1990a), i.e. “reflection that challeng[es] the validity of *presuppositions* in prior learning” (Mezirow, 1991: p. 12, italic added). Philosophically speaking, educators should encourage students to engage in critical reflection. However, as argued by Ghaye (2011), if we accept the idea that reflection has a hierarchy, then we have to be aware of the assumptions implied by such a hierarchy:

The first is that different types or kinds of reflection can indeed be identified and described; the second is that one kind of reflection is more complex than the preceding one; the third is that this complexity is empirically verifiable; the fourth is that the benefits from reflection accrue by climbing the ‘ladder’ or ascending the hierarchy; and the fifth is that ‘mastery’ at one level is a prerequisite for moving onto the next level. The final assumption is that learning develops by some process of inclusion, in that the later levels encapsulate all that which has gone before. (Ghaye, 2011: p. 15)

Empirically, it is actually very difficult to identify and describe Mezirow's levels of reflection, although researchers have attempted to evaluate students' level of reflection by examining students' reflective journals, as we will see later in Section 2.10. However, Mezirow's argument that researchers can measure changes resulting from learning by focusing on learners' problem-solving process and strategies is a vital argument for this study.

For this study, the researcher aims to investigate if there is evidence in the reflective journals that can indicate student reflection; hence, the goal is not to determine students' level of reflection. However, following Mezirow's argument, this study can focus on students' problem-solving processes and strategies to determine if there is evidence of reflection. Mezirow's (1991) model also helps to inform the researcher of the possibility that different levels of reflection might appear in the reflective journals.

2.10 Gibbs' model of reflection

While some educators have tried to determine students' level of reflection or have tried to encourage students to move up the ladder of reflection, others have advocated the idea that reflection is a cyclical process (Ghaye, 2011). The model examined in this section aims to explain the cyclical nature of experiential learning and reflection.

Building on Kolb's model of experiential learning and incorporating the concepts promoted by Boud et al. (1985), Gibbs (1988) has developed a reflective cycle model (Figure 2.4) for pedagogical purposes. The model is very similar to Dewey's (1910) reflective steps, but, as stated by Gibbs (1988/2013), the "guide is written to be used as a resource rather than as a book to be read" (p.12). In other words, compared with Dewey's more abstract and thought-provoking philosophical discussion of the reflective process, Gibbs' (1988/2013) model is to be used as a practical guide for teachers and learners to promote experiential learning and reflection.

Gibbs (1988) argues that learning involves “active exploration of experience” and that learning can be “greatly enhanced by reflection” (Gibbs, 1988: p. 14). He also stresses that experiential learning includes a “cyclical sequence of learning activities” (p.14). The “cyclical sequence of learning activities” is illustrated in his reflective cycle model, as shown in Figure 2.4.

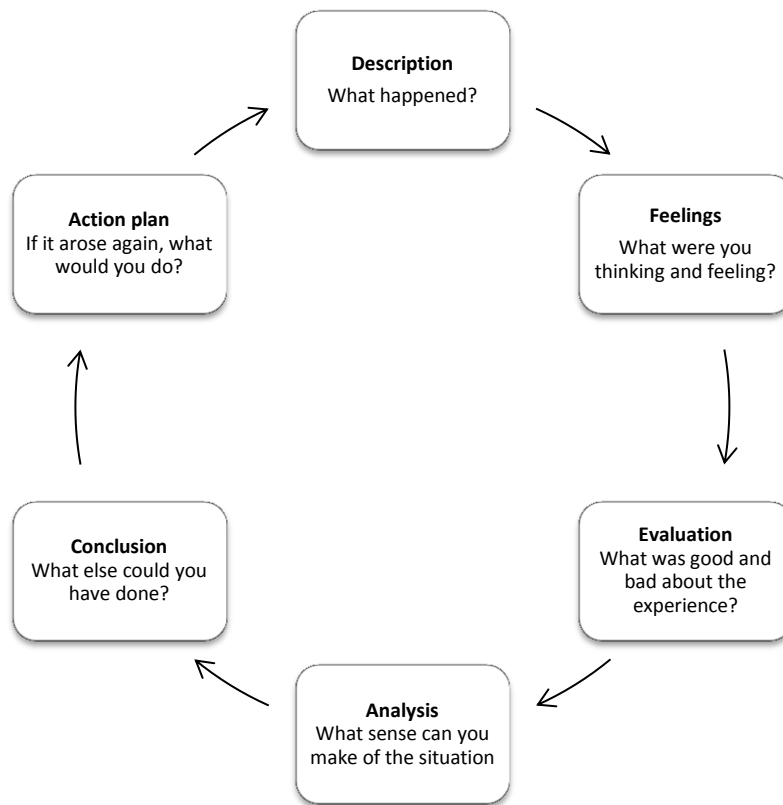


Figure 2.4 Gibbs’ model for reflection

As shown in Figure 2.4, Gibbs’ (1988/2013) reflective cycle consists of six stages: (1) description of what happened; (2) thinking about one’s feelings; (3) evaluation of the experience; (4) analysis to make sense of the situation; (5) conclusion with potential alternatives; and (6) action plan for similar situations that may happen in the future.

Similarly to the models of Dewey and Kolb, Gibbs’ cyclical model starts with the experience and the first step is for learners to describe what happened. The basic description is provided as a way to set the stage or provide the context for the learners when they refer back to their experiences. Compared with Kolb’s model, Gibbs’ reflective cycle is more descriptive, as

the cycle has included “learner’s relevant reaction to each stage” (Park and Son, 2011: p. 171). In fact, Gibbs’ reflective cycle was originally developed for groups to work together; hence, he discusses extensively how group members can work together as a team and the steps to be followed during the “debriefing” time after each task. These suggestions for the debriefing then become the basis for the reflective cycle that is widely used as a model for learners, albeit not necessarily for groups.

Compared with Dewey (2010), Schön (1983) and Boud et al. (1985), Gibb’s reflective cycle takes a different approach to the trigger of reflection. Gibbs (1988) argues that experiential learning is for learners to use an experience to “test out ideas and assumptions” (p.19) and he suggests that learners take initiative and “reflect on their experience in a critical way rather than take experience for granted and assume that the experience on its own is sufficient” (ibid.). Compared with the theories of reflection discussed in previous sections, Gibbs does not talk about an event or an experience triggering reflection, which is more passive, but rather stresses the importance of being active in learning and in reflection.

As learners describe the situation or the learning experience, their accounts may be descriptive and narrative during this stage, but the most important thing to pay attention to, according to Gibbs (1988), is not to “make judgements yet or try to draw conclusions; simply describe” (p. 49). This concept of withholding judgement follows the argument of Dewey’s “postponement of immediate action” and “deliberate observation” and Kolb’s “observation” (See Section 2.8).

Starting with the description of the experience, the next step of reflection, according to Gibbs (1988/2013), involves identification and analysis of feelings. Gibbs stresses that the essence of experiential learning is that learners can generate concepts after they analyse their feelings and thoughts through reflection.

While Dewey (1910) assumes that such feeling is always negative, involving confusion and discomfort, Boud et al. (1985a) argue that reflection can also be embarked upon when the person has a positive feeling, as discussed in Section 2.8. Gibbs acknowledges that learners may have “strong feelings” and that it is important for learners to acknowledge and analyse their feeling, so these feelings can be dealt with properly. Echoing the view of Boud et al. (1985b) who stress that students’ feelings about a particular experience will have an impact on their reflective process, Gibbs states that:

if the experience has been especially powerful then discussion may never get further than description of what happened or of the feelings associated with the experience (Gibbs, 1988: p. 49)

Gibbs has divided “reflective observation” of Kolb’s model of experiential learning (Section 2.8) into feelings and evaluation, so after a learner acknowledges and analyses his/her feelings, the next step, according to Gibbs’ suggestion, is to move on to “evaluation”. Learners are suggested to evaluate in terms of “What was good or bad about the experience? Make value judgements” (Gibbs, 1988: p. 49).

Gibbs has divided Kolb’s “abstract conceptualization” into “analysis” and “conclusion”. After evaluating the experience, learners can then move on to explain to themselves the source of the problem or success through the next stage, which is “analysis”. As shown in Figure 2.4, the guiding question stated in Gibbs’ reflective cycle is “What sense can you make of the situation?” For learners to really consider this question, they need to try to locate the source of the problem and/or define the problem. Gibbs (1988/2013) has also provided a series of questions to help learners through the analysis process, including: “Why did that happen?”, “How can I make sense of that?”, “How can that be explained?” (p.55)

During the analysis stage, the learner’ understanding of the source and definition of the problem or situation are all tentative and inconclusive. However, through analysis, according to Gibbs (1988/2013), learners can learn to draw conclusions from the experience. Gibbs argues that there are two

types of conclusions: the first is a conclusion specific to the experience and situation and the second one is a general conclusion that learners can draw after accumulating multiple experiences and completing several analyses (ibid.).

For Gibbs (1988/2013), Kolb's experiential learning cycle can be applied to action research and can guide research activities. Following this idea, Gibbs adds the last stage of the reflective cycle to connect reflection with action and asks learners to draft an action plan, which is "simply a written list of things to do". (p.30) The objective of having an action plan is for learners to be able to respond to the same situation with a better solution. However, Gibbs (1988) also reminds learners that:

[...] experiential learning can be very messy. If experiences are not to be entirely predictable then outcomes are going to be surprising and it is important to be ready to respond in a flexible way to whatever emerges. The most important learning resource you have to work with is not your own expertise or your plans You have to be prepared to abandon your plans if more promising opportunities arise. (Gibbs, 1988: pp. 117-118)

2.11 Defining reflection for the current study

After examining various theories and models on reflection, the researcher will now attempt to define reflection for the current study by drawing on the elements of the main consensus. Despite the fact that different schools of thought (Dewey, 1910; Kolb, 1984; Boud et al., 1985c; Gibbs, 1988; Mezirow, 1990a) have adopted different definitions of reflection, it is generally agreed that reflection is an important key in experiential learning and that through reflection, learners can gain new insights into the experience.

Moreover, researchers and theorists have different views about what triggers reflection. Some (Dewey, 1910; Schon, 1983; 1987) argue that the process of reflection is usually triggered when an individual encounters a surprise, a concrete experience, or an unexpected situation that causes some discomfort or confusion (Dewey, 1910). Others (Boud et al., 1985b) argue that a positive or satisfactory experience may also inspire learners to

re-examine and reflect on the experience. Gibbs (1988) goes one step further and suggests that reflection can be initiated by the learner, not necessarily triggered by a particular experience.

Although researchers differ in their views on what elements are involved in the process of reflection and some (Mezirow, 1981; 1990b; 1990a; 1991) have argued that there are different levels of reflection, it is generally agreed that reflection is a cyclical process that helps learner solve problems. Based on these discussions, for the present study, reflection is defined as a cyclical thought process that learners go through to solve problems and to gain new insights from an experience.

2.12 The theoretical framework for the current study

Having defined reflection for the current study, the researcher will now attempt to construct a theoretical framework by drawing on concepts and theories discussed in previous sections to help to answer the research questions stated in Section 1.2. The aim of the study is to investigate how writing reflective journals may facilitate student interpreters' learning process as they learn to assess their own performance and reflect on the learning experience. The theoretical framework constructed will need to assist the researcher in identifying evidence or signs in students' reflective journals that can be used to indicate students' reflective thinking.

What can be considered signs or evidence of reflection? As discussed in previous sections, reflection is a cyclical process that has different stages. As pointed out by Dewey (1910) and Kolb (1984), when a learner stops to think about an experience, s/he is beginning to reflect. However, researchers have also stressed that the initial stages of reflection are not enough. Depending on the school of thought, the initial stages may include describing and/or thinking about the experience, deliberate observation of the situation, and analysis of feelings. For reflection to become the key to experiential learning, a learner will also need to go through the later stages, which include contemplating on the experience, attempts to find alternatives and solutions and putting these new

insights into actions. These elements are thus the vital evidence that can be used to indicate if a learner is being reflective.

Considering these requirements, it is proposed that Gibbs' (1988/2013) reflective cycle will be applied as the theoretical framework to help the researcher identify these signs and evidence of reflection in students' reflective journals. The reasons for adopting Gibbs' model will be stated below.

As explained in Section 1.1, the present study focuses on the attempt of interpreter trainers to make students write reflective journals and reflect on their learning experience. This implies that students need to actively explore their learning experience and reflect. In this case, the students' reflection is not triggered. Rather, they are asked to actively engage in reflective thinking. Compared with Dewey's reflective steps or Kolb's cycle of experiential learning, which focus on more passive or responsive reflection, Gibbs' reflective cycle, designed to encourage learners to actively engage in reflective thinking, can better account for students' reflective activities.

Gibbs' reflective cycle is built upon Kolb's cycle of experiential learning (whose theory is built, in turn, on Dewey's concepts) together with the model of reflection from Boud et al. (1985a) and incorporates ideas and concepts from these theorists and researchers. For instance, the reflective cycle stresses the importance for learners to acknowledge their feelings. At the same time, the elaboration of learners' relevant reactions in the reflective cycle enables the researcher to operationalise the concepts and apply them to the context of current study with interpreting students as the learners.

As mentioned in Section 1.1, one of the main reasons that interpreter trainers ask students to write reflective journals is for them to learn from the experience and seek for improvement. Among the theories and models of reflection discussed so far, Gibbs' model is the only that connects action with reflection and specifically asks learners to think about objectives and things to do. This connection to action can assist the researcher to examine students' reflective journals and look for a student's "action plan". Although one

cannot deny the possibility that action plans or objectives stated in students' reflective journals may remain on paper only and may not be translated into real actions, the presence of action plans or objectives can still be considered signs that students have moved towards the latter stages of the reflective cycle.

Finally, Gibbs' (1988/2013) reflective cycle is presented as a cycle, but he acknowledges the fact when learners reflect on an experience, the process can be "messy" (p. 117). Learners may become stuck at describing the experience or analysing their feelings and fail to move on to the next stage, but they can always come back to think about the experience again. In other words, Gibbs encourages, but does not expect, learners to go through all the stages of the reflective cycle. In using Gibbs' reflective cycle as the theoretical framework, the researcher also understands that students in the current study may not complete all the stages. What is important for the current study is to identify if there are signs that students have attempted to move on to the later stages of the reflective cycle.

Adopting Gibbs' reflective cycle as the theoretical framework can assist the current study to answer the first research question, but it is not enough for the researcher to answer the second and the third research questions (Section 1.3). In the following section and in Chapter 3, the researcher will review literature on scaffolding and on interpreter assessment and self-assessment. On the basis of these discussions, the modified theoretical framework to be used for data analysis in Chapter 5 will be presented.

Having defined reflection for purpose of the current study and identified the theoretical framework, the following sections will discuss the importance of scaffolding or guidance for reflection and examine empirical studies on the use of reflective journals.

2.13 The importance of scaffolding

The concept of "scaffolding" has been explained in Section 2.5 in the context of Vygotsky's concept of ZPD. Today, the term "scaffolding" is widely used in

the literature of education to refer to various types of support provided to learners (McLoughlin, 2004).

As Scott (2013) points out,

The conventional notion of scaffolding has a number of characteristics: it is a temporary support; it is offered to the learner in relation to specific tasks that they are asked to perform; the learner is unlikely to complete the task without it... and the scaffold is provided to the learner by the teacher in their capacity as 'expert' in relation to the satisfactory completion of the task. (Scott, 2013: p. xxvi)

The reason that the concept of scaffolding is brought into this discussion is that researchers studying reflective practice have been debating about the possibility of guided reflection (see for instance Ash and Clayton, 2004; Nolan et al., 2005; Husu et al., 2008; Moss et al., 2008; Duffy, 2009) or scaffolding for reflection and the debate is central to the third research question of the current study. In his study on reflection in nursing practice, Johns (1994) argues that reflection is a “profoundly difficult thing to do without expert guidance and support” (p. 110). Welch (1999) also claims that students need help when they learn to make the connection between their experience and learning.

Welch's (1999) claim has been verified in empirical studies on students' reflective journals (Dyment and O'Connell, 2010). Researchers discovered that students often express their feelings of frustration of not knowing “specifically how to use the journals (when to write, what to write, how much to write, etc.)” (Blaise et al., 2004: p. 7). In response to the need for guidance, educators have tried to provide guidelines in the form of guiding questions or prompts that aim to guide learners through the reflective process (Ash and Clayton, 2004; Srimavin and Darasawang, 2004; Arumí and Esteve, 2006; Halim et al., 2011; Ryan, 2012). For instance, in the project conducted by Arumí and Esteve to help student interpreters reflect on their learning of consecutive interpreting, the researchers provided students with what they termed a “metacognitive guide” and students were asked to reflect on questions like “Have you had comprehension problems?”, “Or do you have vocabulary

problems?” and to think about how these problems are shown in their performance.

In a similar fashion, the guidelines used in the current study were provided to student interpreters in response to their feeling of uncertainty about what to write in their reflective journals. The course leader thus provided students with a variety of scaffolding tools which will be examined in Chapter 4.

2.14 Empirical studies on reflective journals

Having discussed the theoretical and conceptual aspects of reflection, the researcher will now move to empirical aspects of reflection and explore how researchers and trainers from other disciplines have used reflective journals to encourage reflective thinking. The researcher will also review the attempts of translator and interpreter trainers to encourage students to engage in reflective thinking, and draw lessons from the literature.

In recent years, researchers and trainers from various disciplines, such as healthcare (e.g., Mann et al., 2009; Prinsloo et al., 2011), nursing (e.g., Atkins and Murphy, 1993; Hargreaves, 2004; Chirema, 2007; Duffy, 2007; Epp, 2008) and teacher training (e.g., Larrivee, 2008; Minott, 2008; Moss et al., 2008; Burton et al., 2009; Otienoh, 2009) have used different tools to encourage students to engage in reflective thinking or reflective activities, including portfolios, logs, logbooks, peer discussion, group discussion, reflective journals and reflective essays. Some of these terms have been used interchangeably to mean the same diary-form records of learning, with slight variances. Portfolio usually refers to a collection of students' (selected) works for a course, such as written assignments or art works. When logbooks and reflective journal are discussed in the literature, it is usually considered to be a learning diary that students write on a regular basis. Reflective essays, in comparison, are essays submitted by students at the end of a program or a course to reflect on what they have learnt from the course or program.

Moon (1999) claims that a reflective journal is “essentially a vehicle for reflection” (p.4). It gives learners the freedom to record their experiences and make comments on these in their journals (Spalding and Wilson, 2002). Through these records and through the process of writing, learners not only record their experiences, they also explore their feelings and reflect on what they have learnt from the experience (Moon, 1999; Boud, 2001; Jarvis, 2001; Blaise et al., 2004). Perhaps for these reasons, among all the available tools, researchers and trainers seem to prefer to ask students to keep reflective journals for reflection (cf. Wedman and Martin, 1986; Morrison, 1996; Woodfield and Lazarus, 1998; Bain et al., 1999; Boud, 2001; Jarvis, 2001; Thorpe, 2004; Hubbs and Brand, 2005; Cui, 2006; Ghaye and Lillyman, 2006; Lew and Schmidt, 2007)

It has been argued that writing a journal can allow students to gain a better understanding of their own learning, their self-development and the knowledge they have acquired during the process (Jarvis, 2001). As it is in a written form, the journal gives the learner an opportunity to go back and review what they have written in the past few weeks or months and help them see their progress. Being able to monitor their own progress and problems gives students a sense of empowerment and gives them more control over their own learning (ibid.). Even when they become professionals, if they continue to write reflective journals, they can continue to review their experience in real practice and perhaps find a better approach next time they encounter similar issues (Moon, 1999: p. 191), thus becoming “reflective practitioners” (Schon, 1983).

Finally, as discussed in Section 2.6, one of the important aspects of reflection is learning to improve problem-solving skills. Through writing and reviewing their reflective journals, learners might be able to see what they might have neglected in the past. Hence, Moon (1999) also lists “enhancing problem-solving skills” (p. 190) as one of the purposes of journal writing.

In summary, researchers argue that writing reflective journals is beneficial for the learners, as the act of writing reflective journals can help them

to engage in reflective activities and learn from their experiences. However, educators have also encountered a range of problems and difficulties when they ask students to write reflective journals. While advocates for the use of reflective journals claim that they can help students learn better; empirical studies have shown mixed and inconclusive results (cf. Ho and Richards, 1993; Dymont and O'Connell, 2010; Dymont and O'Connell, 2011). For instance, studies have shown that learners' reflective journals tend to be descriptive and leaning towards recount of events or activities they have done instead of the lessons they have learnt from the events or activities (Hatton and Smith, 1995; Prinsloo et al., 2011; Bruster and Peterson, 2013).

Another common problem surrounding the use of reflective journals is related to students' uncertainty and frustration about what to write in the journals or how to use the journal (Boud, 1999; Blaise et al., 2004) which highlights the importance of scaffolding for writing of reflective journals (discussed in Section 2.14).

The third issue is related to assessment. In higher education, students' reflective journals have been used by teachers to evaluate students' progress throughout the course (Ash and Clayton, 2004; Chabon and Lee-Wilkerson, 2006). In some cases, students' reflective journals are assessed and can influence students' grades or marks for the particular course (cf. Chabon and Lee-Wilkerson, 2006). However, some scholars (e.g., Sumsion and Fleet, 1996; Boud, 1999) discourage using reflective journals in formal assessment. Boud (1999) argues that there is clear tension between assessment and reflection:

Assessment involves the presentation of one's best work, of putting a good case forward, emphasising what one knows, not what one doesn't yet know. Reflection, on the other hand, is about exploration, focusing on a lack of understanding, questioning, probing discrepancies and so on. There is always the danger that assessment will obliterate the very practices of reflection which courses aim to promote. The assessment discourse celebrates certainty; reflection thrives on doubt. Perhaps one of the reasons that reflection is so often misapplied is because attempts are made to find ways to make it compatible

with assessment practices, when perhaps it is those assessment practices which should be changed first. (Boud, 1999: p. 123)

In addition to the tensions between assessment and reflection, researchers also believe that, because there is a lack of agreement about what constitutes reflection, “there are substantial difficulties involved in attempting to identify and assess reflection” (Sumsion and Fleet, 1996: p. 128). Echoing this view, Ixer (1999) argues that it is “inequitable” to assess students’ reflection unless there are “agreed criteria laid open to external scrutiny and verification”(p.514). Indeed, studies (O’Connor et al., 2003; Blaise et al., 2004) have shown that teachers and practitioners have different ideas about the concept of reflection and the assessment criteria.

Specifically, the study carried out by O’Conner et al. (2003) found that some teachers consider reflective practice to be “an occasional activity rather than a way of thinking” (p.111) and some have admitted that they have “a limited knowledge themselves on scholarship relating to reflective practice” (p.116). The project conducted by Blaise et al. (2004) made the researchers realise that they, as trainers and researchers, also have different ideas about the reflective journal. Some of the members in the team think of a reflective journal as “as a messy, work-in-progress” (p.5) and others think of the journal as way to put together one’s understanding.

Moreover, one cannot ignore the fact that some students may also try to please the teachers by producing what they believe to be the most appropriate journal in order to get higher marks and thus neglecting the fact that the aim of writing reflective journals is for learners to focus on their experience, their problems and their alternative solutions (Boud and Knights, 1996).

It also has to be acknowledged that reflection is often defined differently in different studies and it can be very problematic to include students’ reflective journals in formal assessment without transparent assessment criteria that can withstand external scrutiny. To solve this problem, on the premise that educators are aware of the possible problems that might arise when a reflective journal is used in formal assessment, Boud and Knights (1996) offer some

generic criteria that teachers can use when they assess students' reflective journals:

What is sought in considering reflective reports is evidence that the learner can give an account of a particular experience, be aware of any emotional response the activity engendered and describe the outcomes of reflecting on the experience, such as new awareness [...], new questions [...], or new understanding [...] (Boud and Knights, 1996: p. 31)

Boud and Knights (1996) also suggest that instead of giving grades or marks, teachers can evaluate the journals on the basis of "satisfactory/unsatisfactory" and using the general criteria, teachers can check if the students are just describing the event without making any attempt to think about and learn from the experience (ibid.). These suggestions can be useful for teachers in all disciplines, including interpreter trainers, if they are considering using reflective journals in their courses.

Another approach to minimise the tension between reflection and assessment is by using the reflective journal as a way for teachers to provide feedback (Chirema, 2007; Nickel, 2013), so teachers can keep track of students' learning progress and allow students to see their own problems and progress.

2.15 Reflective journals for students

As mentioned briefly in the introductory chapter, changes in conceptualisation of learning have led translator and interpreter trainers to consider alternative pedagogical approaches that can give students more control over their learning and encourage students to focus on the learning process and learn from the experience.

In translation studies, in the 1990s, Gile (1994c; 1995a) also urged trainers to consider replacing the traditional didactic teaching approach, which places great emphasis on teachers correcting or criticising students' mistakes by a process-oriented approach that encourages students to think about the choices they make during the process:

The desirability of optimization is one good reason for adopting a *process-oriented approach* in I/T [interpreter/translator] training. The idea is to focus in the classroom not on results, that is, on the *end product* of the Translation process, but on the process itself. (Gile, 1995a: p. 10, italic in the original)

Over the years, translator trainers have attempted to use process-oriented pedagogical approaches in translation classrooms, and students are often asked to keep reflective journals so that trainers can ensure that students pay attention to the translation process. For instance, in her attempt to encourage students to think about the translation process, Li (1998) asked students to write a reflective journal answering questions about their “thinking and decision-making process” (p. 229), such as difficulties encountered, solutions, options considered. Similar approaches have also been adopted by other trainers (See for instance Fox, 2000; Gile, 2004; Chen, 2009).

In the field of interpreter training, while signed language interpreter trainers have explored the potential benefits of the process-oriented approach and reflective practice by applying Kolb’s experiential learning cycle in interpreter practicum (see for instance Bentley-Sassaman, 2009; Bentley-Sassaman and Houser, 2014), it is less common to see spoken language interpreter trainers ask students to engage in reflective practice or write reflective journal (Degueldre and Harmer, 1991).

Interpreting is a skill that requires a person to activate a variety of cognitive processes, particularly for simultaneous interpreting (SI) (Riccardi, 2005). As described by Riccardi (2005):

At the beginning of their SI-classes, trainees will ... experience the complexity of the cognitive processes underlying listening and speaking and have to learn new procedural knowledge. Not only will they have to learn to use two languages simultaneously, but they will do so under completely new communicative circumstances. (Riccardi, 2005: p.757)

Before students are able to master the skill of interpreting, much of their attention will be placed on skill acquisition. They will need to work to acquire declarative knowledge, i.e. trying to memorise certain knowledge and gradually developing their own procedural knowledge, i.e. interpreting strategies (Moser-Mercer, 2000b).

In discussing interpreter education and assessment, Sawyer (2004) points out the possible pedagogical value of reflective practice in interpreter training, which includes enhancing students' ability to evaluate their own performance. Moser-Mercer (2008), in an attempt to encourage interpreter trainers to take advantage of pedagogical approaches that are more learner-centred, also argues that encouraging students to be reflective and asking them to keep reflective journals may provide them with "a mechanism to externalize their meta-cognitive learning process. Moser-Mercer does not explicitly define "meta-cognitive skill" in her study; however, as briefly discussed in Section 2.9, literature on "metacognition" shows that metacognition generally to one's awareness of one's own knowledge and learning (Flavell, 1979; Osman and Hannafin, 1992; Metcalfe and Shimamura, 1994). Atkinson and Crezee (2014) also argue that:

Professionals skilled at self-reflection are able to, on an ongoing basis, identify their weaknesses and focus on areas to improve. Devoting time within an interpreting program to self-assessment and the enhancement of psychological skills will encourage this kind of reflection, and it may particularly benefit those practitioners who end up working as freelancers, [...] (Atkinson and Crezee, 2014: p. 4)

In the last few years, interpreter trainers have increasingly started to explore the potential benefits of reflective practice (Goswell, 2012; Bown, 2013; Hild, 2014) and empirical studies on reflective journals or similar tools have been carried out (Badiu, 2011; Bown, 2013). For instance, Arumí and Esteve (2006) used a "metacognitive guide" as an instrument to facilitate students' self-regulation and metacognition when they taught consecutive interpreting (CI). Although their study focuses on two case studies, their analysis showed that students did demonstrate a certain level of reflection when they used the

metacognitive guide (ibid.). What is also noteworthy is that in the two case studies, Arumí and Esteve (2006) found that through using the metacognitive guide, the students seem to become more relaxed in expressing their emotions. This is something that has not been discussed in empirical studies or in theories of reflection.

Miyamoto's (2008) study compared a collection of students' self-reflection reports in an attempt to discover different metacognitive and cognitive learning strategies adopted by the students. Miyamoto concluded that students with better performance seemed to use more metacognitive strategies rather than cognitive strategies (ibid.). It seems likely that students who perform better seem to reflect more on their learning process, not just the content of interpretation.

Bown's (2013) article is one of the very few papers in interpreting studies that discusses the issues of reflection, assessment of reflective journals and scaffolding for reflection extensively. Sharing her experience in training signed language interpreters, Bown developed courses with comprehensive approaches to encourage reflective practice. According to Bown, students enrolled in the courses write reflective journals, with the support of scaffolding tools and they receive comments and feedback from tutors. Bown's approach to assessment also opens a new route that can help minimise the tension between reflection and assessment which was discussed in previous section. Rather than asking students to submit all journal entries, Bown's approach is to ask students to select five entries that "illustrate and reflect diversity in their learning experiences" (p.59). Bown discovered that this approach has helped reduce pressure on students.

2.16 Conclusion

This chapter has discussed educational theories that seek to define the relationship between experience and learning. Theories of experiential learning and reflection have been explored to define the concept of reflection for this study and the importance of scaffolding for learners' reflection and the use of reflective journals in various disciplines have also been discussed.

Currently, many educators try to incorporate reflective practice in their pedagogy because they believe in the potential benefits of reflective practice and in keeping reflective journals. The effectiveness of writing reflective journals is, however, not conclusive and studies have identified pitfalls as well as benefits of using reflective journals for assessment purpose.

On the other hand, even though the number of empirical studies on reflective practice and reflective journals in the field of interpreting is scarce, the results of these empirical studies seem to suggest that reflective practice and writing reflective journals are beneficial to students. However, the content of the reflective journals, i.e. what students actually wrote in their reflective journals, has not been studied extensively. The current study aims to address this issue, as it investigates the content of students' journals.

Whether or not reflective journals should be used for assessment remains an issue that needs to be verified with more empirical studies, but some researchers (Anderson and Freiberg, 1995; Boud, 1995) have argued that in order for students to reflect, they need to have the ability to self-assess. In fact, it can be argued that self-assessment is fundamental for students to acquire the ability to think critically and reflect (Dearnley and Meddings, 2007).

The next chapter will start with a discussion of the literature on interpreting pedagogy and focus on issues related to assessment of interpreter performance, including assessment criteria developed from studies on the quality of interpreting. The researcher will also examine how interpreter educators have tried to encourage students to carry out self-assessment and what scaffolding tools have been used to facilitate learner self-assessment.

Chapter 3 Literature Review: Interpreting Assessment and Self-Assessment

In the previous chapter, the researcher reviewed educational theories and literature on reflective practice and reflective journals to identify concepts related to reflection and constructed a theoretical framework that can be used to examine students' reflective journals for signs of reflection. This chapter seeks to place the current study in the context of interpreter education and focuses on identifying concepts related to interpreting pedagogy and assessment.

With this in mind, this chapter begins with a review of the literature on interpreter education, focusing on salient trends of interpreting pedagogy and assessment approaches of interpreter trainers. Section 3.2 then draws on discussions on educational assessment to identify fundamental concepts and discuss challenges in defining assessment criteria in the field of interpreting. Section 3.3 will explore how interpreter assessment criteria are informed by studies on quality of interpreting. Section 3.4 then examines assessment criteria used for self-assessment in the context of interpreter training together with empirical studies carried out by interpreter trainers to encourage students to assess their own performance.

Following the discussions on students' self-assessment, Section 3.5 will draw on discussions in the literature to differentiate learning strategies from interpreting strategies, as both are considered essential in student interpreters' learning process. Finally, Section 3.6 will explain the modification of the theoretical framework to be used in the current study. After modification, the theoretical framework will incorporate components related to both interpreter training and interpreter assessment.

3.1 Overview of early pedagogical approaches to interpreter training

As mentioned in the introductory chapter, interpreting is considered to be an ancient profession, but the first interpreter training program has only been established about 70 years ago in Geneva in response to the huge demand for

conference interpreters from newly established international organisations (Class and Moser-Mercer, 2013). The first publications on conference interpreting and interpreter training appeared in the 1950s (Herbert, 1952/1960; Rozan, 1956/2005) and the first MA thesis studying conference interpreting was published in 1957 (Pöchhacker and Shlesinger, 2002).

At the beginning, when schools were established to train interpreters, according to Seleskovitch (1999), “methods of teaching interpretation were chaotic” (p. 56) and AIIC thus started to offer suggestions on how to train interpreters and organised symposia on teaching conference interpreting (Mackintosh, 1999). Since then, many papers and articles discussing various pedagogical approaches on translator and interpreter training have been published, including a number of seminal texts (including Weber, 1989; Dollerup and Loddegaard, 1991; Dollerup and Lingegaard, 1994; Dollerup and Appel, 1996; Ilg and Lambert, 1996; Garzone and Viezzi, 2002; Lee-Jahnke et al., 2012).

According to Gile (2000), interpreting research has gone through four periods in the last 50 years: “the pre-research period”, “the experimental psychology period”, “the practitioners’ period” and “the renewal period”. From experience-based theories of practising interpreters, interpreting studies have gradually moved towards a “more scientific, more interdisciplinary investigation” (p.300). Pedagogical approaches to interpreter training as well as approaches of interpreter assessment are also influenced by the characteristics of interpreting research during these periods.

During the “pre-research period”, publications are primarily by experienced interpreters who share their practical and teaching experiences (e.g. Rozan, 1956/2005; Herbert, 1960). As products of insights gained by interpreting practitioners through their reflection on their craft and their attempts to pass on their knowledge (Pöchhacker, 2009), these publications are often characterised as impressionistic and cannot be considered to be the results of scientific research (Gile, 1994b; Sawyer, 2004; Cai, 2005a). Nevertheless, these books have helped to lay out key issues in the field of interpreter

education and interpreter assessment, many of which continued to be discussed today.

For instance, in his book “*The Interpreter’s Handbook: How to Become a Conference Interpreter*”, Herbert (1952/1960) offers an overview of the practice of conference interpreting. He first touches upon the issue that in order to perform well at international conferences, an interpreter needs to acquire a variety of abilities, including analytical ability, listening, and broad knowledge, in addition to language proficiency. He discusses a broad range of issues related to conference interpreting, including the importance of public speaking skills and note-taking techniques for CI and of the dual-task of listening and speaking for SI.

Herbert also lays out the criteria for good interpreting, including accuracy, style, grammar, fluency, voice quality, intonation and pleasantness of voice (Many, if not all, of these criteria continue to be discussed in the literature on interpreting assessment, see Section 3.3). However, Herbert does not provide an elaborated explanation of all the criteria, nor does he discuss their relative importance; hence, “the relative importance of these and other criteria remained unclear” (Pöchhacker, 2012: n. p.).

3.1.1 Influence of experimental psychology on interpreting pedagogy

In the 1960s and early 1970s, researchers from the disciplines of cognitive psychology and psycholinguistics, such as Goldman-Eisler (1967; 1972), Barik (1971; 1974; 1975/2002) and Gerver (1971; 1975), began to study issues like interpreting errors, noise distraction and short-term memory capacity. Gile (2000) refers to this period as the “experimental psychology period”. As the name suggests, cognitive psychologists mainly adopted experimental approaches to model the process of interpreting.

In these experiments, professional interpreters and amateurs were asked to perform interpreting and various tasks, such as shadowing¹, in an artificial and controlled environment where variables were determined and controlled. Recordings of the speech and the interpretation were then compared so researchers could analyse errors made by the interpreters. These studies also attempted to hypothesise how interpreters perform the complex task of interpreting and understand what variable(s) can cause interpreters to make mistakes.

As Gile (1998) points out, the validity of some of these studies has been questioned by practitioners. For instance, Stenzl (1983) and Gile (1991b; 1994a) have both challenged the approach of conducting experiments with non-interpreters and amateurs rather than professional interpreters. Practitioners have also expressed their doubts about approach of researchers, such as Goldmean-Eisler (1972) in taking interpreting out of the context of the communicative event and obtaining the data in a laboratory situation. In addition, some of the experiments failed to consider all the potential variables that may influence an interpreter's performance, such as unfavourable working conditions (see Gile, 1990; 1997).

Nevertheless, psychologists' interest in studying interpreting shed new light on the studies of interpreting and brought in new ideas for interpreter training and assessment. For instance, Gerver's definition of SI as "a form of complex human information processing involving the perception, storage, retrieval, transformation, and transmission of verbal information" (Gerver, 1975: p. 119) has significantly influenced researchers' conceptualisation of interpreting (Pöchhacker, 2005) and some researchers continue to use this definition (Riccardi, 2002; Pöchhacker, 2005).

According to Gerver's hypothesis of the processes of interpreting, from the moment the speaker begins speaking and the interpreter hears the first utterance of the speaker (input) to the moment that the entire speech is

¹ The person is asked to listen to a recorded passage and repeat immediately in the same language while s/he continues to listen.

interpreted into the target language (output), the interpreter has to go through different stages of processing and each stage has its own skill components and requires different interaction between the interpreter's long-term memory and short-term memory. Gerver also hypothesises that the interpreter's information processing system is "subject to overload if required to carry out more complex processes" (Gerver, 1969/2002: p. 66).

Gerver's (1969/2002; 1971; 1975) hypothesis that interpreting involves different processing stages and different skill components has inspired practitioners to experiment with different aptitude tests to screen intending student interpreters (e.g. Gerver et al., 1984; Gerver et al., 1989; Lambert, 1991) and also led researchers to approach interpreting as a cognitive activity in their studies (Pöchhacker, 2004). Gile's (1995a) conceptual model of interpreting was a good example (see Section 3.1.5).

Similarly, although researchers (e.g. Altman, 1994; Clifford, 2001) criticised Barik's (1971) methodology or his definition of errors, his typology of errors, including omissions, additions and substitutions, has become an important starting point for later studies on interpreting quality and interpreter assessment. (See Section 3.3 for discussion on quality of interpreting.)

It is important to note that during the experimental psychology period, in addition to the contributions made by psychologists and psycholinguists as discussed above, some practitioners have also made efforts to improve quality of research in interpreting studies, rather than relying heavily on one's own experience and "personal theorizing" (Gile, 1990). For instance, researchers like Moser-Mercer and Setton have sought to find "possible convergence between approaches from cognitive psychology and linguistics" (Pöchhacker, 2004: p. 42). Indeed, during this period, a broad range of issues on the training of interpreters were raised in the literature, which included preparatory exercises to teach students interpreting (Section 3.1.2), quality of interpreting (Section 3.2) and interpreter assessment (Section 3.4).

3.1.2 Experience-based literature on interpreting pedagogy

During what Gile (2000) refers to as the “practitioners’ period”, practitioners and interpreter trainers also attempted to conduct research on interpreting. A dominant theme in the literature of the works published during the practitioners’ period is the training of future interpreters. As pointed out by Pöchhacker (2004):

Assuming that teaching presupposes a thorough understanding of what is to be taught, much research on interpreting [...] has been carried out in the context and, more or less directly, in the service of interpreter training. (Pöchhacker, 2004: p. 177)

Seminal works from this period include the pedagogical model presented by Weber (1984) in “*Training Translators and Conference Interpreters*” and the pedagogical approaches advocated by Seleskovitch and her colleagues² at the Ecole Supérieure d’Interprètes et de Traducteurs (ESIT) in Paris (e.g. Seleskovitch, 1978; Seleskovitch, 1989; Seleskovitch and Lederer, 1989/1995). Seleskovitch’s works and pedagogical approaches have been particularly influential in Europe (Pöchhacker, 2004; Baker and Saldanha, 2009; Gile, 2009).

Weber’s pedagogical approach is based primarily on his interpreting experience and particularly his teaching experience. He argues that a conference interpreter training program should include courses for sight translation, CI and SI. Weber’s approach to train consecutive interpreters begins with memory exercises (using short stories) and gradually moves on to CI without any notes. He stresses that students also need to be trained to “concentrate on the essential elements of the message” and “analyze the original message” (p. 35). Once students have learned these skills, they can then be taught how to take notes with abbreviations, symbols and signs for CI and gradually learn to master the skill of CI. Once students have mastered the skill of CI, according to Weber, it will be fairly easy for them to learn SI, although some pre-interpreting exercises will be helpful.

² Seleskovitch’s early works were published in the 1960s, but most of these are in French.

The pedagogical principles discussed by Weber share a number of similarities with those of Seleskovitch and Lederer. While Weber provides prescriptive suggestions to teach translation and interpreting, he does not have a theory to support his pedagogical approaches. Seleskovitch, on the other hand, has proposed a theory to explain the nature of interpreting based on her extensive experience as a professional interpreter and through field observation and introspection. This theory is known as *théorie du sens* or the interpretive theory. *Théorie du sens* and the pedagogical model of interpreter training promoted by Seleskovitch and the Paris School (known as the ESIT model) not only affect the way interpreters are trained, but also the way their performance is evaluated.

In order to understand the pedagogical approaches of the ESIT model in detail, it is important to explain the interpretive theory or *la théorie du sens*. As the name suggests, the core argument of *théorie du sens* (theory of sense) is that interpreting is based on sense. What should be made clear here is that “sense”, as used in the interpretive theory, is basically “meaning” (Gile, 2009) and should not be confused with “making sense”, which focuses more on coherence (see Section 3.6 for more discussion on the concept of coherence). Seleskovitch and Lederer (1989/1995) argue that interpreting is about using a different language to convey the meaning expressed by the speaker, rather than transcoding of individual words between different languages and the interpreter must learn to “deverbalise”, i.e. s/he needs to move away from the constraints of words or linguistic forms and focus on the meaning.

The pedagogical approaches of these early practitioners concentrated on what trainers should do and they did not discuss students’ self-study after class or how students can be taught to assess their own interpreting performance. As mentioned in the introductory chapter, a teacher-centred approach was the norm at the time.

These pedagogical approaches have had a profound influence on the way conference interpreters are trained (Angelelli, 2004; Pöchhacker, 2004; Baker and Saldanha, 2009), but they are based primarily on the practitioners’

personal experience and lack methodological and theoretical rigour. This implies that some of the pedagogical assumptions can be questioned. For instance, Seleskovitch's claim that interpreting is language-independent has been questioned by Gile (1991b) because the claim is "not based on or justified by scientific findings" (p. 165).

Another important theme in the literature on interpreter training is the description of "various **preliminary** and **ancillary** skills" (Pöchhacker, 2004: p. 183, bolded in the original), or what is referred to as foundational exercises in this study. Interpreter trainers use these foundational exercises to help students learn the skills of interpreting gradually. Different terms have been used to describe these pre-interpreting exercises, but many of them share similar concepts or rationale. Shadowing is one of the commonly used pre-interpreting exercises used by trainers, although its effectiveness as a way to prepare students for SI has been debated (cf. Schweda-Nicholson, 1990; Kurz, 1992; Lambert, 1992b; Andres et al., 2015).

Other pre-interpreting exercises that have been used in interpreting classrooms or as ways to screen prospective students include memorising (Weber, 1984; Pollock, 1985; Seleskovitch, 1989; Taylor, 1989; Weber, 1989; Ballester and Jimenez, 1992), retelling of stories and counting backwards while listening to a talk (Seleskovitch and Lederer, 1989/1995), paraphrasing³ (Moser, 1978; Weber, 1984; Russo, 1995; Ilg and Lambert, 1996), "probabilistic prognosis"⁴ (Moser, 1978: p. 361) or anticipation exercise⁵ (Weber, 1984; Kalina, 1994b; Setton, 1994; Ilg and Lambert, 1996) and cloze exercise⁶ (Lambert, 1992a; Ilg and Lambert, 1996; see also Chabasse and Kader, 2014; Andres et al., 2015). The importance of sight translation as a training method to enable students to become familiar with dual-tasking

³ Students are trained to read or listen to a passage and use different words and different sentence structures to render the idea of the passage.

⁴ Students will listen to recording of statements that are not completed and they are instructed to complete the statements.

⁵ Anticipation exercise asks students to complete a sentence that has not been finished by the instructor.

⁶ Students are asked to listen (while they shadow) and fill in the blanks embedded in the speech.

(reading the text and interpreting at the same time) has been stressed by Weber (1984: p. 27) and an increasing number of studies have been conducted to understand the different cognitive constraints between SI and sight translation (Viaggio, 1995; Tang, 1996; Agrifoglio, 2004; Lambert, 2004) Ilg and Lambert (1996) have put these exercises together and suggest that the “successive, hierarchical and clearly lineated steps” (.76) that students need to go through to learn interpreting include:

- (1) listening and memory exercises,
- (2) shadowing,
- (3) dual-task training,
- (4) paraphrasing,
- (5) abstracting,
- (6) clozing,
- (7) sight translation,
- (8) sight interpretation,
- (9) processing of digits, proper names, technical words and acronyms,
- (10) lagging exercises,
- (11) anticipation exercises and
- (12) left-and right-ear processing exercises. (Ilg and Lambert, 1996: p. 76)

Although the effectiveness of many of these exercises needs to be validated with more empirical studies, there is evidence in the literature that these exercises continue to be used in interpreting classrooms (Shaw et al., 2004; Andres et al., 2015). In Chapter 5, where the content of students’ reflective journals will be examined, we can see if participants have tried to use these pre-interpreting exercises.

As for materials to be used in class, Weber stresses the importance that all materials used for interpreting must be speeches. Seleskovitch and Lederer (1989; 1989/1995) suggests that as “narrative developments are easier to follow and re-tell”, trainers should begin with narratives such as fairy tales and gradually move on to “reasoned or polemical arguments” (p.73). Ilg and Lambert (1996) encourage trainers to expose students to various types of materials, “well structured or rambling, clearly delivered or mumbled, with or without a regional or social colouring, delivered at a reasonable pace or at top speed”. In the literature, there appears to be no systematic investigation exploring what types of materials interpreter trainers use in classrooms, but from the scaffolding tools provided by the course leader in the case study (Chapter 4), one can infer that some trainers have continued to follow these suggestions.

3.1.3 Experience-based approach for interpreter assessment

As mentioned in Section 3.1, practitioners' pedagogical approaches to interpreter training and their approaches in assessing interpreters are closely related. Again, in the case of these practitioners/interpreter trainers, their personal experiences play an important role in shaping the way they assess an interpreter. For instance, based on his experience as an examiner, Weber argues that assessment of students' performance of both translation and interpreting "should be based on precise criteria, including meaning, accuracy, style, terminology, and grammar" (Weber, 1984: p. 46). Additional criteria for interpreting include "voice, speed, presentation and "credibility" of the performance" (ibid. p. 50). Although Weber does not provide further explanation to define these criteria, he does stress that "the overriding criterion must always be the accuracy of meaning" (ibid. p.49).

Weber (1984) also points out that different assessment criteria should be applied for CI and SI. According to Weber, a candidate's CI must be shorter than the original speech. In determining the completeness of a candidate's CI, the examiners should determine whether "the interpretation [...] contain[s] everything that is necessary to the understanding of the original message that the speaker intended to communicate, including all nonverbal content." (ibid. p. 50) For SI, in addition to the criteria used for CI, the SI interpreter should also be evaluated according to his/her "anticipation, speed, and pleasantness of voice" (ibid.). Moreover, according to Weber, interpreters should "never sound boring", or "hurried and incoherent" (ibid.). Indeed, good simultaneous interpreting means that:

the rendition should sound effortless; it should be presented in a pleasant, confidence-inspiring voice; it should be rigorously accurate in meaning and as complete as possible; and it should include all the innuendos, inflections, nuances, and "atmosphere" of the original speech. (Weber, 1984: pp. 42-43)

Many of the criteria listed by Weber are exemplars of the types of assessment criteria in the literature of interpreter assessment, which will be discussed in more depth in Section 3.4. Although it may be claimed that the criteria have been defined clearly, assessors' subjective judgement or even

his/her preferences will play an important role in determining if a candidate's interpretation is satisfactory. For instance, on what grounds can assessors determine that the interpretation provided by the candidate "sounds effortless"? Also, different assessors may have different preferences regarding the "pleasantness" of a candidate's voice? Later, in Section 3.4, the researcher will return to this issue for more discussion.

Seleskovitch and Lederer (1989/1995) take a very similar view of interpreter assessment to that of Weber. They argue that interpreter assessment should only be carried out by practising interpreters and they also distinguish interpreter assessment in the classroom and interpreter assessment for certification or qualification to work as a professional interpreter.

According to the Seleskovitch and Lederer (1989/1995), during the training period, the teachers are the ones who will listen to student interpreters' interpretation and provide them with useful feedback/critique that can help them identify and analyse the causes of their errors and help them improve. However, once the training period comes to an end and when students sit in the final exam, the role of the trainer should change. Since the result of the final exam will determine whether or not the students/candidates are ready to work as professional interpreters, the role of the teacher changes from being an encouraging trainer to an impartial jury member. At the final exam, the overriding question that all members of the jury (which may include the trainers who have taught the trainees and external examiners who are professional interpreters) must ask is "whether or not they would be comfortable sending a particular candidate to work consecutively or in the booth at a conference where they themselves regularly work as professional interpreters" (ibid. p. 210).

In a prescriptive approach, Seleskovitch and Lederer argue that the following three factors must be taken into consideration when the jury evaluate trainee students' interpreting performance:

- (1) Linguistic competence. Does the candidate intuitively understand what is said in his B and C languages? Does he [sic] express himself in his native language without interference from the source language?
- (2) Technique. If, at the end of his training, the student is still making mistakes due to poor technique, he [sic] is not ready to go out and interpret professionally.
- (3) Isolated mistakes. These errors should not count for more than one third of the evaluation, provided they do not betray poor technique. (Seleskovitch and Lederer, 1989/1995: p. 211, undelined in the original)

Examining these “factors”, it is apparent that the authors have assumed that jury members have the same understanding of all three criteria, but, like Herbert’s (1952/1960) criteria (discussed in Section 3.1), there are similar issues with vague language in the criteria listed by Seleskovitch and Lederer (1989/1995). For instance, on what grounds can jury members decide that the candidate is able to “intuitively understand what is said”? Is it even possible for jury members to determine this? On what grounds can jury members determine that mistakes are simply “isolated mistakes”, i.e. a once-off mistake that are “due to a temporary loss of concentration” or “a technical problem” (ibid.) rather than a mistake that is caused by the interpreter’s misunderstanding? Once again, the acceptability of a candidate’s performance is decided mainly by jury members on their professional judgement.

Moreover, Seleskovitch and Lederer (1989/1995) state that the purpose of the final exam is to “reveal whether the students have properly assimilated their training or not” (p. 210). In other words, such a final exam should be an “achievement test” that is “based entirely on what has been taught in a particular curriculum” (Hatim and Mason, 1997: p. 200). However, the jury members are in fact asked to determine if a candidate is ready to enter the market, which goes beyond the realm of an achievement test.

If the purpose of an exam is to check whether the students have learnt from their training, then it would be necessary for the jury members to have a clear idea of what has been taught in the course. In contrast, if the purpose of an exam is to determine whether the candidate is qualified to become a

professional interpreter, then the jury members should focus only on the candidate's performance and disregard any prior knowledge concerning the candidate's training. The problem here is that Seleskovitch and Lederer have blended the two purposes together in one exam, which poses more challenges for assessment.

Indeed, if the blended approach recommended by Seleskovitch and Lederer were adopted, it would be difficult to design a test and set of assessment criteria that can meet the dual purposes of the test. These questions are closely linked to issues that have been discussed and debated in the literature of educational assessment and which will be discussed in more depth in Section 3.3.

3.1.4 Pedagogical approaches for interpreter training in the renewal period

The discussions on pedagogical approaches to interpreter training and assessment have thus far focused on the approaches adopted by interpreters and trainers based on their personal experience and introspection. In fact, for a long time, most interpreter trainers followed these pedagogical approaches and paid little attention to the very few empirical studies related to interpreter training. As Gile (1990) observes:

[training-oriented scientific research] does not seem to have had any significant effect on training methods and results except in courses given by the researchers themselves, and sometimes in the schools where they teach, but on the whole, interpretation instructors prefer to keep their personal, most often traditional methods, and take no heed of research. (Gile, 1990: p. 33)

Indeed, studies on interpreter training and assessment have continued to be published with trainers sharing personal experience and observation, even when interpreting studies has entered what Gile (2000) refers to as the “renewal period” with broadened scope of “themes, paradigms, sub-disciplines and perspectives (Shlesinger, 2009: p. 6) and emphasis on the importance of scientific, empirical studies.

During this period, the models developed by Gile (1995a; 2009) for translator and interpreter training have become influential, with translator and interpreter trainers using these models to explain the process of interpreting and translation. Over the years, Gile has proposed a variety of theoretical models for training of interpreters and translators, including the Sequential Model of translation and the Effort Models of interpreting (see Gile, 1991a; 1994c; 1995a; 1997). In interpreting studies, the Effort Models have been frequently cited to explain the various cognitive tasks that interpreters have to cope with during the interpretation process.

Originally, these models were designed as “pedagogical models” (Gile, 1991a: p. 186). As Gile (1995a) explains,

The concepts and models presented [...] are the result of much research including observational studies (the systematic observation of phenomena as they occur in the field), experimental studies (the study of controlled situations generated by the researcher), and theoretical studies, both from the field of [interpreting and translation] and from other disciplines, in particular cognitive psychology and psycholinguistics. (Gile, 1995a: p. xii)

The Effort Models of interpreting explain that during the process of interpreting, an interpreter needs to find an ultimate balance among at least three efforts: listening and analysis, production, and memory, and there are different models for SI, CI and sight translation. The Listening and Analysis Effort, according to Gile (1995a), includes “all comprehension-oriented operations” (p. 162), in other words, efforts made by an interpreter to understand everything in the source text. For CI, the comprehension phase will also include note-taking. The Production Effort, in comparison, focuses on the output of interpreting. It consists of the efforts made by an interpreter to produce the speech in the target language. The third effort, the Memory Effort, is about an interpreter’s short-term memory, which is constantly in operation to enable an interpreter to memorise what s/he has heard. In addition to the three efforts, an interpreter also needs to be able to coordinate the three efforts during the interpreting process.

On the basis of the Effort Models, Gile (1999; 2009) also proposes a “tightrope hypothesis” that explains why interpreters experience interpreting difficulties. According to the tightrope hypothesis,

[...] most of the time, interpreters work close to saturation, be it in terms of total processing capacity requirements or as regards individual Efforts because of high Effort-specific requirements and/or sub-optimized allocation of resources to each of them. (Gile, 2009: p. 170)

According to the tightrope hypothesis, in certain situations, for instance, when the speakers speak too fast or when the speeches are information-dense, interpreters will encounter difficulty because they have reached “a tightrope situation” (Gile 2009: p. 183) in which they are working close to the maximum of their cognitive capacity. In such situations, interpreters will use “coping tactics” (ibid. p. 192) or interpreting strategies, to help them reduce potential negative impact on the quality of the interpreting. One of the key elements that interpreter trainers hope students can learn is how to use these interpreting strategies. However, is it reasonable to expect students who are still learning to interpret to use these interpreting strategies or coping tactics strategically? In Section 3.6, the researcher will return to discuss this issue.

Gile’s Effort Models have been widely used by interpreter trainers to explain the process of interpreting and why interpreters make errors (e.g. Kuwahata, 2005; Mizuno, 2005; Chang and Wu, 2014). However, Gile (1995) has stated explicitly that the models are “not a presentation of research” (p. xii) and he has ventured “beyond research results into some speculation” (pp. xii-xiii). In other words, the Effort Models should be considered to be pedagogical tools for concept explanation. The tightrope hypothesis that explains the cognitive overload of the interpreter is also a hypothesis that “has not been submitted to precise empirical tests” (Gile, 2009: p. 190).

The interpreter, as portrayed by Gile (1995a), follows the traditional view that an interpreter’s main task is to ensure that the message is conveyed between the involved parties in an interpreter-mediated communicative event.

In the 1990s, with increasing recognition of community interpreters, researchers began to challenge this view. Researchers into community interpreting argue that, in the context of community interpreting, an interpreter is not a bridge or conduit that conveys the message, but one of the participants in the interpreted event (Roy, 2000; Angelelli, 2004; Hale, 2007). However, the pedagogical approaches discussed so far have not addressed the issue that interpreters need to play different roles in different settings, particularly for community interpreting. The next pedagogical model to be discussed bearing the influence of community interpreting, looks at interpreter training from another perspective.

This pedagogical model, proposed by Hatim and Mason (1997), represents the authors' attempt to provide an alternative pedagogical approach to teaching interpreting, one that takes into account the fact that interpreters working in conference settings and community settings face different challenges and have different requirements. Adopting a text-linguistic framework, this approach is centred on the three strands of textuality—context, structure and texture and how the varying prominence of the three strands poses different challenges for CI, SI and community interpreting, which the researchers refer to as liaison interpreting.

In the text-linguistic framework proposed, context is defined as “the extra-textual environment which exerts a determining influence on the language use.” (p. 214). For instance, the location and occasion of an interpreter-mediated event is a piece of contextual information. (Text) structure is defined as “the compositional plan of a text” (p.224). In other words, structure focuses on coherence of a speech. Finally, texture refers to “aspects of text organization which ensure that texts hang together and reflect the coherence of a structure in a context” (pp. 224-225). A speaker's use of cohesive devices will affect the texture of a speech.

In the hypothesis proposed by the authors, the partial inaccessibility of one strand of textuality will force the interpreter to make more use of the other two strands that are available to them:

- (a) In the case of simultaneous interpreting, context and structure are revealed only piecemeal and can thus be accessed more effectively via texture, i.e. the words as they are spoken.
- (b) In the case of consecutive interpreting, texture and context are retained only in a most short-lived manner and can thus be stored more effectively via structure.
- (c) In the case of liaison interpreting, texture and structure are manifested only partially and can thus be negotiated more effectively via context. (Hatim and Mason, 1997: p. 42)

According to these hypotheses, a simultaneous interpreter has less access to information related to the context and texture, so s/he has “to rely more heavily on the emerging texture in order to make and maintain sense” (Hatim and Mason, 1997: p.36). Facing these challenges, a simultaneous interpreter will make use of the “textural clues” or “devices serving anaphoric (backward) and cataphoric (forward) reference, substitution, ellipsis, conjunction and ... lexical cohesion” (ibid. p. 47) to maintain sense. If the interpreter manages to receive the speaker’s speech script before the meeting, then the challenges can be reduced, but as one cannot predict what a speaker will say when s/he steps on to the podium, the constraints remain.

In comparison to simultaneous interpreters who need to produce interpretation as they are still listening to the source text, consecutive interpreters have the advantage of listening to the speech first. In other words, consecutive interpreters have relatively more access to the context. However, as they need to wait until the speaker pauses or even finishes the speech before they can interpret, they have to utilise their memory and the aid of notes to remember the content and most importantly the structure of the speech. Hatim and Mason (1997) thus hypothesise that consecutive interpreters will place more focus on the structure of the speech. Both context and texture are tools that they utilise to help them gain better access to structure (ibid.).

Finally, for liaison interpreters, texture and structure will gradually unfold as the dialogue continues between the two parties communicating with the help of the liaison interpreter. This “incompleteness of texture [...] and

structure” (Hatim and Mason, 1997: p. 51) will force the liaison interpreter to rely more on context.

These authors believe that interpreter training programmes should not just work under the assumption that by teaching students different forms of interpreting, they will learn to “handle whatever is thrown at them” (ibid. p.45). The two authors suggest that interpreter training programmes should teach students that they need to pay more attention to the challenges that may be posed because of varying degree of prominence of the three aspects of textuality for different modes of interpreting and students need to be aware of register (which concerns the level of formality) and cohesive devices used by speakers in different communication situations.

On the basis of their suggestion of a different pedagogical approach, Hatim and Mason also discuss issues concerning interpreter assessment. In contrast to previous researchers discussed in the above sections (e.g., Herbert, 1952/1960; Weber, 1984; Seleskovitch and Lederer, 1989/1995), who focus on examiners’ judgment of candidates’ accuracy, fluency, pleasantness of voice and so on, Hatim and Mason argue that interpreting assessment should take all aspects of textuality into consideration. For them, text-level errors, or “mismatches of propositional meaning or breaches of the target language code” (p.164), are not as serious as the “mishandling of context” which can result “in a flawed performance in which all aspects of textuality suffered” even when “the output was fluent and almost faultless in terms of lexis and grammar” (p. 168). As will be shown later in Section 3.4, Hatim and Mason’s suggestions have influenced some interpreter trainers as they try to formulate criteria for interpreter assessment.

In summary, Hatim and Mason argue that context will affect the strategies that an interpreter adopts to facilitate communicate and that context should also be taken into account to determine what constitutes good quality interpreting.

This overview has shown that although interpreter trainers have been active in sharing their pedagogical approaches and what they believe to be important criteria to assess students' performance, very few empirical studies have been carried out. Moreover, as pointed out by Angelelli and Jacobson (2009):

[...] few researchers have focused on measurement of aspects of interpreting in general, quality in performance specially, and on the problem of assessing interpreting via the implementation of valid and reliable measures based on empirical research. (Angelelli and Jacobson, 2009: p. 3)

However, as will be shown in Sections 3.3 and 3.4, some researchers have attempted to bridge this gap to establish reliable and valid measures of assessment. Studies on interpreters' criteria of good interpreting, on quality of interpreting and on user expectations have also helped to provide trainers with some assessment criteria to be used in classroom settings. Before examining these studies, the researcher will first introduce several fundamental concepts in educational assessment and use these concepts to discuss challenges in defining assessment criteria in interpreting studies.

3.2 Foundations for Interpreter Assessment

This section will begin with a brief review of literature on educational assessment and definitions of fundamental assessment concepts. The researcher will then attempt to place these concepts in the context of interpreter education and interpreter assessment and discuss the complexities and challenges in interpreter assessment.

3.2.1 Validity and reliability of assessment

The first two concepts that are central to assessment are validity and reliability. In testing and assessment, "validity" generally means whether a test given to students measures what the test maker intends to measure, whereas "reliability" refers to the consistency of the tests (Fulcher and Davidson, 2007).

Discussions on translation and interpreting assessment (Sawyer, 2004; Clifford, 2005; Angelelli, 2009) have repeatedly stressed that the issues of

assessment validity and reliability need to start with several fundamental and essential questions. For example, “for whom the test is written, what exactly the test measures, who receives the results of the test, how results are used, etc.” (Angelelli, 2009: p. 14) Depending on the answers to these essential questions, test designers need to come up with different ways to assess interpreting performance and ensure validity and reliability of the assessment measures.

The literature on assessment suggests that the validity of a test can be examined from different perspectives (Gipps, 1994; Messick, 1995; Vermeiren and Gucht, 2009), but the most important perspective for interpreter assessors is “construct validity”, which is “the unifying force” of different categories of validity (Messick, 1995: p. 744). Basically, construct validity is used “to examine the extent to which test users can make statements and inferences about a test taker’s abilities based on the test results” (Angelelli, 2009: p. 16).

To determine a test’s construct validity, the first obstacle faced by interpreter trainers or test developers is how to define a construct. Using the concept “fluency” as an example, Fulcher and Davidson (2007) explain that with two more properties, the concept “fluency” can become a construct:

Firstly, it must be defined in such a way that it becomes measurable. In order to measure ‘fluency’ we have to state what we could possibly observe in speech to make a decision about whether a speaker is fluent. [...] Secondly, any construct should be defined in such a way that it can have relationships with other constructs that are different. (Fulcher and Davidson, 2007: p. 7)

However, in reality, it is very difficult to turn a concept into a construct. For instance, if we place Fulcher and Davidson’s example of “fluency” in the context of interpreting, when assessors measure fluency of an interpreter, what will they be looking at? As pointed out by Fernandez (2013),

There are two possible definitions for *fluency*. One meaning is close to general proficiency in language, and the other is a more specialized sense, related to the temporal, suprasegmental features of speech, such as speech rate, uninterrupted runs of

speech, number and duration of pauses (filled or unfilled), etc.
(Fernandez, 2013: p. 55, italic in the original)

Will assessors be looking at speed of delivery or the number of pauses or hesitations? Will they be looking at “uninterrupted runs of speech”? Studies have shown that the interpreting community is still struggling to define fluency (Macías, 2006; Rennert, 2010), and in general, as Sawyer (2004) observes, researchers and practitioners in the field of interpreter training and assessment are still struggling to define many of the constructs. Attempts have been made to identify all the skill components required to perform good interpreting (Moser-Mercer et al., 1997), but Campbell and Hale (2003) point out that trainers’ evaluation of

the skills and abilities necessary of a trainee interpreter to succeed in a conference interpreting course or in the profession [...] is not based on any empirical data, but rather on intuitive judgements by trainers who are mostly practising interpreters (Campbell and Hale, 2003: p. 212)

3.2.2 Assessment of performance and/or product

The challenge of construct validity is connected to the issue of performance assessment and product assessment. As Messick (1994) explains, product assessment and performance assessment, under certain circumstances, can mean the same thing. An example given by Messick is dancing. On the other hand, if a student is asked to conduct a chemical experiment, the assessor will need to differentiate if s/he is assessing the procedures (i.e. performance) or the end result of the experiment (i.e. product) (Messick, 1994).

In the field of interpreter assessment, assessors may be called upon to assess if a candidate is qualified to work for an organisation, in which case the focus of the assessment will be placed on the quality of interpreting, i.e. the product, and the assessors will need to determine if “the interpretation is accurate, complete, stylistically appropriate, etc.” (Sawyer, 2004: p. 94, see also Section 3.4 for more discussion on assessment criteria.). In educational settings, assessors may need to evaluate a student’s performance (Hatim and Mason, 1997; Sawyer, 2004; Lee, 2008) to check if the student’s performance

is acceptable according to the learning objectives or assessment criteria of the course.

Literature on interpreter training tends to place more emphasis on product assessment (see Section 2.15 for Gile's appeal for a process-oriented training approach), in particular problem identification and error analysis (Barik, 1971; Altman, 1994). However, in many exams, examiners are actually called upon to evaluate the quality of the interpretation (the product) in order to determine if a candidate has performed acceptably (Sawyer, 2004), which means that the performance and product are blended together and it is not an easy task for assessors to differentiate the two when they listen to the interpretation.

More empirical studies are needed on "interpreter competence and performance" and "on assessing processes and products for different purposes, i.e. those of interest to industry, pedagogy, and research (Angelelli and Jacobson, 2009). The good sign is that more practitioners and researchers are paying attention to the topics of testing and assessment of interpreters as evinced by recent studies (e.g. Wu, 2010a; Fernandez, 2013; Tsagari and van Deemter, 2013).

As empirical studies have thus far not been able to provide answers as to how to resolve the issues discussed in Section 3.2.1 and in this section, it is not surprising to see that many interpreter training programmes continue to use the traditional exam model, which seeks to ensure assessment reliability by having multiple examiners.

The traditional exam model with multiple examiners relies heavily on the examiners' professional judgment of candidates' performance (Sawyer, 2004; Liu et al., 2008). Assessment reliability is achieved through the approach of "inter-rater reliability", which means "the degree to which raters agree with each other when rating the same performances" (Fulcher and Davidson, 2007: pp. 131-132). However, studies have shown that examiners are not always consistent, and there are variations in their professional

judgments, despite the fact that they are all supposed to follow the pre-determined assessment criteria (Sawyer, 2004; Liu et al., 2008; Wu, 2010a). This inconsistency of professional judgement may be attributed to the various parameters that may influence the exams, such as the speed of the source speech, level of difficulty, the time given to candidates for preparation (Pöchhacker, 2004; Liu et al., 2008). Kalina (2005) has pointed out the worrying phenomenon that interpreters rely on their intuition to assess trainees but when they are asked, they are “unable to express their subjective judgements by objectively measurable standards.” (p.768)

3.2.3 Purposes of assessment: summative, formative and ipsative

In educational settings, there are at least three types of assessment: formative, summative, and ipsative, according to the purposes of the assessment (Gipps, 1994; Sawyer, 2004). It should be made clear here, that any form of assessment, including essays, oral or written tests, reflective journals or portfolios can be used as any of these three types of assessment.

The first type of assessment, formative assessment, is a concept that is closely linked to Vygotsky’s concept of “zone of proximal development” (ZPD) (Section 2.5) and the concept of scaffolding (Section 2.12), as it is a form of assessment that provides feedback and support to learners. Thus, formative assessment, “is carried out during the learning process as an intervention that is designed to encourage further learning and change” (Fulcher and Davidson, 2007: p. 372). Through formative assessment, students will be made aware of their problems and current progress as they receive feedback about their performance. The aim of formative assessment is to encourage students to continue to improve. Indeed, it has been argued that formative assessment “can be used to shape and improve the students’ competence by short-circuiting the randomness and inefficiency of trial-and-error learning” (Sadler, 1989: p. 120).

In the context of interpreter training, formative assessment is used to provide continuous feedback, so that both interpreter trainers and student interpreters can become aware of the students’ progress (Hatim and Mason,

1997). Teachers' critiques on trainee interpreters' performance in class, peer critique, and comments on assignments are all different forms of formative assessment, because their shared purpose is to provide students support and feedback for improvement.

In contrast, summative assessment is usually "conducted at the end of a programme of study to assess whether and how far individuals or groups have been successful" (Fulcher and Davidson, 2007: p. 376). Whereas formative assessment aims to provide students with continuous feedback for improvement, the purpose of summative assessment is usually for teachers to

judge the extent of students' learning of the material in a course, for the purpose of grading, certification, evaluation of progress or even for researching the effectiveness of a curriculum (Bloom et al., 1971 cited in Wiliam and Black, 1996: p. 537).

Typically, summative assessments are oral or written exams or essay papers that students take or submit at the end of a course. However, even a portfolio or a learning journal can serve as summative assessment, if a grade or score is given as the result of the assessment. In other words, the assessment instrument used is not the key that determines whether or not an assessment is formative or summative, the key is the purpose of the assessment. For instance, Jacobson (2009) developed a rubric that aims to measure interpreter's ability to interact with the parties involved and the rubric can "be used to provide formative feedback to interpreters and student interpreters, and in summative evaluations, such as end-of-course exams, and in professional certification" (p.59).

The third type of assessment is referred to as "ipsative assessment" by Gipps (1994). Ipsative assessment is a type of assessment "in which the [learner] evaluates his/her performance against his/her previous performance" (p. vii) and the "emphasis in assessment is placed on each student's progress and learning" (p. 42). Arguably, compared with the other two types of assessment, ipsative assessment is closely linked to lifelong learning and reflective practice as "it provides a vehicle and framework for problem-solving

through self-assessment” (Sawyer, 2004: p. 106) that can last for the entire career of an interpreter.

For a long time, assessment of interpreter performance (whether this interpreter is a professional interpreter or a trainee interpreter) has been a task reserved to practising interpreters. However, as stated in Section 1.1, the field of interpreter training is witnessing a shift in pedagogical approach from traditional, teacher-centred to student-centred approaches. With this change of pedagogical approach, interpreter trainers need to pay more attention to formative assessment and ipsative assessment.

3.2.4 Ipsative assessment and self-assessment

As mentioned in the previous section, the concept of ipsative assessment is closely linked to self-assessment, which is defined as “the [learner’s] ability to accurately evaluate or assess his/her performance, and his/her strengths and weaknesses” (Woods et al., 1988: p. 107). Self-assessment is a practice as well as a goal (Boud, 1995). As a practice for formative assessment, students gradually learn to apply appropriate criteria to evaluate their own performance. At the same time, it should be stressed that self-assessment is not something that always comes naturally, because it does require higher level thinking for students to be able to judge and evaluate their own performance by comparing it with pre-defined criteria (Ross, 2006).

If trainers wish to use self-assessment in the interpreting class and ask students to evaluate their own performance, they will need to provide the student interpreters with clear and transparent assessment criteria so that they know what they should strive to achieve. It has been noted that transparent assessment criteria can help enhance “learner’s autonomy and may exert a considerable influence on the quality of students’ work” (Bartłomiejczyk, 2007: p. 251). However, as shown in preceding sections, it has not been easy for interpreter trainers to define or even identify assessment criteria for interpreting. Thus, studies on quality of interpreting have become important foundations for interpreter trainers to formulate assessment criteria.

The next section will explore studies on quality of interpreting as concepts discussed in these studies can serve as a foundation for this study to define assessment criteria.

3.3 Studies on quality of interpreting

The topic of quality has been discussed by interpreting practitioners and researchers since the “practitioners’ period” in the 1980s and 1990s (Gile, 2000) and researchers have generated relatively abundant literature. The first attempts to evaluate quality of interpreting, focusing on fidelity and completeness of the interpretation were through error analysis and error counts (Barik, 1971; Barik, 1975/2002; Altman, 1994). Barik (1971), for example, compared recordings and transcripts of source text and target text and suggests that “translation departures” can be divided into three categories: omissions, additions and substitutions. The underlying assumption of these studies is that quality in interpreting means “the correct rendering of the original speech in terms of content” (Behr, 2015: p. 202). However, critics (Clifford, 2001; Bartłomiejczyk, 2007) have argued that Barik’s classification focuses too much on the semantic and fails to consider the intention of the interpreter who may choose to omit or add certain information in the source text to facilitate communication.

Researchers have also studied quality of interpreting from the perception of professional interpreters. Since conference interpreters are usually reluctant to allow researchers to study and evaluate their interpretation (Gile, 1990; Moser-Mercer, 1996; Gile, 2003), researchers have conducted surveys and asked professional interpreters to express their opinions on the various criteria that determine a good interpretation (Bühler, 1986; Zwischenberger, 2010; Pöchhacker, 2012).

In her attempt to understand how professional interpreters applied different criteria to assess the quality of interpreting, Bühler (1986) conducted a survey by distributing questionnaires to professional interpreters who are members of AIIC. In the questionnaire, Bühler (1986) includes 16 criteria, which are divided into linguistic-semantic factors and extra-linguistic factors.

“Linguistic-semantic” factors comprise native accent, fluency of delivery, logical cohesion of utterance, sense consistency with original message, completeness of interpretation, correct grammatical usage, use of correct terminology, and use of appropriate style. “Extra-linguistic factors” comprise a pleasant voice, thorough preparation of conference documents, endurance, poise, pleasant appearance, reliability, ability to work in a team and positive feedback from delegates.

In Bühler’s (1986) study and also in later studies inspired by her study (e.g., Chiaro and Nocella, 2004; Zwischenberger, 2010; Pöchhacker, 2012), “sense consistency with original message” is rated by professional interpreters as the most important criterion. Bühler used the term “sense” to refer to content. A second criterion that is rated as highly important is “logical cohesion”. Bühler’s study and later studies have also found that there seems to be consensus among professional interpreters that “sense consistency” and “logical cohesion” are the most important criteria to assess interpreter performance.

However, critics have pointed out the fact that Bühler’s criteria are in fact poorly defined and not explicit enough (Hartley et al., 2003; Pöchhacker, 2012; Fernandez, 2013). Indeed, a number of respondents in Bühler’s study expressed their difficulty in differentiating between the different criteria (Chiaro and Nocella, 2004). If trainers wish to adopt Bühler’s criteria in classroom settings, explanations and clarification will be necessary.

Bühler’s study also highlights the fact that wording of assessment criteria can be ambiguous. For instance, Bühler’s “extra-linguistic factors” include pleasant voice and pleasant appearance, but critics have shown that the vagueness of these terms can pose serious problems (Shlesinger et al., 1997; Fernandez, 2013). For instance, Fernandez (2013) points out that many of the criteria, such as fluency and pleasant voice, have both a general meaning and a technical definition. The general meaning of pleasant voice may be about the person’s “voice pitch, intonation and voice volume” (p.55), but the technical definition will refer to the person’s “features of the pitch...and to voice timbre”

(ibid.). When assessors are assessing an interpreter's performance, their judgement may be influenced by their understanding of the general meaning as well as the technical meaning. Moreover, different assessors may have different ideas about what these terms mean and different definitions, so the results of their assessment may be problematic.

Despite its limitations, Bühler's study has inspired researchers to use surveys to collect empirical data to study the issue of quality of interpreting. Researchers have sought to define assessment criteria from the user's perspective using questionnaires as the main tool to collect empirical data (Ng, 1992; Kurz, 1993/2002; Kopczyński, 1994; Moser, 1995; Kurz, 2001; Kurz, 2003b). However, critics argue that users are not the best judge of interpreter's performance, as

they are not homogeneous in their priorities, tastes and comprehension abilities. In addition, the listener is lacking one of the most crucial means of assessing quality: an understanding of the source message. Thus, for example, smooth delivery may create the false impression of high quality when much of the message may in fact be distorted or even missing. On the other hand, a listener may misjudge a very faithful rendering as flawed when in fact it is the source that accounts for its shortcomings. (Shlesinger et al., 1997: p. 127)

This view is reaffirmed by Gile (2003). After reviewing studies on user expectations and carrying out his own study to elicit an audience's evaluation of interpreting performance, Gile concludes that "listeners are not very sensitive to two presumably important quality components, namely information fidelity and linguistic correctness" (Gile, 2003: p. 111).

Apart from studies on interpreters' and users' expectations, studies on quality of interpretation (Pöchhacker, 1994; Moser-Mercer, 1996; Shlesinger et al., 1997; Kahane, 2000; Pöchhacker, 2001; Kalina, 2005; Macías, 2006; Macdonald, 2013) have also served as a foundation for interpreter trainers to define assessment criteria.

What is noteworthy is that many of the criteria mentioned these studies are in fact very similar to those prescribed by early interpreter trainers (See Section 3.1.3). For instance, in her study on quality of interpreting, Moser-Mercer (1996) proposes this definition of “optimum interpreting”:

An interpreter provides a complete and accurate rendition of the original that does not distort the original message and tries to capture any and all extralinguistic information that the speaker might have provided, subject to the constraints imposed by certain external conditions. (Moser-Mercer, 1996: p. 44)

Shlesinger et al. (1997) suggest that interpretation should be evaluated on different levels. At the intertextual level the focus is on comparing the interpretation output with the source text. The second focuses on the intratextual level (i.e. examining the quality of the output in its own right); the third level focuses on comprehensibility of the output. To evaluate the intertextual level of an interpretation, the assessor will need to understand both the source language and the target language whereas the other two levels can be evaluated by someone who only speaks the target language.

Despite the fact that the focus of many of the studies is not on assessment criteria, there seems to be an agreement among researchers on the essential criteria to evaluate interpreting performance, such as completeness and accuracy. Pöchhacker (2001) reaches a similar conclusion after reviewing the literature on the quality of interpreting.

Pöchhacker (2001) believes that with regard to quality of interpreting, four concepts are deemed essential: accuracy, adequacy, equivalency and success. As a criterion, accuracy is associated with product-oriented assessment (Section 3.2.2) and focuses on whether or not the interpretation is faithful to the source text (ibid.). In other words, this criterion focuses on the “intertextual” aspect of the interpretation. In contrast, adequacy, also referred to as “clarity”, “linguistic acceptability” or “stylistic correctness” (ibid., p. 413), focuses on the “intratextual” aspect as it is about the quality of the target language and listener’s perspective. Equivalency is about the interpreter’s ability to “represent the speaker’s intention” and whether or not the

interpretation can create an equivalent effect to the target audience (ibid.).

Finally, Pöchhacker points out that

the focus of quality assessment may be neither on the source text nor on listeners' comprehension or speakers' intentions but on the process of communicative interaction as such. From this perspective, which foregrounds the '(inter)activity' of interpreting rather than its nature as a 'text-processing task' [...], quality essentially means "successful communication" among the interacting parties in a particular context of interaction [...] (Pöchhacker, 2001: p. 413)

Indeed, as interpreting is about successful communication among the interacting parties, quality may be viewed differently by different parties. This is a view that has been shared by many researchers into interpreting (see for instance Moser-Mercer, 1996; Pöchhacker, 2001; Gile, 2003; Vermeiren et al., 2009; Behr, 2015). In her attempt to study the issue of quality from the different perspectives of all the parties involved, Kalina (2005) proposes a framework that can be used to evaluate the quality of interpreting that also takes into account the processes of training and preparation. The framework includes:

- (1) a **pre-process** phase that includes trained interpreting skills and competences, information retrieval and preparation as well as coordination or cooperation with other members of a team,
- (2) a **peri-process** framework which includes the conditions in which the interpreting act takes place (data on participants, working languages, team composition, possible relay requirements, documents made available in-conference, time schedules, technical equipment),
- (3) **in-process** requirements to be met by interpreters, speakers, listeners, technical staff, etc. and
- (4) **post-process** activities (Kalina, 2005: p. 778, bolded in the original)

Kalina's (2005) framework does not point out specific criteria that focus on interpreter performance, but "pre-process" points out the fact that in order to ensure "quality", interpreters need to start working long before the interpreting assignment as they prepare for the assignment. "Peri-process" highlights the fact that interpreting quality can be influenced by many variables.

Moreover, Kalina's parameters for "in-process requirements", which include "profile of the event", "structure of interaction", "media used", "speaker language" and so on, can be applicable in interpreting classrooms to raise learners' awareness of the different situations mediated through interpreting. In fact, in the case study in the present research, the guidelines used by the course leader incorporate some of these parameters. (The details of these guidelines will be examined in Chapter 4).

In summary, despite the fact there are very few empirical studies that specifically attempt to define assessment criteria for interpreter assessment, studies on interpreters' criteria of good interpreting, on quality of interpreting and on user expectations have helped to provide trainers with some assessment criteria to be used in classroom settings. Interpreter trainers can draw on the researchers' suggestions to discuss and elaborate on criteria like accuracy, completeness, and quality of target language.

However, as discussed in Section 3.2, assessment criteria need to be valid and reliable. As many of these assessment criteria have not been tested for validity and reliability in empirical studies, more efforts are needed to improve these criteria. If the goal of an interpreter trainer is to enable student interpreters to assess their own interpreting performance, s/he will also need to ensure that transparent and elaborative assessment criteria can be provided. The next section will examine the efforts made by interpreter trainers to make the assessment criteria explicit and transparent to facilitate students' self-assessment.

3.4 Assessment criteria for interpreter self-assessment

The purpose of assessment will influence the way interpreting is evaluated (Behr, 2015). In general, interpreter training programmes use tests for at least three purposes: (1) as entrance exams or aptitude tests to determine if students have the required aptitude to enter a program; (2) as tests given by course leaders during the course to determine students' progress and provide feedback for improvement; (3) tests given on completion of the course(s) to determine if students can receive certificates or degrees (Seleskovitch and Lederer,

1989/1995; Arjona-Tseng, 1990; Sawyer, 2004; Shaw et al., 2008; Timarová and Ungoed-Thomas, 2008; Chabasse and Kader, 2014).

Most of the literature on interpreter assessment has focused on testing for the first purpose, i.e. aptitude tests to screen students (e.g., Lambert, 1991; Arjona-Tseng, 1994; Moser-Mercer, 1994; Shaw et al., 2008; Timarová and Ungoed-Thomas, 2009; Russo, 2011; Shlesinger and Pöchhacker, 2011; Chabasse and Kader, 2014; Russo, 2014). While studies on quality of interpreting (Section 3.3) have helped to give interpreter trainers some pointers on what constitute good interpreting, many questions remain unanswered, including the types of speeches to be used, and the different criteria for different mode of interpreting.

In educational institutions, assessment approaches often face issues related to “fluctuation in test method facets, in particular differences in test administration, content, and scoring” (Sawyer, 2004: p. 174). The procedures of interpreter assessment, including the choice of test materials and the way candidates are evaluated, also rely heavily on professional judgement (Cai, 2005a; Liu et al., 2008; Wu, 2010b; Liu and Chiu, 2011). In the interpreting classroom, whether a student’s performance is acceptable or satisfactory also depends largely on the trainers’ professional judgment and their own sets of criteria (Gao, 2012), which may or may not be explicit or transparent to the students.

Thus, researchers have called for greater scrutiny of the way exams are designed, the transparency of assessment criteria and how candidates are assessed (Hatim and Mason, 1997, Sawyer, 2004, Angelelli and Jacobson, 2009).

As mentioned in Section 3.2.3, with the change of pedagogical approach, interpreter trainers have started to explore the possibility of having students assess their own performance through ipsative assessment.

Russo's (1995) study on students' self-evaluation of their simultaneous interpretation was among the first studies that focused specifically on students' self-assessment. The author's aim was to "encourage SI students to analyse their performance, discover their weaknesses and strengths and channel their resources during the training period accordingly" (ibid. p.75). In fact, the study mainly discussed students' feelings about their weaknesses, instead of strengths, but the present author agrees with the recommendation in literature on self-assessment that students should do more than just picking out their mistakes and weaknesses.

In response to her students' request for explicit assessment criteria, Schjoldager (1996) developed a checklist for assessment of simultaneous interpreting from studies on quality of interpreting (See Section 3.3). The checklist, which Schjoldager refers to as "the feedback sheet", uses a series of questions to guide students through the process of assessing their own interpreting as a product.

The questions on the feedback sheet are broken down into four categories, as shown in Table 3.1: (a) "comprehensibility and delivery", which focuses on the user's perspective on the interpreted content and interpreter's delivery; (b) "language", which focuses on the quality of target language; (c) "coherence and plausibility", which focuses on interpreter's coherence and whether or not the interpretation makes sense; (d) "loyalty", which checks if the interpreter is faithful to the original speaker.

Assessment Criteria	Questions that the teacher/student asks during assessment
Comprehensibility and delivery	Is anything incomprehensible?
	Is the articulation bad?
	Are there irritating outbursts?
	Are there exaggerated fillers?
	Are there strange noises?

	Is the intonation unnatural?
	Are there excessive repairs?
	Are there irritating unfinished sentences?
	Is the voice unpleasant?
	Is the voice unconvincing?
Language	Are there irritating mispronunciations?
	Are there irritating grammatical mistakes?
	Is there interference?
	Is the language unidiomatic?
	Does it sound odd in the context?
Coherence and plausibility	Are there abrupt beginnings? Are there abrupt endings?
	Is the performance incoherent?
	Is the message implausible?
Loyalty	Does the interpreter mock the speaker?
	Does the interpreter mock the message?
	Are there significant omissions?
	Are there unjustified changes?
	Are there unjustified additions?

Table 3.1 Schjoldager's (1996) feedback sheet

What is noteworthy is that all the questions on the feedback sheet focus on undesirable features of interpretation. This approach can direct students' attention to mistakes and problems, perhaps due to the influence of error-analysis studies discussed earlier in Section 3.4. However, it fails to encourage students to also see their strengths or progress. Also, like many of the criteria included in Bühler's (1986) survey, the wording of the assessment criteria in Schjoldager's feedback can be said to be vague and

“oversimplifistic” (Bartłomiejczyk, 2007) and requires further clarification. However, as shown in Section 3.3, this problem is not uncommon among studies on quality of interpreting or interpreter assessment.

Whereas Schjodager’s feedback sheet was created to give students explicit assessment criteria, Riccardi’s (1998) assessment sheet is an attempt to differentiate assessment approaches for professional interpreters and student interpreters. Riccardi argues that it is problematic to use standards that are used to judge professional interpreters’ performance to evaluate student interpreters’ performance, a view that is shared by the current author. For professional interpreters, Riccardi suggests that “macrocriteria” can be used to check if the interpreter has successfully achieved the goal of effective communication: macrocriteria include “equivalence, accuracy, appropriateness and usability (ibid. p. 118). For student interpreters, Riccardi designed an assessment sheet based on what she refers to as “microcriteria”. The microcriteria are based on data collected after surveying interpreting trainers’ evaluation criteria and she also drew on studies on quality of interpreting and on personal experience (ibid.). The assessment sheet can be used for both SI and CI, as most of the criteria are shared by both modes of interpreting, with additional criteria added for evaluation of CI. Instead of the term errors, the author uses “deviations” to refer to performance that failed to meet the expectation. In total, Riccardi proposes 16 deviations, which are shown in Table 3.2.

Microcriteria	Description
Phonological deviation	Deviations from standard pronunciation
Prosody deviations	Wrong accent, deviations of intonation
Production deviations	False starts Fillers
Pauses	More than 3 seconds (and not present in the ST)
Lexical deviations	Errors of common and technical terms
Morphosyntactic deviation	Wrong concordances

Logical/semantic deviations	Deviation from the meaning of ST
Omissions	Omissions that result in loss of information
Additions	Additions that impede text coherence
Reformulation	The ability to move away from the influence of the ST
Technique	SI: décalage, volume, divided attention CI: note-taking
Successful solutions	All those instances indicating quality interpreting
Overall performance	The impression of the interpreting performance as a whole
Eye contact	CI only
Hand control and/ or gesticulation and/ or posture	CI only
Incomplete sentences	SI only

Table 3.2 Riccardi's (1998) assessment sheet

Again, the fact that Riccardi's (1998) assessment sheet focuses on "deviations" means that students might be less likely to think about their strengths or progress. However, the additional criteria for CI enable student interpreters to think about where to direct their efforts when they are working on CI.

The two assessment sheets discussed above are both based on the interpreter's or the trainer's perception of quality assessment. The two studies did not elicit student interpreters' opinions about the usefulness of these feedback sheets or how well they understand the criteria.

The project carried out by Hartley et al. (2003) rectified this problem by collecting opinions not only from interpreters and interpreter trainers, but also from student interpreters. The aim of the project was to develop a comprehensive feedback grid that could provide students with "explicit and detailed guidelines for peer- and self-evaluation". As the feedback grid was

designed specifically for SI, the criteria do not include skills that are closely related to CI, such as note-taking and eye contact.

To develop the grid, two groups of advanced student interpreters were asked to carry out self-assessment after interpreting. The first group of eight student interpreters were asked to interpret from French into their native language, English. The second group of four student interpreters were asked to interpret from Chinese, their native language, into English.

After interpreting the speeches given in a simulated classroom setting, student interpreters were asked to listen to the recordings of their own interpretation without pausing or rewinding. They could make notes when they were listening to the recordings. Afterwards, student interpreters were asked to write down comments on their own performance. Trainers and professional interpreters were also asked to listen to the same recordings and write down their comments on the quality of the interpretation. The researchers also invited users who only speak English to listen and comment on the interpretation.

Analysis of the comments from the three groups of participants showed that all three groups were concerned with the problem of delivery, namely voice, intonation, pace, speed, accent, hesitation, and articulation. The most important criteria, based on the number of mentions of the trainee group, were “delivery”, “omission/completeness”, “message/accuracy” and “awkward/natural TL [target language] expression” (Hartley et al., 2003: p. 13).

After reviewing the literature on quality of interpreting, consulting experts and analysing comments collected from the pilot study, Hartley et al. developed a peer-and self-assessment grid. The grid is broadly divided into five categories: inter-textual, intra-textual, behavioural skills, user perceptions and supporting knowledge (See the complete feedback grid in Appendix 4). Each category includes several subcategories that list criteria that trainees should pay attention to when they assess their own performance. However,

the number of criteria listed under each category seems to suggest that emphasis should be put on the first two categories.

- (i) Inter-textual: This category asks students to compare their interpretation (TT) with the source text (ST). It suggests that students look at the content, grammar, rhetorical force and *décalage*. Under each of these suggested subcategories are more detailed criteria. For instance, accuracy and completeness are under the subcategory of content.
- (ii) Intra-textual: This category asks students to examine their interpretation as a product. On the one hand, students need to evaluate the language quality of their interpretation, including the cohesion, coherence and grammatical correctness. On the other hand, they also need to take a step back and look at the overall presentation of their interpretation, which entails issues of repairs and fluency.
- (iii) Behavioural: the third category focuses student's attention to their booth manners and noise management and it also asks students to judge their own stamina.
- (iv) User perceptions: the fourth category asks students to examine the interpretation from the user's perspective and takes a bird-eye's view of their interpretation to see if they have managed to structure their interpretation in a way that makes it easier for listeners to understand.
- (v) Supporting knowledge: the last category asks students to check if they have accumulated enough background knowledge to assist them to perform better.

According to the explanation of the researchers, as they designed the grid, they tried to incorporate suggestions from studies on quality of interpreting (Shlesinger et al., 1997), the pragmatic approach to interpreter assessment (Kopczyński, 1994), the text-linguistic approach to interpreting (Hatim and Mason, 1997) and studies on user expectations (Kurz, 1993/2002; Moser, 1995).

Revisions were made to the grid after it had been tested by participants and it was found that participating trainees generally were positive about “the completeness of coverage of criteria and lasting usefulness compared to verbal feedback” (Hartley et al., 2003: p. 14). However, the researchers also acknowledge the need for a larger-scale study to test the grid.

In the current study, Hartley’s feedback grid has been used as one of the guidelines to facilitate students’ self-assessment (More details of this will be discussed in Chapter 4). The results of the case study, to be presented in Chapter 5, will help to reveal how students actually used the feedback grid to assess their interpreting performance.

Like the project carried out by Hartley et al. (2003), Bartłomiejczyk’s (2007) study also asked student interpreters to interpret a speech and then comment on their interpretation. However, in addition to self-assessment of “both negative and positive aspects” of the interpretation, Bartłomiejczyk also asked student interpreters “to reconstruct the thought processes that had led to failures or successful solutions” (ibid. p. 257). The findings of the study shows that student interpreters’ quality assessment tended to focus on the product and on the negative aspects; specific aspects that have been mentioned by the trainees included completeness, faithfulness, coherence, style, lexis, presentation, and grammar.

The study also suggests that student interpreters often find it difficult to express their “strategic processing” (Bartłomiejczyk, 2007: p. 258). Bartłomiejczyk provides two possible reasons for the trainees’ lack of “strategic awareness” (ibid.):

[...] strategies are not reported either because they are not used (which would mean that the subjects have not yet learned to apply strategic processing effectively) or because these processes are already highly automated and therefore not accessible to retrospection (which would mean that the subjects have a well-developed system of strategies whose employment does not use up processing capacity). Another possibility to consider is that the subjects may sometimes

refrain from reporting strategic processing because they feel unable to voice their comments properly [...] (Bartłomiejczyk, 2007: pp. 258-259)

If Bartłomiejczyk's explanations for trainee's lack of strategic awareness are valid, then this will imply that self-assessment alone is not enough. In addition to providing student interpreters with transparent criteria for self-assessment, trainers also need to improve trainees' awareness of their strategies. However, what types of strategies should student interpreters be aware of? Should they focus on interpreting strategies or learning strategies? These issues will be discussed further in Section 3.5.

In summary, this section has reviewed studies that specifically focus on clarifying assessment criteria so that these criteria can be used by students in class or during self-study. As there are very few empirical studies on interpreter assessment, the studies reviewed in this section have mostly drawn on studies on quality of interpreting, user expectations and opinions of professional interpreters. However, there is considerable agreement among researchers and practitioners on what criteria are important for good interpreting. These criteria will be used in the theoretical framework to help the researcher identify evidence in the reflective journals for students' self-assessment.

3.5 Interpreting strategies and learning strategies

Reflection, as defined for the present study in Section 2.11, is a cyclical thought process that learners go through to solve problems and to gain new insights from an experience, but what does problem solving mean in the context of interpreter training? According to Gile's Effort Models of interpreting (Section 3.1.4), during the interpreting process, interpreters may face the tightrope situation where they have to use coping tactics or interpreting strategies to resolve the problem or minimise the damage to the quality of interpreting. One of the main reasons that trainers encourage students to engage in reflective thinking is to help them to gradually learn to use interpreting strategies.

At the same time, trainers cannot ignore the fact that students do not have the same language proficiency as professional interpreters. In ideal situations, “students already have the ability to carry messages across linguistic barriers” (Ilg and Lambert, 1996: p. 73). However, studies have shown that students studying interpreting often need to enhance their command of language (Shaw et al., 2004; Yan et al., 2010). When students are struggling with comprehension and finding the appropriate expressions, they probably do not have the capacity of using interpreting strategies. In such situations, students will need learning strategies to help them improve their basic ability.

In other words, students in the present study have two roles: trainee interpreter and learner. In their reflective journals, students may talk about the interpreting strategies they have used during the interpreting process; they may also talk about learning strategies that can make them better learners. Hence, for the current study, it is necessary to make a clear distinction between interpreting strategies and learning strategies.

3.5.1 Professional interpreters’ interpreting strategies

Interpreting strategies have been widely discussed in different contexts. These discussions often concentrate on what strategies interpreters can apply during the interpretation process. However, one needs to remember that “preparatory work constitutes a key strategic step” for professional interpreters (Kader and Seubert, 2015: p. 127, also see Kalina 2005 in Section 3.3.) As explained by Kader and Seubert (2015), during preparation, professional interpreters gather information about the conference and the individual speeches, “anticipate certain topics, speakers and speeches” (p. 127), and continuously check and monitor if there is any change to the conference. Without sufficient preparation, the interpreter may have false expectations, which can lead to more stress during the interpreting process.

Preparation usually happened before the interpreting assignment. Once the interpreter start interpreting, as pointed out by Kalina (1992a; 1994a) and Kohn (1996) the interpreter will then need to use interpreting strategies to overcome the various constraints that can affect their comprehension and

production in an interpreter-mediated communicative event. For instance, for consecutive interpreting, interpreters need to store the information of the source text for an extended period of time before they can produce the target text. Hence, interpreters use strategies to help them cope with the difficulty. These strategies have been broadly divided into two categories: comprehension strategies and production strategies.

Comprehension strategies discussed by the two researchers include modification of the time lag, inferencing and anticipation. The first strategy is particularly relevant for simultaneous interpreting while latter two strategies can be useful for both consecutive and simultaneous interpreting. Kohn and Kalina (1996) argue that, during the simultaneous interpreting process, when an interpreter encounters a comprehension problem, the interpreter may “resort to strategies of **extending or narrowing the time lag** (*décalage*)” (ibid. p. 131, bold and italic in the original) in order to improve comprehension of the source text. In addition, an interpreter may also use other strategies to cope, for instance, inferencing, i.e. the interpreter tries to make inferences about the source text based on what s/he has heard and understood and based on his/her general knowledge (Kalina 1998, cited in Bartłomiejczyk, 2006), and anticipation, i.e., the interpreter’s conscious effort to try and predict what the speaker may say next.

Interpreters may also use production strategies to minimise the negative impact of the difficulties they encountered during the interpreting process. According to Kohn and Kalina (1996), an interpreter may deliberately choose to interpret only the information that s/he has understood correctly or use vague expressions. When the source text is “inappropriately complex” (p.132), the interpreter may try to simplify the sentence, paraphrase or restructure the sentence. Compression/condensation is another important strategy for interpreters. The interpreters may try to convey the information but render it to a “higher macro level” or condense repetitive information in the source text. They may also try to paraphrase what they have understood in an effort to convey the message. Moreover, in the entire interpreting process, interpreters

have to constantly monitor their output, and the monitoring strategy is considered to be an overall strategy.

Kohn and Kalina (1996) also maintain that when an interpreter is interpreting, various interpreting strategies are constantly interacting with one another:

In practice, strategies of very different types and levels interact to a large extent. There can be no strategically controlled production unless comprehension strategies have been successful. Anticipated elements and uttered anticipations have to be monitored for correctness; there can be no error correction or repair strategies unless monitoring has taken place; sentence splitting requires strategies to maintain cohesion; paraphrasing often entails syntactic restructuring, which again requires longer *décalage*, more monitoring, more memory effort, etc. Any one single strategic decision will have consequences for numerous others to be taken. (Kohn and Kalina, 1996: p. 132, italic in the original)

Whereas Kohn and Kalina think of the interpreting strategies as methods that interpreters use to help them overcome the comprehension and production constraints presented in an interpreter-mediated communicative event, Gile (1995a; 1997; 2009) thinks of the strategies as an interpreter's methods or "coping tactics" to help him/her cope with various "cognitive load-related factors" that has led to saturation of their cognitive processing capability (Gile, 2009: p. 179, see also Section 3.1.4). As interpreters become "aware of actual or potential comprehension and/or reformulation problems" (ibid.), they will make "deliberate decisions" (ibid. p. 188) to use various coping tactics to minimise potential damage to the quality of interpreting.

Based on his Effort Models (Section 3.1.4), Gile (1995a; 2009) divides the coping tactics into three categories: comprehension tactics, preventive tactics and reformulation tactics. Comprehension tactics are strategies used by interpreters to help them cope with comprehension problems, which include "delaying the response", "restructuring the segment with the help of the context", "using boothmate's help" and "consulting resources in the booth" (Gile, 2009: pp. 188-190).

Gile's "delaying the response" means that an interpreter deliberately delays the utterance of his/her interpretation. In SI, by delaying utterance of the interpretation for a few seconds, the interpreter can have a bit more time to think about what s/he has just heard. In CI, the interpreter may need to leave a blank space in the notepad and wait to see if the speaker will mention this point again later, so that the interpreter can return to the point and fill the blank.

For both SI and CI, the interpreters can make educated guesses about what they have missed by using the context and the interpreter's own extralinguistic knowledge about the subject. The SI interpreter can choose to restructure the interpretation to gain more time and wait for more information to come in, but a CI interpreter may need to decide if s/he needs to ask the speaker for clarification or omit the information.

For SI interpreters, boothmates and documents in the booth can be helpful, particularly for numbers and technical terms. In comparison, CI interpreters do not have boothmates, but they may have the opportunity to ask the speaker for confirmation, or they can consult a glossary list for technical terms.

Preventive tactics, according to Gile (2009), are tactics interpreters use when they "believe that a problem may arise or is about to occur" due to "time or processing capacity pressure" (ibid. p. 191). Preventive tactics for SI include "taking notes", "lengthening or shortening the Ear-Voice Span", "segmentation and unloading of short-term memory", and "changing the order of elements in an enumeration" (ibid. pp. 191-192).

SI interpreters may note down numbers or names during the interpreting process to relieve their short-term memory for the incoming information. They may also choose to change their ear-voice span, which is similar to what Kohn and Kalina (1996) refer to as changing the time lag. Shortened ear-voice span can reduce cognitive load of short-term memory, but the interpreter faces the potential risk of misunderstanding. Lengthened ear-voice

span allows the interpreter to have more time to process the information and use anticipation, but his/her short-term memory may be overloaded.

Gile's "segmentation" is similar to what Kohn and Kalina (1996) refer to "sentence splitting". By segmenting a long sentence in the source text into several short sentences while maintaining the original coherence by using cohesive devices, the interpreter can reduce loading of his/her short-term memory.

When the speaker gives a list of things in an information-dense speech, the interpreter may change the order of elements in the enumeration. In other words, the interpreter may choose to interpret the last item first and move on to the other items so as to reduce loading of his/her short-term memory.

The last category of the coping tactics proposed by Gile (2009) is reformulation. Reformulation tactics work closely with the other two categories. In fact, the first three tactics in this category are identical to the tactics discussed in comprehension tactics because delaying response, consulting a boothmate and resources in the booth are tactics that can help comprehension but also affect reformulation.

The other reformulation tactics discussed by Gile include "replacing a segment with a superordinate term or a more general speech segment", "explaining or paraphrasing", "reproducing the sound heard in the source-language speech", "instant naturalisation", "transcoding" and "form-based interpreting" (ibid. pp. 193-195). The first two tactics are very similar to those discussed in the study by Kohn and Kalina (1996), i.e. the interpreter will choose to use a more general statement to convey the message or s/he may choose to explain and paraphrase. Using these tactics, the interpreter can relieve his/her cognitive loading for other tasks, but the information rendered will be considered less accurate.

Using “reproducing the sound heard” and “instant naturalisation”, the interpreter basically repeats the sound or the word that s/he has heard from the source text. These two tactics are useful when the source language and the target language share similar pronunciation and vocabulary.

The last two tactics, “transcoding” and “form-based interpreting” are tactics that are considered to be last resort when interpreters have to interpret a speech that is really dense with information and/or when the speaker is reading a text at extremely fast speed. These two tactics involve word-for-word translation and the interpreting focuses on the surface structure, rather than the meaning of the source text (Bartłomiejczyk, 2006).

Gile also discusses the possibility of “informing listeners of a problem”, “omitting the content of a speech segment”, “parallel reformulation” and “switching off the microphone” (ibid. pp. 195-197). However, as these tactics are used only in extreme cases and may not be applicable in classroom settings or students’ self-study sessions, these tactics will not be discussed in the current study.

Although different terms or categories have been used in the literature, one can see interpreters’ interpreting strategies and coping tactics are very similar, which means that these strategies and tactics are shared among professional interpreters. In her study of student interpreters’ interpreting strategies using retrospective comments, Bartłomiejczyk (2006) identifies over 20 interpreting strategies. In their review of interpreting strategies for SI discussed in the literature, Kader and Seubert (2015) identify 16 micro-strategies that are very similar to the ones discussed above.

3.5.2 Students’ learning strategies

In interpreting studies, learning strategies have been associated with metacognitive learning (Moser-Mercer, 2000a) and “autonomous learner” (Horváth, 2007). However, researchers in interpreting studies have neglected to define learning strategies and seem to be content with the ill-defined concept that learning strategies are various methods related to learning how to learn.

For instance, Horváth (2007) talks about changes in students' learning strategies, but no definition is provided to explain what is considered a learning strategy in the study. However, the examples given in the same study (*ibid.*) to illustrate changes in learning strategies refer to changes to students' focused attention and changes of learning habits. Does this imply that focused attention is one type of learning strategies?

The scarce discussion of learning strategies in interpreting studies has compelled the researcher to look for answers in other disciplines. Surprisingly, studies on learning strategies in language acquisition, psychology, and education have not reached a consensus on what is a learning strategy. As shown in the review carried out by Gu (2012), what can be agreed on is the fact that learning strategy is a "fluid concept" (p.331) and researchers may have different ideas in mind when they talk about learning strategies. Some talk about learning how to learn while others talk about learning strategies being "learning techniques, behaviours, or actions" (Oxford and Crookall, 1989).

Facing the challenges in defining "learning strategy", Gu (2012) proposes "a prototype perspective" of learning strategies:

Prototypes are the ideal forms, so to speak, of target concepts. Particular instances are evaluated by means of comparing them to the prototypical exemplars to see how much common variance they share. Finding strategy prototypes and matching various strategic properties against them offers a much more illuminating perspective in the definition and description of learning strategies than simple categorizations based upon the presence or absence of, for instance, generality, or of other strategic attributes. Hence, the definition of learning strategies, according to prototype theory, would mean the delimitation of attributes that anchor the central core of a strategy, while at the same time spelling out possible dimensions of variance [...]
(Gu, 2012: p. 336)

Adopting the prototype perspective to define a learning strategy, Gu argues that "a prototypical strategy is a dynamic process with problem-solving as its central aim" (*ibid.*). According to the Gu, this dynamic process involves "selectively attending to a problem", "analysis of self, problem, and situation",

“making, execution and evaluation of a plan”, “monitoring progress and modifying plans”, “evaluating results” to “problem solved” (Gu, 2012: pp. 336-337).

There are apparent similarities between the learning strategies discussed above and the concepts of the reflective cycle (discussed in Sections 2.6 and 2.10). Such similarities also help to support the claim that reflection can be transformed into a learning strategy that involves a higher order of learning. (Black and Plowright, 2010; Scott, 2013).

To sum up, in the context of interpreter training, trainee students are learning to interpret, which includes knowing when and how to use interpreting strategies to cope with various challenges and constraints during the interpreting process. At the same time, as learners, students are still striving to acquire the expertise needed to become interpreters. Engaging in reflective thinking has the potential of helping students become aware of their learning problems, analyse the problem, come up with plans, implement the plan and evaluate the results to see if they have managed to solve the problem. In other words, through the reflective process, they will gradually become aware of their learning strategies. There is no guarantee that a particular strategy will always yield a satisfactory result (Bartłomiejczyk, 2006), but student interpreters should at least become aware of the various strategies they have attempted and enhance those strategies that have helped them improve.

3.6 Modification of the theoretical framework

In Section 2.12, it was explained that Gibbs’ model for the reflective cycle will be adopted as the main theoretical framework for this study. However, concepts related to interpreter assessment need to be incorporated into the theoretical framework for the researcher to answer the question (Section 1.2) regarding the potential tension between reflection and assessment. After reviewing literature on quality of interpreting and discussions on interpreter assessment criteria, the researcher can now attempt to define the various concepts related to interpreter performance, for analysis of the data.

As explained in Section 2.10, Gibbs' (1988) cyclical model starts with a question that asks learners to describe what happened. In the context of the current study, when student interpreters are asked to describe what happened, their description might include what Kalina (2005) refers to as "in-process requirements", which include "profile of the event" and "speaker language" (See Section 3.3). They might also provide information related to the interpreting practice, including the date when the practice takes place and the type of practice. As we will see in Chapter 4, one of the guidelines provided to the students has specifically asked them to include this information (Section 4.3.3).

In Gibbs' model, the second stage is about learner's feelings about the experience. As discussed in Sections 2.8 and 3.4, students' feelings about a particular interpreting practice may affect their reflection and reflective process has the potential of encouraging students to express their feelings. Although researchers into interpreter education often comment on students' reporting anxiety, feelings of frustration or feeling stressed (Kurz, 2003a; Cai, 2005a), it is only in recent years that these issues have been discussed and studied in depth in the literature of interpreter training (Chiang, 2010; Bontempo and Napier, 2011; Lu, 2011; Lu and Liao, 2012). Attention to students' expression of their feelings in the logbooks may help trainers become aware of student interpreters' feelings.

In Gibbs' reflective cycle, the next stage is "evaluation" and learners are suggested to give value judgment of their learning experience. At the same time, this study aims to examine students' self-assessment of their performance, so assessment of interpreting is included in the stage of "evaluation".

The present study's review of the literature on quality of interpreting and interpreter assessment has helped the researcher to identify the following as core criteria for assessment of interpreting quality: accuracy, faithfulness, completeness, quality of target language, coherence, and delivery. These criteria are also feature in the scaffolding tools which students in this study have been supplied with to support their self-assessment. The researcher will

now examine how these are defined in the literature and explain how they will be defined in the theoretical framework.

The first two criteria to be discussed focus on the intertextual level (Shlesinger et al., 1997). Accuracy and faithfulness (or fidelity) are often discussed as if they are interchangeable concepts (Gile, 1995b; Pöchhacker, 2001), but it is believed that it is necessary to differentiate the two concepts in this study. For the purpose of this study, accuracy focuses on keeping the facts straight, which means all the information in the original speech, including the figures and names, are conveyed correctly. Accuracy also means that there is no unwarranted addition or distortion of information. Faithfulness, on the other hand, focuses on the interpreter's ability to "maintain not only the content [of the original speech,] but also the stylistic and rhetorical element which characterises it" (Cecot, 2001: p. 63) and reflect the speaker's intention and emotion.

The next few criteria focus on the intratextual level. In the literature of interpreter assessment, the criterion "completeness" is often explained by using questions related to omission. In the context of interpreter education, omission is something to be avoided, as shown in various self-assessment tools in Section 3.4. Therefore, although in reality, interpreters do omit information and omission can sometimes be used as a strategy (Napier, 2004; Pym, 2008; Korpala, 2012), for the purpose of this analysis, the concept of "completeness" will be defined as "the extent of omissions in the interpretation".

The definitions of coherence and cohesion present particular challenges for this study. The review of the literature on cohesion and coherence reveals that the two terms have been used interchangeably. The distinction between the two concepts has been made by Beaugrand and Dressler (1981). However, as pointed out by Ahn (2005),

Nowadays, cohesion is generally seen as surface grammatical relevance of text and coherence represents relevance in terms of substance [...] However, these two terms are not

consistently used this way, nor have they been used as such from the beginning. (Ahn, 2005: p. 698)

Nevertheless, in interpreter training, it is common practice for trainers to ask students to think about the coherence of their interpretation or how they have made use of cohesive devices. Can student interpreters differentiate the two concepts?

When the term coherence is discussed in the literature related to interpreter education and assessment, it has been used to mean “consistency of sense” (Bühler, 1986) and “logical coherence” (Ahn, 2005) of the target text, i.e. whether or not the audience can understand the logic of the source text as they listen to the interpretation. According to Beaugrand and Dressler (1981), coherence is about how a text links together and “continuity of sense” (p.2) whereas cohesion is seen as the various grammatical devices used in a text as lexical links to hold the text together. Hatim and Mason (1997) agree with this approach and suggest that cohesion refers to the use of “textual clues” in order to maintain sense. In Chapter 5, in the data analysis, the researcher will attempt to see if students in this current study can differentiate the two concepts when they carry out self-assessment.

Another important intratextual aspect to be evaluated is the quality of the target language. In the literature, this criterion evaluates if the interpreter’s interpretation is clear, linguistically acceptable and stylistically correct (Pöchhacker, 2001). Although some of these concepts remained ill-defined (e.g. how to measure stylistically correctness) in the literature, it can be inferred that this criterion evaluates the linguistic correctness of the target language quality. Thus, for this study, quality of the target language will focus on the use of appropriate language with appropriate terminology, correct grammar and correct register.

Finally, the last criterion evaluates the delivery of the interpreter. Discussion of interpreter assessment criteria in this chapter has shown that the concept of delivery is subject to examiner’s professional judgement and

includes many sub-criteria, such as voice and fluency. When they carry out self-assessment, student interpreters may also use their personal judgement to evaluate their delivery. To ensure that all these sub-criteria can be taken into consideration, in this study, the definition of delivery will include all the relevant aspects, namely voice quality, fluency, pace, hesitation, fillers and pauses (see Mead, 2000; Cecot, 2001; Mead, 2002, and Fernandez, 2013 for more in-depth discussion on delivery, pause and hesitation in interpreting studies).

Although these sub-criteria are applicable for both SI and CI, they cannot be used to evaluate aspects that are associated with CI or liaison interpreting, in particular the interpreter's eye contact, gaze with interlocutors, posture and appearance of confidence. Hence, a separate criterion, "presentation" is added to the list of criteria for the current study and it is defined as the interpreter's eye contact, gaze, posture, gesture and appearance of confidence.

After defining the core assessment criteria that will be applied to examine students' reflective journals for the "evaluation" stage of Gibbs' reflective cycle, the researcher will now move to define concepts for the next stage. The next three stages in Gibbs' reflective cycle, including "analysis", "conclusion" and "action plan" are all related to what Bartłomiejczyk (2007) refers to as "strategic awareness".

In students' reflective journals, they may discuss learning strategies and/or interpreting strategies (Section 3.5). For the purpose of this study, interpreting strategies will be those strategies that are used to cope with problems involved in listening and comprehension, production and coordination of the interpreting process (see Section 3.1.4 and 3.5.1). Strategies that are not directly connected to the interpreting process, such as increasing practice time, reading background information and practice pre-interpreting exercise will be defined as learning strategies. The researcher will also look for signs in the reflective journals for students' action plans and signs that indicate students are thinking about what to do next for their

improvement. Reflective journals, thus, act as “a mechanism to externalize meta-cognitive processes” (Moser-Mercer, 2008: p. 14).

3.7 Conclusion

This chapter began with an overview of pedagogical approaches and assessment approaches discussed in the literature on interpreter education and highlighted the fact that for a long time interpreter pedagogy and assessment have been impressionistic. This was followed by an examination of fundamental concepts in educational assessment and the challenges faced by researchers, including the difficulty of defining construct for interpreter assessment. Studies on quality of interpreting, on the other hand, have helped researchers and trainers to establish assessment criteria which are used by trainers to encourage students to carry out self-assessment.

Considering the fact that students in the research context may need to be aware of two types of strategies, the researcher sought to differentiate interpreting strategies and learning strategies. Finally, drawing on assessment criteria discussed in the literature, the theoretical framework was modified for the purpose of this study to incorporate the components of assessment.

The next chapter will explain the methodology adopted in the current study. It will also explain the context of the case study and examine the scaffolding tools provided to the students in the present study.

Chapter 4 Methodology

4.1 Introduction

The review of the literature in Chapter 2 shows that theories of experiential learning and theories of reflection have been applied in practice in various disciplines to challenge traditional understanding of learning and encourage learners to engage in reflective practice. The review of previous studies related to interpreter training in Chapter 3 also informs us that there are signs that the current practice of interpreter training is shifting towards pedagogical approaches that are more student-centred, which includes measures that aim to encourage students to engage in self-assessment and/or reflective practice.

However, while there are studies that specifically focus on students' self-assessment (see for instance Hartley et al., 2003; Bartłomiejczyk, 2007 in Section 3.4), studies that aim to explore difficulties experienced by student interpreters (Russo, 1995; Moser-Mercer, 2000a in Section 3.4) and studies that focus on developing students' ability to reflect from their experience (see for example Peterson, 2000; Miyamoto, 2008 in Section 3.4), very few empirical studies on spoken language interpreter training have been carried out to study students' reflective journals and identify the relationship between self-assessment and reflection as manifested in the reflective journals.

The relationship between self-assessment and reflection may be cyclical according to Gibbs' reflective cycle, or it may cause tension, as suggested by Boud (1999). The problem is without information on the relationship between self-assessment and reflection, it is difficult for interpreter trainers to know if we are pulling students in different directions when we ask them to self-assess their interpreting performance and reflect from the experience. (See Section 2.14 for the discussion on the tension between reflection and assessment.) The actual challenges and benefits that interpreter trainers face when they try to shift from a traditional, teacher-centred approach to a student-centred approach also need to be explored.

In addition, as shown in Section 3.4, interpreter trainers have developed a variety of scaffolding tools (see Schjoldager, 1996; Riccardi, 1998; Arumí and Esteve, 2006) based on their own assumptions about how to guide reflection and self-assessment, and yet there are thus far very few empirical studies that analyse students' reflective journals to identify the potential influence of these scaffolding tools. Without information on the influence of scaffolding tools, interpreter trainers may fall into the trap of working with the wrong assumptions, believing that their students understand the purpose(s) of the scaffolding tools and know how to use the scaffolding tools.

A case study that examines the content of students' reflective journals can thus be useful for researchers to gain knowledge about how students engage in self-assessment and reflection and identify the potential relationships or tensions between self-assessment and reflection. By examining the various scaffolding tools provided to students, the case study can also help to identify potential influence of these scaffolding tools. Consequently, a case study has been carried out by the researcher to answer the research questions and contribute to our knowledge about students' self-assessment and reflection.

Before providing more in-depth explanations regarding the case study approach, it is important for the researcher in the present study to explain why action research and interviews have not been adopted for the present study.

As discussed in Chapter 2, reflective practice and action research are closely connected. Although researchers have used different definitions for action research, it is generally agreed that action research involves "systematic reflection" (Elliott, 1991; McMahan, 1999; Costello, 2011; Hale and Napier, 2013). In educational settings, action research is usually carried out by educators "to understand, to evaluate and then to change, in order to improve" (Bassey 1998, p. 93 quoted in Costello, 2011). In interpreting studies, researchers and trainers have also carried out action research which goes through the cycle of asking questions, planning, taking action, observation and reflection (Napier, 2005; Boéri and de Manuel Jerez, 2011; Liu, 2011).

However, reflection in action research refers to the researcher/teacher's own reflection of their professional practice or teaching practice as s/he works to identify areas that can be changed for improvement. In other words, the ultimate goal of reflection in action research is to bring changes to the individual's professional or teaching practice. The premise for action research to be effective is that the person carrying out the action research is involved in the decision-making process related to the course material, instruction or even curriculum design.

In contrast, in the current study, the researcher was not a member of the instruction team, nor was she involved in designing the curriculum, choosing course material or deciding the format of the reflective journals to be submitted by students. As will be shown in later sections, all the decisions regarding curriculum design, selection of course materials and the initiative for students to keep reflective journals, had been decided before this research took place. In other words, the researcher could not go through the cyclical process of action research mentioned earlier because no changes could be made to the curriculum or course material by the researcher during the research process. Thus, this project cannot be considered to be a project of action research.

Moreover, even though this study examined reflective journals and the researcher did keep an informal reflective journal, the focus of this study is on students' reflective journals, not the researcher's own reflection. This makes this study different from action research, in which the researcher's own reflective journal plays a key role.

Another commonly used research method in studies on reflective practice and reflective journals is interview. In studies on reflective practice, interviews are usually used to explore participants' views about reflective practice or journal writing (see Lai and Calandra, 2007; Ortlipp, 2008; Otienoh, 2011; Shaw, 2013). This method has also been used for triangulation to "secure an in-depth understanding of the phenomenon in question" (Denzin and Lincoln, 2005: p. 5).

For the current study, interviews could be useful to enable the researcher to explore the perceptions of the course leader and participants about the reflective journals. Additionally, the data collected from the interviews could also be used for triangulation. However, after due consideration, the researcher decided not to include interviews in this case study for the following reasons.

First of all, even though participants' perceptions about the journals and the requirement to keep reflective journals would be valuable, the core of this study is not about participants' perceptions, but how participants attempted to follow the instruction of the scaffolding tools in writing when they were trying to balance the tasks of self-assessment and reflection.

Secondly, researchers who have used interview to explore participants' perceptions about reflective journals have often stated that participants have positive views about journal keeping, yet the contents of the journals still tend to be descriptive (Bain et al., 1999; O'Connor et al., 2003; Lai and Calandra, 2007; Otienoh, 2011; Williams and Grudnoff, 2011; Radulescu, 2012). This implies that participants may try to please the researchers when they answer questions during interviews, a phenomenon known as "social desirability effect" (Marvasti, 2012). As the current study focuses on the content of the journals, participants' views about reflection and self-assessment are considered to be manifested in the reflective journals. While there is a risk that the students may try to please the teacher in the content included in the journal, the social desirability effect is minimised for the current study.

Nevertheless, the researcher acknowledges that interview can be a valuable source for the case study and the lack of this dimension is a limitation of the current study. In future studies, the researcher would seek to use interviews to gain more understanding about participants' views.

Having explained why action research and interviews are not adopted for the current study, the researcher will now explain the case study approach and its rationale in the present research.

4.2 Case study approach

In interpreting studies, case study research is a commonly adopted approach. Case study research has been undertaken to understand the learning experience of student interpreters and it has been used to examine how exams have been carried out in educational institutions. For instance, Moser-Mercer's (2000a) study on difficulties experienced by student interpreters is a case study that presents "a series of snap-shots of student performance along a specified time line" (Moser-Mercer, 2000a: p. 350), with students studying at the Ecole de Traduction et d'Interpretation of the University of Geneva as the cases. Roy (2000) conducted a case study of an interpreter-mediated meeting between a deaf student and a professor. Her analysis of the meeting produced evidence showing that the interpreter was an active participant of the interaction, rather than an invisible conduit. Sawyer (2004) uses the case study of Monterey Institute of International Studies to highlight issues that need to be addressed in interpreter assessment. Hale and Napier (2013) also find that

[...] case studies often do provide a very thick description of the interpreting process or product, and the case studies are snapshots taken by interpreter researchers as part of their on-going work in a given context. (Hale and Napier, 2013: p. 113)

4.2.1 Interpretivist and neopositivist approaches to case study

In an attempt to present a typology for case study, Thomas (2011b) offers the following observation:

Differing themes and priorities characterize attempts at definition of the case study. This is to some extent explicable by the diversity of epistemological starting points from which practitioners and analysts of the case study arrive. While those from sociology, education, and psychology have tended to see the case study in an interpretivist frame, those from business, politics, and other areas may espouse the interpretivist holism of case study but address this through what George and Bennett (2005, p. 5) have called "neopositivist" means via the identification of variables to be studied [...] (Thomas, 2011b: p. 512)

Thomas's observation shows that researchers have used case study differently according to their epistemological positions. Specifically, he

proposes that there are at least two popular case study approaches: the interpretive case study and the “neopositivist” approach of case study (ibid.).

The interpretive case study approach has been proposed and promoted by Stake (1995; 2005) and Merriam (1998). For interpretivists, the most important characteristic of a case study is its “interest in individual cases” (Stake, 2000: p. 435), and a case can be “a person, a group, an institution, a country, an event, [or] a period in time” (Thomas, 2011a: p. 3).

An interpretivistic approach of case study can adopt literally any method, as long as the case is at the focal point of the study, as argued by Stake:

By whatever methods, we choose to study the case. We could study it analytically or holistically, entirely by repeated measures or hermeneutically, organically or culturally, and by mixed methods--but we concentrate, at least for the time being, on the case. (Stake, 2000: p. 435)

In other words, case study is unlike other methodologies that often imply the adoption of specific research methods. For instance, ethnography usually involves long-term field observation and grounded theory usually involves using “constant comparative analysis” of interview transcripts. The interpretivists’ view of case study is that it “is a frame that offers a boundary” (Thomas, 2011a: p. 21) to the particular study. The case study defines the boundary for a study, not the particular research methods that a researcher can use to gather data or analyse data for the study.

The second approach of case study—the neopositivist approach, also embraces the idea that case study approach is a research strategy that does not imply any particular research methods (Yin, 1981; Eisenhart, 1989; Yin, 2009). However, this approach also gives more attention to making case study research more rigorous. Proponents of the neopositivistic approach to case study tend to adopt criteria that are associated with an experimental approach or variable-oriented approach to measure certain features of a case study. For instance, Yin (2009) states that case study approach is particularly suitable in

situations when there are too many variables to make an experimental approach feasible.

Yin's attempts to recommend the conditions best suited for case study research are made in response to critiques to credibility of case study research and provide justification for case study research. Here, a clear distinction should be made between studies that aim to answer "what" questions and studies that focus on "why" questions. (Thomas, 2011b) While studies in natural science are more likely to focus on "what" questions, Yin (2009) argues that a case study is suitable

when (a) "how" or "why" questions are being posed, (b) the investigator has little control over events, and (c) the focus is on a contemporary phenomenon within a real-life context. (Yin, 2009: p. 2)

Yin's recommendations are made as an attempt to show the distinctive strengths of case study research, in contrast with the experimental approach. Experiments are often carried out to answer "what" questions, but a case study is used for "how" and "why" questions. The experimental approach works to control and at least manage the variables in a controlled environment, but case study takes place in a real-life context, and so the investigator cannot control the variables, and should not pretend that all the variables will be accounted for.

However, cautions should be given when researchers compare case study with the experimental approach because the two approaches to research have very different epistemologies about the social world (Thomas, 2011a; 2011b). While one cannot say that the two approaches are exclusive of each other, it is not reasonable to use the set of criteria developed to evaluate experimental approaches to evaluate case study research.

Despite the differences in the two approaches of case study, they share some commonalities. They both focus on individual cases; they both put case study in the real-life context; and they both argue that case study is not defined by the methods employed.

4.2.2 Definition of case study for the current study

The current case study has adopted the definition provided by Simons (2009) as it unites the two approaches by focusing on their commonalities:

Case study is an in-depth exploration from multiple perspectives of the complexity and uniqueness of a particular project, policy, institution, programme or system in a ‘real life’ context. It is research-based, inclusive of different methods and is evidence-led. The primary purpose is to generate in-depth understanding of a specific topic (as in a thesis), programme, policy, institution or system to generate knowledge and/or inform policy development, professional practice and civil or community action. (Simons, 2009: p. 21)

This study was an in-depth exploration of a case of a teacher’s pedagogical approach that required students to keep reflective journals for self-assessment and for reflection. It took place in a university setting in a real-life context. In other words, students were required to submit the reflective journals with or without the current study and the reflective journals were not produced for research purposes. Moreover, before this project took place, the course leader had already asked students to keep reflective journals with the assistance of the scaffolding tools (See Appendices 1-5) for several years and the researcher had no influence over the course leader’s approach. The primary purpose of this case study was to enable the researcher to generate knowledge regarding students’ reflective journals and the influence of the scaffolding tools provided.

This case was what Thomas (2011a) refers to as “a local knowledge case”, rather than “a key case” or “a special or outlier case” (p. 92). In other words, this case was selected because it was situated in a university where the researcher was studying and thus allowed the researcher to have the opportunity to gain access to the reflective journals after obtaining consents from both the course leader and the students to examine the scaffolding tools and the reflective journals. The current study does not claim that the case is a “classic or exemplary case” (ibid. p.77) that can represent similar pedagogical approaches carried out in other universities or other training programmes, nor is

the case a special case that is distinctively different from other similar pedagogical approaches (ibid.).

The purposes of this case study were what Stake (2005) refers to as “intrinsic” because the researcher was interested in the case itself “in all its particularity and ordinariness” (ibid. p. 445). The case study was exploratory and explanatory, based on Yin’s categories (2009), because the researcher intended to find out more about what was happening in these reflective journals through the case study and explain how teacher’s guidelines influence student interpreters reflection and self-assessment.

The research design of the case study (which will be discussed further in Section 4.3) was a single-case study with multiple subcases (Yin, 2009; 2014). The case to be studied was a teacher’s attempt to ask students to keep reflective journals in an interpreter training program. The subcases within the case study were 27 reflective journals produced by individual students as a result of the teacher’s pedagogical attempt. Thus, each subcase (reflective journal) was analysed separately and a comparison could be made between different subcases (Baxter and Jack, 2008, Yin, 2009). The focus of the analysis was placed on the comparison of the subcases to identify their similarities and differences. The disadvantage or limitation of such an approach was that the researcher would not be able to describe and analyse each individual subcase in as much detail as in case studies with only one or two subcases (Thomas, 2011a).

4.2.3 Generalisation and limitations of the case study

This case study analysed multiple subcases, but these subcases were not random samples and should not be considered as such. In other words, they were not representative of other types of reflective journals. The researcher did not seek and in fact should not seek to generalise from the findings generated after comparison of the subcases in the case study.

Even though the researcher did not intend to generalise from the findings of the case study, the credibility of this case study is still sufficient for

the results to “contribute to scientific development” (Flyvbjerg, 2011: p. 302) for several reasons. While the focus of case study is “on the phenomenon of which the case is an example” (Thomas, 2011a: p. 141), “the point of a case study is *not* to find a portion that shows the quality of the whole” (ibid. p.62, italics in the original). A case is not a random sample, but an intentional choice made by the researcher to study “the complexity and uniqueness of a particular” phenomenon (Simons, 2009: p. 21). Hence, unlike studies that conduct surveys or experiments, case study research does not seek to generalise its findings to the greater population.

Indeed, using case study research, researchers cannot carry out what Yin (2014) refers to as “statistical generalization” (p.40), which is commonly used in projects that involve surveys or polls and researchers can “generalize their findings beyond their sample of respondents” (ibid.). Case studies are context-dependent because the focus of a case study is on the particularities of the case and no two cases are exactly the same (Rossman and Rallis, 2012).

However, researchers doing case study research can still strive for what Yin (2014) refers to as “analytical generalization” (p.40), i.e. the lessons learnt, or the findings of the case study may “go beyond the setting for the specific case” (ibid.). Similar views have been expressed by other researchers. For instance, Rossman and Rallis (2012) have argued that findings of a case study may be applicable for another case study with “reasoning by analogy” (p.104).

Flyvbjerg (2011) also argues that:

Formal generalization is only one of many ways by which people gain and accumulate knowledge. That knowledge cannot be formally generalized does not mean that it cannot enter into the collective process of knowledge accumulation in a given field or in a society. Knowledge may be transferable even where it is not formally generalizable. (Flyvbjerg, 2011: p. 305)

Findings from a case study may be context-dependent, i.e. it is relevant mainly within the settings of the specific case(s) and thus cannot be “formally generalised”. This can be seen as one of the limitations of case study research,

but at the same time, context-dependent knowledge can still contribute to the accumulated knowledge of a given discipline such as interpreting studies.

For the current case study, the circumstances in which students wrote the reflective journals were context-dependent and the contents of students' reflective journals were subject to the influence of the specific requirements or teachers' instructions in this case study, including those presented in the guidelines. However, the findings of the current case study can still help interpreter trainers gain a deeper understanding of how reflection and self-assessment are viewed and manifested by participating students in this case study.

The results can also inform the community of practice about how teachers' scaffolding tools affects students' understanding and application of reflection and self-assessment. In other universities or other training programmes, interpreter trainers may use different approaches to encourage students to write reflective journals or to undertake self-assessment, but lessons learnt from this case study can help highlight important issues or potential problems, through "reasoning by analogy" (Rossman and Rallis, 2012), so that trainers can avoid making the same mistakes or pay attention to potential issues.

Another limitation of this case study was the fact that the reflective journals and the scaffolding tools were the primary sources of evidence. As pointed out by Riessman (1993), texts and talks are simply "forms of representations of experiences" (p.15), researchers have to be aware that "we are interpreting and creating texts at every juncture, letting symbols stand for or take place of the primary experience, to which we have no direct access" (p.15). Hence, the researcher in this case study understands that the reflective journals and the guidelines represent only part of the learner experience and are a representation of that experience. Despite this limitation, the analysis of the scaffolding tools and the reflective journals can still enable the researcher to draw conclusions about how students attempt to present their self-assessment and reflection in a form of writing that is indicative of a particular approach to

learning. Close examination of the reflective journals can still shed light to deepen our understanding of reflection and self-assessment.

4.3 Research design

After explaining why the current study has chosen to use case study and the limitations of the case study, in the following sections, the researcher will explain the research design of the case study and data collection process. The current case study was a single-case study of a student-centred pedagogical approach that asked students to write reflective journals. In this case study, there were multiple subcases, i.e. reflective journals produced by individual students resulting from the student-centred pedagogical approach. In the following sections, the context of the case study, the scaffolding tools and characteristics of the reflective journals will be explained.

4.3.1 The context of the program and the participants of this case study

This case study was conducted in a UK-based university that offered translation and interpreting training programmes to both undergraduate and postgraduate students. At the time when this case study took place in 2010, language combinations available in the postgraduate programme included French, German, Spanish, Chinese and Arabic while the undergraduate programme focused on European languages, including French, German and Spanish.

The postgraduate programme aimed to “offer the specialist training required to work as a professional interpreter and/or translator in a variety of professional contexts” (Programme Overview, 2010). Students in the postgraduate program could choose between two ‘strands’ for their language combination. If a student chose strand A, s/he worked in both directions between the two languages chosen, which could include English, French, German or Spanish. For strand B, students worked from two chosen languages (which could be French, German, Spanish, Arabic or Chinese) into English.

In comparison, the undergraduate programme focused on “practical language skills, communication studies, European Studies and linguistics/translation studies” (Programme Overview, 2010). In the four-year

undergraduate programme, students were required to spend their third year abroad. Translation and interpreting were taught in the undergraduate programme, but the programme overview did not explicitly state that the aim of the programme was to train professional interpreters and/or translators. Rather, students were trained to be “linguists with transferable vocational skills” and “interpreting is used for the dual purpose of language and skills acquisition” (Perez, 2002).

The courses at the core of this case study were two generic and introductory courses: “Applied Professional Skills for Conference Interpreters” (hereinafter referred to as APSCI) for postgraduate students and “Advanced Interpreting Skills” (hereinafter referred to as AIS) for undergraduate students. For postgraduate students, APSCI was a mandatory course aimed “to help learners develop mastery of the skills and techniques of conference interpreting (both consecutive and simultaneous), including a number of key transferable skills such as public speaking, note-taking and oral summarising” (Course descriptor, Applied Professional Skills for Conference Interpreters, 2010). For AIS, the aims were:

To enable students to reach professional standards of accuracy and presentation in consecutive and liaison interpreting, and to familiarise students with the simultaneous mode of interpreting
To equip students with the skills to negotiate interactional exchanges between two or more persons of different languages and cultures.

To enhance students’ skills in the spontaneous production of English and two foreign languages.

To develop students’ presentation and communication skills in English and two foreign languages. (Course descriptor, Advanced Interpreting Skills, 2010)

APSCI was a 12-week course broadly divided into two parts. The first six weeks covered introduction to the course and mainly non-language-specific workshops. During these six weeks, the course leader taught students skills that are essential and fundamental for both consecutive and simultaneous interpreting, such as short-term memory training, note-taking, public speaking, shadowing, anticipation and summarising (Course descriptor, Applied Professional Skills for Conference Interpreters, 2010)

The seventh week was a reading week, so no class took place, but students were encouraged to carry out self-study. From the eighth week on, students attended language-specific workshops where they were led by language-specific instructors to practise consecutive interpreting and simultaneous interpreting in their respective language combinations (Course descriptor, Applied Professional Skills for Conference Interpreters, 2010). In addition to this generic course, depending on their programmes, students also attended other courses, including translation, translation theories, international organisations, and/or liaison interpreting.

For the undergraduate students, AIS focused on language-specific seminars that were held once every two weeks (for 11 weeks), each lasting 3 hours. At the seminars, students practised conference interpreting and liaison interpreting with alternate language combinations. Similarly to the schedule of APSCI, no class took place during the 7th week, but students were encouraged to carry out self-study. In the seminars, as well as practising consecutive interpreting, simultaneous interpreting and liaison interpreting, students were also required to take part in 3-hour mini-conferences (mock conferences) at least three times per semester.

Students attending these two courses were required to keep reflective journals, referred to in the course descriptor as logbooks. As noted in Section 2.14, different terms have been used to refer to reflective journals. For the purpose of this research, the term “reflective journal” has generally been used when the researcher was discussing reflective practice in the literature. However, as the course leader in this case study chose to use the term “logbook” and the term was used in most of the guidelines, the term “logbook” is used here specifically to refer to the diary form of writing that student interpreters use to keep record of their practices as well as their thoughts or reflections in this case study.

According to the Logbook Assessment Criteria (LAC) (Appendix 5):

The logbook task is designed to allow interpreting students to develop their performance as student interpreters. There are two components to the task: in the logbook, the student should 1) evaluate her/his performance as an interpreter and 2) plan and implement further development. Students review their interpreting assignments and evaluate their performance and preparation; they must be able to identify their strengths and weaknesses and create a personal development plan to develop and maintain their professional knowledge and skills. (Logbook Assessment Criteria, 2010)

The objectives of the use of logbooks, as stated in the LAC, were for a student to use the logbooks to “evaluate his/her performance as an interpreter” and “plan and implement further development”. Through evaluating their performance, it was intended that students would learn to identify their own strengths and weaknesses. At the same time, students were also expected to think about personal development and how to maintain their knowledge and skills as interpreters.

Students were expected to make entries in these logbooks on a regular basis when they were practising interpreting (which might include interpreting practices in class, interpreting performed during mini-conferences and self-study sessions). The logbooks served as a tool for them to keep track of their interpreting practice (including all modes of interpreting), the problems encountered, the solutions identified and any progress made.

However, as students were only required to submit their logbooks at the end of the semester and the course leader did not ask to see the logbooks during the semester, to monitor if students were writing in them regularly, there was a possibility that some of the logbooks may have been completed by the students at the last minute before submission. This is in fact a common problem found in empirical studies on reflective journals or learning portfolios. In a study carried out by Zeichner and Wray (2001) on pre-service teachers’ learning portfolios, for instance, they found that

Teacher educators have also struggled with getting student teachers to work on their portfolios over time (e.g., a course, a field experience) rather than engaging in the common practice

of putting it all together at the last minute[...] (Zeichner and Wray, 2001: p. 619)

As students may try to complete the logbooks a few days before the submission date, the content of the journals may not be a true reflection of the students' activity and thinking, but as McNeill and Chapman (2005) stated, this is "a nagging doubt" that researchers simply have to accept. Nevertheless, the content of the logbooks can still shed light on students' self-assessment and reflection on their interpreting performance.

Students were also given the flexibility of deciding the format of their logbooks. Guidelines or scaffolding tools were provided to give suggestions regarding the arrangement of the logbooks and things that students should pay attention to when they conduct interpreting exercises or practices (See Appendices 1, 2 and 3). Detailed discussion of the guidelines will be presented in the next section, but it should be stated here that students were free to selectively include in their logbooks any components from the guidelines, as they saw fit.

As students were free to choose the format of their logbooks, the variety of logbook formats added to the difficulty in the analysis process. This is an issue that has not been widely discussed in the literature. Often, when reflective journals or logbooks are mentioned in the literature, readers might be led to think that all the journals look simply like personal diaries (cf. Chirema, 2007; Faizah, 2008). However, in some of the studies, models such as Kolb's cycle (Kolb, 1984) have been used as guides for students to write the journals (see for instance Chirema, 2007 and Section 2.12), which mean that the participants' reflective journals might have been influenced by the model provided. There are also cases where the teachers have "devoted little or no time to teaching students how to write reflectively" (Spalding and Wilson, 2002: p. 1399, see also Section 2.12).

Reflection is a highly personalised activity and some of the logbooks will resemble personal diaries, but the empirical studies reviewed in Sections 2.14 and 3.4 have made it clear that neither reflection nor self-assessment

comes naturally for students. Also, the studies reviewed in those two sections all stress the importance of providing scaffolding tools to help students as they learn to reflect and evaluate their own performance.

As mentioned in Section 2.13, the course leader in the present case study provided student interpreters with a variety of scaffolding tools. To answer the third research question on the influence of scaffolding tools, the scaffolding tools provided to the students in this case study will be examined in detail in the following sections to identify suggested assessment criteria, as well as suggestions related to reflection that may be adopted by students.

4.3.2 Scaffolding tools for reflection and self-assessment: An overview

As mentioned in the previous section, students in the current case study were given guidelines. These guidelines provided suggestions on how to arrange the logbooks and things that students should pay attention to when they conduct interpreting exercises or practices. In this section, the researcher will first explain the evolution of the guidelines; then the guidelines will be explained in detail.

Four sets of guidelines were included in this study, but they were not developed all at once. Instead, they were gradually added to the course over the years in response to students' questions and requests for clear instruction on how to practice interpreting and how to keep the logbooks.

The first set of guidelines developed and provided to the students was the one concerning "How to practise interpreting" (hereinafter referred to as HPI, Appendix 1). HPI stressed the importance of extensive practice and gave advice on the type of materials suitable for students to use in interpreting practice, the level of difficulty of different materials and how to concentrate on one particular aspect for each practice. In addition, HPI also asked students to keep a logbook in which they could record all comments made regarding their interpreting performances and review the logbook to monitor progress and identify any recurring problems. It was also suggested that the logbook could be used to note down useful expressions (see Appendix 1).

When students expressed their confusion about the structure of the logbooks, the course leader prepared the second set of guidelines: “How to complete the logbook” (hereinafter referred to as HCL, Appendix 2). Whereas HPI was vague about the types of comments that should be recorded in the logbook, HCL provided more explanation, suggesting that as well as comments made by the students themselves, those by their peers and tutors should also all be recorded. In addition, HCL advised students that their logbook could include the following components (see Appendix 2):

- (vi) date of the practice so that the logbook could become a chronological record;
- (vii) all comments made by the student interpreter, the tutor and peers regarding a specific interpreting performance;
- (viii) clear distinction between generative problems, i.e. problems or mistakes that occurred repeatedly and non-generative problems, i.e. problems or mistakes that only happened once or twice and possibly mistakes that were related to the specific text;
- (ix) positive and negative comments; and
- (x) targets that the student set for himself/herself for a specific period of time; and
- (xi) progress or any improvement that the student noticed.

Compared with HPI, HCL provided more information on what should be recorded in the logbooks, but students still had questions about the logbooks; hence, the course leader prepared “Suggestion for Logbook Outline” (hereinafter referred to as the SLO, Appendix 3) to give specific information regarding the layout and content of the logbooks. In this set of guidelines, assessment criteria for self-assessment were presented in the form of prompts and reflection was added to become an important part of the logbook for the first time. Because of the potential influence of the SLO on students’ self-assessment and reflection, the SLO will be examined in detail in Section 4.3.3.

Unlike the previous three sets of guidelines, which were developed in an evolutionary way over the years by the course leader in response to students' questions and concerns, the fourth set of guidelines provided to the students was the product of a joint project conducted by University of Leeds and Heriot-Watt University in 2002 and 2003. The product — the peer-and-self-assessment grid (Hartley et al., 2003) (Appendix 4) —was developed to help students evaluate their own performance of simultaneous interpreting.

The project carried out by Hartley et al. (2003) is one of the few empirical studies found in the literature that specifically focus on student interpreters' self-assessment. As discussed in Section 3.4, Hartley et al. (2003) developed the self-assessment grid as a comprehensive feedback grid for students to carry out peer- and self-assessment. The grid incorporates opinions and comments from student interpreters, professional interpreters, interpreter trainers and users, and suggests that, when they assess their own interpretation, students should focus on five categories: inter-textual, intra-textual, behavioural skills, user perceptions and supporting knowledge. (See the complete peer-and-self-assessment grid in Appendix 4).

This self-assessment grid offers detailed criteria for students to evaluate their performance of simultaneous interpreting and has been made available online, so the course leader included the self-assessment grid as one of the guidelines to help students have clearer idea about what they should pay attention to when they evaluate their own interpretation. The self-assessment grid was designed primarily for simultaneous interpreting⁷, and students were told that they could use the self-assessment grid to evaluate their interpretation.

The guidelines were developed at different times, and the original intention was that each newly added group of guidelines would complement the previous one(s) and answer various questions students might have throughout the process of practising interpreting and writing the reflective journals.

⁷ The self-assessment grid included in this study was used primarily for simultaneous interpreting, but see the PhD thesis of Peng (2006) for a different self-assessment grid that is developed for consecutive interpreting.

Among the four sets of guidelines, HPI was considered the least relevant for the current study because it was mainly used to help students set up practices and there was no discussion or suggestion on assessment criteria or how to keep a logbook. In comparison, SLO was considered to be an expansion of HCL, as it included most of the suggestions in HCL but provided further details on assessment criteria. Because SLO and the self-assessment grid focused primarily on students' reflection and self-assessment and both provided detailed assessment criteria as well as specific guides for completing the logbook, they were considered most relevant for this case study. The content of these two sets of guidelines will thus be examined in detail.

4.3.3 Scaffolding tools for reflection and self-assessment: Suggestion for Logbook Outline

The Suggestion for Logbook Outline (SLO) suggested that students could start off by providing a so-called "Profile", contextual information related to the interpreting practice, including the date of practice, the speaker's name, the event, the language combination and topic (see Figure 4.1).

1. Profile
Date
Speaker
Occasion/event
Language combination/direction
Speech type
Topic
Etc.

Figure 4.1 Profile in the SLO

The importance for students/interpreters to be aware of the contextual information has been pointed out in several studies. For instance, Riccardi (1998) states that

An evaluation of an interpreter's performance means bearing in mind the peculiarities of the specific communicative event and conference environment, the audience, the ST, the speaker's intention as well as the delivery speed, the intonation and prosody. (Riccardi, 1998: p. 117)

Kalina's (2005) "in-process requirements" (discussed in Section 3.3.) also include parameters that are very similar to those suggested in Figure 4.1, such as "profile of the event" and "structure of interaction".

The second part of the SLO advised students to record information related to the exercise, the set-up and any preparation. It was made clear in the SLO that students could include foundational exercises that could help them improve their interpreting performance, such as summarising and shadowing, or exercises that did not involve language transfer, such as memory training and note-taking exercises. (See Figure 4.2)

<p>2. Type of practice</p> <p>Mode of interpreting or other type of exercise (memory, note-taking...) Set-up (individual, group or classroom practice, using double booths...) Preparation/anticipation (sources used, glossaries enclosed, brainstorming...)</p>

Figure 4.2 Type of practice in the SLO

The third part of the SLO was "Evaluation of the performance". In this part, the SLO pointed out the possibility for students to present the evaluation as a table in which grades and marks could be given and that students could talk about their strengths and weaknesses under at least four or more headings, such as meaning, coherence, delivery and target language expression (see Figure 4.3). This part also pointed out that students were allowed to include further aspects as they saw fit.

In addition to strengths and weaknesses, it was also suggested that students should think about "good solutions and successful strategies". As discussed in Section 3.5, considering the fact that the students keeping these logbooks are beginners who have just started to learn interpreting, the strategies referred to here can be either interpreting strategies or learning strategies, but the wording was not specific about what types of strategies. The concept of "strategy" was thus open for interpretation by students.

According to “Evaluation of the performance”, assessment criteria in the SLO were divided into four broad aspects: meaning, coherence, delivery and target language expression and all the criteria were presented in question form. For example, to determine if their interpretation is accurate or not, it was suggested that students ask themselves these questions “Are there distortions, omissions, unwarranted additions? Is the output accurate and complete? Does it convey the speaker’s intention and/or emotion?” To a certain extent, the SLO is very similar to Schjoldager’s (1996) feedback sheet because both use prompts to guide students through the process of self-assessment and ensure that students’ attention will be placed on the suitable questions they should ask when they examine their performance under each category.

3. Evaluation of the performance

This may be presented as a table. Student interpreters have found it useful in the past to grade the performance in each of the categories listed below, for example from A *very good* to F *very poor*.

Strengths (including good solutions and successful strategies) and weaknesses should be recorded in the table at least under the four following headings – and as many sub-headings as you deem appropriate:

- **MEANING:** Are there distortions, omissions, unwarranted additions? Is the output accurate and complete? Does it convey the speaker’s intention and/or emotion?
- **COHERENCE/COHESION:** Does it make sense? Is it plausible? Are beginning and ending neat and logical? Is it concise or wordy? Are all utterances finished/rounded off? Is chunking appropriately signalled by intonation and pauses? Are the chunks linked using appropriate logical connectors?
- **DELIVERY/PRESENTATION:** Is it audible and clear? Is articulation good and intonation natural? Are there unwarranted outbursts or excessive fillers? Is the pace fluent and regular? Is the voice pleasant and confident?
- **TARGET LANGUAGE EXPRESSION:** Is it grammatically correct and idiomatic? Is there interference from the source language? Are linking words used appropriately? Does the performance reflect knowledge of appropriate vocabulary and

specialist terminology? Are register and style appropriate?

You may also want to record in the table corrections or solutions to the problems you have identified.

Figure 4.3 Assessment criteria of the SLO

The criteria suggested in the SLO include many assessment criteria discussed in the literature on interpreter assessment and quality of interpreting (see Sections 3.3 and 3.4), including many of the criteria included in Bühler's (1986) survey, error analysis (Barik, 1971; Altman, 1994) and user expectation (Ng, 1992; Kurz, 1993/2002; Moser, 1995; Collados Ais, 1998/2002; Kurz, 2001; Gile, 2003; Kurz, 2003b; Pym, 2008; Diriker, 2011; Pöchhacker, 2012).

The prompts in the SLO could be applied for various modes of interpreting taught in the programme, according to the course descriptors, including liaison interpreting, consecutive interpreting and simultaneous interpreting. More discussion on the assessment criteria of the SLO will be provided in Section 4.3.4.

In addition to using the assessment criteria, students were also advised to reflect on their performance, in two stages. Immediately after a particular practice session, students were advised to reflect on the practice and to review the experience and determine goals for the next practice. Such reflection should be "written up as a narrative" on what they observed and concentrate on "what goes wrong" and "why something goes wrong". (See the underlined sentences in Figure 4.4.)

In other words, the purpose of reflection at this point was to describe/review the experience, identify the problems and think about possible reasons for the problems. Once students had completed these tasks, SLO asked them to think about the next step, i.e. their "goals/priorities" for their future practice. (See the underlined sentences in Figure 4.4.)

4. Reflection on the performance

This should be written up as a narrative and contain your reflection on what you have observed about your performance, having gone through the recording stage as above.

At this stage, you should identify 1) what goes wrong (particularly if it is a recurring problem) but also and essentially 2) why it goes wrong, using the range of commonly used concepts pertaining to the interpreting process and criteria used for performance evaluation.

For example, does the problem occur at the *Active listening/Comprehension* or *Re-expression/Presentation* end of the process? Is it due to difficulties with *Analysing, Note-taking, Chunking* or *Memorising*?

Finally, based on the above, you should indicate what your goals/priorities are with respect to your practice over a given period of time.

Figure 4.4 Reflection on the performance in the SLO

It is not known to what extent the course leader consulted literature on reflection (Chapter 2) or process-oriented training (Section 2. 15) when preparing the SLO, but elements that have been discussed in theories of reflection and process-oriented training can be seen in this section. The assessment criteria suggested in Figure 4.3 show according to the SLO, the focus of self-assessment should be placed on the “product” of interpretation. On the other hand, “Reflection on the performance” (Figure 4.4) can be seen as the course leader’s attempt to direct students’ attention to the process of interpreting, as students are asked to analyse the problems they experienced during the process of interpreting.

The suggestion for students to write down their “reflection on what [they] have observed about [their] performance” fits Dewey’s (1910) concept of “deliberate observation” (Section 2.6). Also, this scaffolding tool asks students to actively engage in reflective thinking, which reflects Gibbs’ (1988/2013) idea that learners need to actively explore their learning experience and reflect on the experience (Section 2.10). The suggestion for students to “identify 1) what goes wrong [and] 2) why it goes wrong” in this section is also very similar to the two stages “Description of what happened” and “Analysis of the situation” in Gibbs’ reflective cycle (Figure 2.4). The last sentence of this

section asks students to identify their goals and priorities for future practice. This approach resembles Gibbs' suggestion that students should prepare an "action plan" or objectives for future.

In addition to reflection on interpreting performance after each practice, students were advised to write a narrative reflection at the end of the semester as an overview—"Reflective overview for semester 1" (hereinafter referred to as Reflective overview.) For this overall reflection, students were expected to formulate a development plan for improvement and record any progress (underlined in Figure 4.5).

5. Reflective overview for semester 1

Having recorded assessment and reflection as per the above process for a number of individual practice sessions, bring it all together towards the end of the semester under a concluding section highlighting the development programme which you identified for yourself and progress you have made.

Figure 4.5 Reflective overview in the SLO

Compared with the specific focus of "Reflection on the performance" shown in Figure 4.4, the "Reflective overview" asked students to think about the entire learning experience throughout the semester. Strictly speaking, "Reflective overview" is a form of "reflective essay" (See Section 2. 14) and the SLO was actually asking students to keep reflective journals for individual practices *and* write a reflective essay to think about all their practices and identify any changes that they had observed in their thinking or actions..

Comparing the SLO with the other sets of guidelines, one can see that certain concepts were stressed repeatedly across the three sets of guidelines while others have also been mentioned in one set of the guidelines. For instance, in only two of the sets of guidelines did the course leader ask students to record the date of practice (to create a chronological record). All the three sets of guidelines informed students that they can choose to focus on foundational skills, and that not all practices have to involve interpreting. On the other hand, while HCL asked students to record all comments made by their

peers and teachers on their performance, SLO laid more focus on students' own assessment, although it also mentioned teachers' and peers' comments.

At the same time, as with many of the assessment criteria discussed in Chapter 3 (e.g., Bühler, 1986; Seleskovitch and Lederer, 1989/1995; Schjoldager, 1996), many of the concepts in the assessment criteria presented in the SLO have not been clearly defined and are thus open to interpretation.

As pointed out in Section 3.3.4, clear and transparent assessment criteria should be provided if interpreter trainers would like students to evaluate their own performance. However, just as in formal examinations, the evaluation of a candidate's performance depends largely on the examiners' professional judgement and their interpretation of the assessment criteria (Sawyer, 2004; Liu et al., 2008; Wu, 2010b), students' self-assessment also depends on students' own interpretation of the assessment criteria. Considering the fact that they are novice rather than experts, their understanding of the assessment criteria may be astray and this can be problematic. If students misunderstand or simply do not understand the assessment criteria, what will they do to cope with the issue?

For instance, in the SLO, one of the prompts under "Meaning" was "Does it (the output) convey the speaker's intention and/or emotion?" This prompt reflects one of the themes found in the literature on quality of interpreting—the interpreter's ability to represent the speaker's intention (Pöchhacker, 2001). However, while much of the literature on quality of interpreting and interpreter assessment have stressed the importance for interpreters to represent the speaker's intention (and/or emotion), no empirical studies have been carried out to produce applicable criteria that can be used to determine if the interpretation has in fact met the speaker's original intention.

For interpreters to judge the speaker's intention, they will need to take into account several factors, which include context, educated guesses and extralinguistic cues, as stated by Schweda-Nicholson (1987):

Also relevant to the current discussion of simultaneous interpretation is the factor of speaker intention (Pergnier 1978; Uhlenbeck 1978). Pergnier (1978) refers to ‘message-meaning’ as that which is intended by the speaker and relies heavily on context. Uhlenbeck (1978) writes of a ‘makes-sense’ principle in which listeners assume that what the speaker is uttering makes sense. Given this pre-analysis frame of mind, listeners then interpret input, taking into consideration all of the information available to them in order to ascertain the meaning expressed by the speaker. At times, all interpreters are faced with an ambiguity or a comprehension problem. When this occurs, they must utilize the ‘makes-sense’ principle and take advantage of the linguistic and extralinguistic cues available to them in order to produce a complete and accurate interpretation. (Schweda-Nicholson, 1987: p. 197)

Schweda-Nicholson’s statement makes it clear that it can be a complex task to determine a speaker’s intention and a certain level of ambiguity may be unavoidable. While there is no doubt that student interpreters will receive training on how to determine or at least form an educated guess about the speaker’s intention when they interpret, their answers to the prompt “Does it (the output) convey the speaker’s intention and/or emotion?” will be subject largely to their own judgement and their own interpretation of the question.

As discussed in Section 2.11, a considerable amount of literature on reflection seems to agree that the process of reflection is usually triggered when the individual encounters an unexpected situation, which usually is a problem that causes some discomfort or confusion. At the same time, Gibbs (1988) has suggested that learners can decide to engage in reflective thinking, rather than passively waiting for reflection to be triggered by an experience. The SLO can be seen as a scaffolding tool that encourages learners to actively engage in reflection and explore what they have learnt from a learning experience.

Although researchers may be debating about what constitutes reflection or the processes of reflection, but some consensus has been reached. Most theorists agree that reflection is a cyclical process. Gibbs (1988) and others (e.g., Boud et al., 1985a) have suggested that reflection can be divided into substeps that may involve “description of what happened”, “feeling”, “evaluation”, “analysis”, “conclusion” and “action plan” (Section 2.10).

When one attempts to compare these concepts to the SLO, it is clear that the suggestions in SLO are very similar to the ones suggested in the literature, particularly Dewey and Gibbs.

The SLO instructed students to think about what goes wrong and why it goes wrong. It should be noted that these two questions were put under the category of “reflection”, which implied that the teacher’s understanding of reflection was related to analysis of problem and difficulty as well as better problem-solving ability. At the same time, it can be argued that the focus on “what goes wrong” reflects the consensus in the literature that reflection may be triggered by an unexpected situation or problem encountered. To a certain extent, “what goes wrong” becomes a point of departure for students to start the cycle of reflection.

Thirdly, researchers (Dewey, 1910; Gibbs, 1988; Boud, 1999; Boud, 2001) have argued that reflection involves deliberate observation or reviewing of the experience/procedures (see Section 2.10). The suggestion for students to write about what they have observed about their performance reflects the consensus among researchers on the importance of observation and reviewing of the experience.

Section 2.6 discussed the five steps of reflection proposed by Dewey (1910): (i) a felt difficulty ; (ii) its location and definition; (iii) suggestion of possible solution; (iv) development by reasoning of the bearings of the suggestion; (v) further observation and experiment leading to its acceptance or rejection; that is, the conclusion of belief or disbelief. (Dewey, 1910: p. 72) The SLO apparently focused mainly on steps (i) to (iii) when it suggested that students should think about what they had seen from their performance, identify their problems and explore the potential reasons behind the problems. It could also be argued that “Reflective overview” as used in the SLO can help students move forward to steps (iv) and (v).

Similar to Dewey’s (1910) steps of reflection, Gibbs’ (1988) cycle of reflection, as discussed in Section 2.10, suggests that learners start off by

describing what happened. The next stage in the cycle, as suggested by Gibbs (1988/2013), is for learners to think about their feeling. Dewey's (1910) steps of reflection assume that such feeling is about difficulty, a view echoed in the SLO, which focused on "what goes wrong", but one should also be aware the argument of Boud et al. (1985a) that such feeling can also be positive.

Regardless of learners' positive or negative feeling towards the experience, Gibbs' (1988/2013) suggestion is for learners to acknowledge the feeling and move on to evaluate their experience and determine what is good and bad about the experience. This stage could also be found in the SLO, but it was not covered in "Reflection on the performance" (Figure 4.4) or "Reflection overview" (Figure 4.5), but in the assessment criteria of the SLO (Figure 4.3) where students were asked to record their "strengths (including good solutions and successful strategies) and weaknesses".

Gibbs' (ibid.) next stage is very similar to Dewey's (1910) "step (ii) its location and definition" (p.72) where learners are advised to try to make sense of the situation by analysing the experience. This suggestion is also very similar to the SLO's suggestion of "why it goes wrong".

Using the analysis as the basis, Gibbs (1988/2013) suggests learners should draw a conclusion "what else could you have done?" and finally come up with an action plan to try and resolve the situation if the same situation occurs again. Gibbs' action plan is similar to Dewey's (1910) (iii) suggestion of possible solution (p.72). The differences lie in the fact that Dewey's "suggestion of possible solution" (ibid.) focuses on thinking while Gibbs' "action plan" asks learners to set objectives and take actions.

Gibbs asks learners to formulate an action plan and act on it, but an action plan may or may not help learners resolve the situation. What happens after this stage is in fact a critical factor determining if students or learners can move on to Dewey's steps (iv) and (v). Gibbs did not advise learners to view their action plans critically, rather, the reflective recycle sends learners back to "description of the experience". On the other hand, Dewey's reflective steps

do express the need to examine the suggested solution critically in order to find better solutions.

Moreover, Gibbs' (1988/2013) reflective cycle focuses on individual experience and he has not suggested learners to engage in reflection that goes beyond the reflective cycle. The SLO's suggestion of "Reflective overview" attempts to encourage learners to go beyond the reflective cycle which focuses on "the experience" and examine their performance over the semester.

4.3.4 Scaffolding tools for reflection and self-assessment: Self-assessment grid

Another scaffolding tool to be examined in detail in the current study is the self-assessment grid. As explained in Section 3.4, the self-assessment grid in this case study is the product of a joint research project between Heriot-Watt University and Leeds University (Hartley et al., 2003).

The assessment criteria in the self-assessment grid incorporate many components, such as delivery and completeness, that are considered by professional interpreters, interpreter trainers and student interpreters to be important for good quality of interpretation. Suggested assessment criteria discussed in the literature on quality of interpreting and interpreter assessment have also been included, such as the "intertextual" aspects and "intratextual" aspects of the interpretation (Shlesinger et al., 1997, see Section 3.4).

Despite its main focus on simultaneous interpreting, the use of Hartley's self-assessment grid in conjunction with the SLO, potentially made the prompts in the SLO clearer for students by providing additional explanation to each element and divided each element into smaller sub-elements. For instance, instead of asking students a general question about the coherence and cohesion of their interpretation, the self-assessment grid provided an explanation to make it clearer that "coherence" involves "making sense and no contradictions" and "cohesion" involves the use of "synonyms, pronouns, repetitions, linking words".

Moreover, many of the assessment criteria overlapped with those suggested in the SLO. For instance, to assess the content of interpretation, where the SLO used a question “Is the output accurate and complete?”, the self-assessment grid evaluated the same aspect with the column “content” and further divided content into accuracy and completeness. Accuracy was further divided into “accurate (fact, figures, etc)” and “faithfulness to source speech” (see Table 4.1).

Inter-textual (ST vs TT)	Content	Accuracy	Accurate (fact, figures, etc)	
			Faithfulness to source speech.	
		Completeness (no substantial omissions)		
	Grammar	Interference		
	Rhetorical force	Intention (conveys speaker’s speech act)		
		Emotion (conveys speaker’s attitude)		
	Decalage	<input type="checkbox"/> Too far behind <input type="checkbox"/> Too close		

Table 4.1 Extract from Hartley’s self-assessment grid

As already discussed in detail in Section 3.4, Hartley’s self-assessment grid is intended to provide students with “explicit and detailed guidelines for peer- and self-evaluation”. Hence, the self-assessment grid provides extensive assessment criteria, including (a) inter-textual aspects that compare the interpretation with the source text; (b) the intra-textual aspects that examines the interpretation as a product; (c) behavioural aspect that asks students to think about their booth manners for simultaneous interpreting; (d) user perception that asks students to evaluate their performance from the user’s perspective and (e) knowledge that can help them perform better.

However, as it focuses mainly on providing explicit assessment criteria for student self-assessment, the table-form self-assessment grid does not ask students to think about why they encounter problems or why they make mistakes, nor does it ask students to reflect on the strategies used during the interpretation process.

4.3.5 Scaffolding tools for reflection and self-assessment: Logbook

Assessment Criteria

In addition to the guidelines and the self-assessment grid, an additional document—the Logbook Assessment Criteria (LAC, Appendix 5) also needed to be taken into account. This document was provided to the students to help them understand the criteria used to assess their logbooks. If students intended to receive high grades, they would need to keep the LAC in mind when they wrote their logbooks.

While the guidelines discussed in previous sections aimed to provide students with support and provided instruction to inform students how to practice interpreting or how to assess their performance, the LAC showed the teachers' expectations. Students would receive different marks based on the extent that they have met these expectations. The expectations, as spelt out in the LAC, had six different elements, including the student's ability to

- (i) Use commonly used concepts and criteria to review preparation for and delivery of assignments.
- (ii) Evaluate language used during interpreting, which includes syntax, lexical choice, pronunciation, intonation, modulation and register.
- (iii) Evaluate the fluency and accuracy of their interpreted message.
- (iv) Analyse their strength and weaknesses
- (v) Set goals and priorities for improvement
- (vi) Identify an appropriate development programme and evaluate the programme regularly against set criteria
- (vii) Update and revise the development programme

Students who were able to demonstrate that their reflective journals had met all the criteria would receive higher marks. If students' reflective journals only showed some signs of meeting a number of the expectations, then they would receive lower marks.

On close examination, it was clear that the LAC also shared similar concepts with both the reflective cycle and the other guidelines, covering students' learning from preparation to follow-up activity. To meet the first criterion listed above, students were expected to assess how they prepared for an interpreting assessment preparation against "commonly used concepts and criteria". The LAC did not make clear what concepts and criteria it was referring to, but it can be inferred that the concepts are related to how professional interpreters usually prepare for interpreting assignment (see Kalina 2005 in Section 3.3. and Section 4.3.2) and the criteria were the interpreter assessment criteria that were suggested in SLO and the self-assessment grid.

The second and third criteria were both about interpreting assessment, covering language quality, fluency and accuracy. While these criteria overlapped with those mentioned in the other guidelines, the LAC provided additional interpreting assessment criteria for students to consider. Whereas accuracy and fluency and intonation were mentioned in all the guidelines, syntax, lexical choice, pronunciation and modulation were mentioned only in the LAC.

The remaining four criteria were related to reflection, as students were expected to talk about the strengths and weaknesses of their performance and provide analysis, set goals and priorities, identify and revise the development programme. These expectations corresponded with the suggestions in the SLO. What was noteworthy were the last two criteria that asked students to constantly evaluate, update and revise the development program. If we apply the concepts in Gibbs' (1988/2013) reflective cycle to these assessment criteria, we can see that the last criterion was asking students to go beyond action plan. They not only needed to have an action plan, implement it, but also had to evaluate the result and make modifications.

In summary, although the scaffolding tools examined in this section were developed at different times and for different purposes, used together, they provided students with information about how to practice interpreting, the assessment criteria that they could use to evaluate their performance, as well as advice about how to be reflective. The assessment criteria suggested in the guidelines have been found to overlap with those discussed in the literature and some of them were found to share the same problem that the concepts have not been clearly defined. The suggestions for students to reflect on the problems encountered, their strength and weaknesses and the advice/requirement for students to come up with an improvement plan also reflected the concepts discussed in the literature of reflection.

4.4 Data collection

Having examined the scaffolding tools in previous sections, this section will now explain how the researcher collected the logbooks, which are the embedded subcases for this case study. As explained in Section 4.2.2, the research design of the case study was a single-case study with multiple subcases (Yin, 2009; 2014). The case to be studied was an attempt at a student-centred pedagogical approach in an interpreter training program. The subcases within the case study were logbooks written by students who attended the two courses, Applied Professional Skills for Conference Interpreters and Advanced Interpreting Skills.

Each logbook was considered to be an individual subcase produced by students as a result of the student-centred pedagogical approach. The students were all situated in the same context as discussed in Section 4.3.1, despite any variances in students' language combinations and approaches to the practice of interpreting. By comparing and analysing students' logbooks, this study explored how these students engage in self-assessment and reflection to identify the potential relationship or tension between self-assessment and reflection.

Before collecting the logbooks, the researcher submitted the proposal to the Ethics Committee of the University for approval. Once approved by the

Ethics Committee, the researcher then approached the course leader to explain the objectives of the project and obtain her approval to contact her students. E-mails were sent out to students to inform students of the project before they submitted their logbooks. Students were assured that their identity would be protected and that results of the project would in no way affect their grades. In addition, students were assured that their grades would not be affected by their decision to participate or not participate in the project. The researcher would be the only person who knew the identity of participating students.

Students who agreed to offer their logbooks for inclusion in this study attached their consent form (see Appendix 6) with their logbooks when they submitted the assignment to the course leader at the end of the semester. Photocopies of these logbooks were made and given to the researcher before the journals were distributed to various lecturers and tutors for assessment. This would ensure that the researcher would not see the comments made by the lecturers or tutors on the logbooks, so the analysis process would not be affected by the teacher's comments. At the same time, this would ensure that lecturers or tutors grading the journals would not know who among the students took part in the project. In total, 27 logbooks, including 15 from postgraduate students and 12 from undergraduate students were collected in this case study.

The majority of the logbooks came from students with Chinese Mandarin and English as their language combination. As the logbooks were provided to the researcher for the purpose of this study on a voluntary basis, this was coincidental. Also, although the logbooks were students' self-reflection, they did not contain information about each student's personal profile, such as their age, gender or nationality, except their student numbers, so there was no way to ascertain students' age or confirm if the writers of the journals were native English speakers or native speakers of other languages. However, by examining the language combination listed in the entries, it was possible to infer the working languages of the student interpreters.

To ensure anonymity of the participants, all names and references to any third party, including teachers or classmates, were removed from the logbooks

and replaced with general terms, such as “teacher” and “classmate”. Random numbers were assigned to the students’ logbooks for ease of identification. Postgraduate students were referred to as PG01 to PG15 while undergraduate students were referred to as UG01 to UG12.

In this section, the research design of the case study, including the context and the data collection process have been described. In the next section, the method for data analysis will be explained.

4.5 Data analysis method

Thematic analysis was adopted to analyse the logbooks collected for this case study. According to Mills et al. (2010),

Thematic analysis is a systematic approach to the analysis of qualitative data that involves identifying themes or patterns of cultural meaning; coding and classifying data, usually textual, according to themes; and interpreting the resulting thematic structures by seeking commonalities, relationships, overarching patterns, theoretical constructs, or explanatory principles. (Mills et al., 2010: p. 925-926)

As a data analysis method, thematic analysis has been widely used to analyse documents and interview transcripts and has been applied in many disciplines (Boyatzis, 1998; Braun and Clarke, 2006; Guest et al., 2012; Guest et al., 2013). It is an “analytic approach and synthesizing approach” (Mills et al., 2010: p. 926) used in qualitative research and a tool for research projects of various methodologies because it does not “prescribe methods of data collection, theoretical positions or epistemological [...] frameworks” (Braun and Clarke, 2013: p. 178).

Thematic analysis shares many of the principles and procedures with other qualitative analysis methods that focus on the “content meaning” of the texts, albeit the strategies may vary (Coffey, 2014). For instance, content analysis (Krippendorff, 2004) also examines and analyses texts, but the method focuses more on numerical description while thematic analysis focuses more on exploring and investigating qualitative aspects of the texts analysed (Joffe and

Yardley, 2004). Grounded theory (GT), “a systematic method of analysing and collecting data to develop middle-range theories” (Charmaz, 2012: p. 2), analyses data through open coding and axial coding. These two methods have been compared with first cycle coding and second cycle coding of thematic coding (Saldana, 2013). However, as a method of data analysis, GT is more commonly used to analyse interview transcripts, while thematic analysis has usually been adopted to analyse diaries and journals.

To conduct thematic analysis, one has to understand the meaning of themes and codes. Braun and Clarke (2006) suggest that themes are basically patterns. However, Saldana (2013) has argued that in order to discover a “theme”, encoding and decoding processes are required. In other words, a theme is not something that is there for someone to discover, it is “an outcome”, the end result of an observation of a researcher who has gone through the processes of encoding and decoding of the data (which is often referred to as the “coding” process) (Saldana, 2013). Saldana’s view echoes the view of Opler (1945, cited in Ryan and Bernard, 2003) who argued that themes are discovered through the manifestation of expressions.

Codes are defined as “tags or labels for assigning units of meaning to the descriptive or inferential information compiled during a study” (Miles and Huberman, 1994: p. 56). Investigators use codes to summarise the idea manifested in the given sentences, which may be short phrases, sentences or paragraphs (Miles and Huberman, 1994; Saldana, 2013). Like themes, codes are products of a researcher’s observation. During the coding process, which may take several rounds, investigators use codes to help them capture the idea manifested in the sentence or passage, then these codes are used to help investigators identify or develop themes.

To develop codes and themes, an essential step is for researchers to familiarise themselves with the data and immerse themselves in the data (Rossman and Rallis, 2003). In fact, codes and themes can be developed with different approaches. Both can be developed deductively from theories or previous studies or they can be developed inductively from the data, as will be explained in Section 4.6.

In the literature on reflective journals, thematic analysis has often been used for data analysis, although sometimes the researchers have not explicitly stated that they have applied “thematic analysis”. Ho and Richards (1993), for instance, state in their study that they have coded the journals written by the participants and developed five categories from the coding process. The researchers do not state that thematic analysis has been applied, but thematic analysis may have been adopted for data analysis as the researchers talk about how certain “categories or themes” emerge from the coding.

Orland-Barak (2005), in contrast, has been more explicit about how she analysed portfolios collected for her study:

The portfolios were examined for recurrent *themes* and for how the language used disclosed *levels of reflective thinking*. [...] Initially, emergent patterns within the data of the product and the process portfolio respectively were identified and analysed. This was followed by analysis across cases. Patterns were counted, coded and classified into broader thematic categories. The thematic analysis yielded three recurrent themes across the two portfolio types [...] (Orland-Barak, 2005: p. 31, italic in the original)

As demonstrated by Orland-Barak, in the analysis process, she looks for themes by coding and identifying patterns. The process of coding, identifying patterns and developing themes for the current case study will be explained in Chapter 5.

The strength of thematic analysis lies in its flexibility as it can be adopted in various qualitative studies to analyse portfolios, diaries, interview transcripts, official documents and/or historic records. However, the flexibility of thematic analysis can also result in doubts about its rigour. As Braun and Clarke (2006) point out,

As thematic analysis is a flexible method, [researchers ...] need to be clear and explicit about what [they] are doing, and what [they] say [they] are doing needs to match up with what [they]

actually do. In this sense, the theory and method need to be applied rigorously. (Braun and Clarke, 2006: p. 27)

An important method to enhance the reliability of thematic analysis and to ensure rigor is through the construction of a codebook or a code manual (MacQueen et al., 1998; DeCuir-Gunby et al., 2011). A codebook is basically a record kept by the researcher to keep track of all the codes and their definitions. Examples may be included in the codebook for better consistency.

Because thematic analysis can be adopted to analyse various types of data, researchers have to be clear and explicit about what a study is intending to explore from analysis of the data and they also need to be decisive about the particular aspects that the analysis intends to focus on; otherwise, the results of thematic analysis may end up being mere description (Braun and Clarke, 2013). For this reason, and to reduce the potential impact of the drawbacks of thematic analysis, this case study will be explicit about the entire process of coding and how categories and themes are developed after coding and work to establish “logical chain of evidence”(Miles et al., 2014). In the next section, the researcher will briefly explain how codes were developed. Then, in Chapter 5, detailed information about the coding process and the development of themes in this case study will be provided.

4.6 Approaches to coding

As mentioned in Section 4.5, codes and themes can be developed deductively from theories or from previous research or inductively from the data (Crabtree and Miller, 1992, Boyatzis, 1998, Ryan and Bernard, 2003). A third approach, referred to as a hybrid approach by Boyatzis (1998), combines the two approaches.

When codes are developed with a deductive approach, researchers pre-define the codes using literature review and theoretical considerations. The characteristics of the phenomenon to be studied and analysed are pre-defined and decided before the analysis takes place. Coders then apply the pre-defined codes when they examine and go through the data to find any words, phrases or sentences that match the predefined codes. To provide more

explanation for the deductive approach, the researcher will use the study conducted by Terrion and Philion (2008) as an example. In their study to explore students' learning process and reflection, Terrion and Philion collected electronic journals from students and used the model proposed by Boud (2001) (See Section 2.8) to develop pre-defined codes and use these codes during the coding process.

Another type of deductive approach is by applying themes identified in a previous study. For instance, Hatton and Smith (1995) examined students' reflective writing and concluded that students' reflective writing can be divided into four types: (a) descriptive writing; (b) descriptive reflection; (c) dialogic reflection; (d) critical reflection. Other researchers (cf. Orland-Barak, 2005; Luk, 2008) have then used the four categories as pre-defined codes.

In comparison with the deductive approach that starts with theories or previous studies, inductive approach starts with the raw data. Crabtree and Miller (1999) contend that codes can be developed after "some initial exploration of the data has taken place, using an immersion/crystallization or editing organizing style" (p.167).

However, Boyatzis (1998) cautions that to use this approach, the researcher has to try his/her best to block out or reduce any potential "conceptual interference of his or her own cognitive abilities to formulate concepts while interpreting them" and remember that the task at the initial coding is not interpreting, but developing codes. The main reason for this caution is for researchers to avoid forcing the data to fit the codes or make premature decisions of what is emerging from the data. On the other hand, it has also been argued that theories and prior research can serve to inform and guide the way of the research, especially during the initial stage of coding process (Saldana, 2013), and it is in fact very difficult, if not entirely impossible for researchers to block out the influence of prior studies.

Because no theoretical framework is in place before the analysis, the biggest danger of an inductive approach is a researcher's tendency to

prematurely develop a theoretical framework at the initial stage. The process of code development is iterative and the researcher needs to move back and forth between the data and the code developed to make any necessary modification.

The last approach is the hybrid approach. According to Boyatzis (1998), the hybrid approach combines the above-mentioned approaches for the development of codes. The hybrid approach starts with initial coding of the data, but the codes are then refined and modified not through constant comparison between different samples, but informed by theories and prior research. Theories and prior research, in this case, act as a guide for the researcher to refine the codes and focus on meaningful themes.

The current case study also adopted a hybrid approach. However, the hybrid approach adopted by the current study was slightly different from the one described by Boyatzis (1998). Rather than starting with initial coding of the data, the current study began with a theoretical framework and theory-driven codes were developed before the analysis. These theory-driven codes were created specifically from the theoretical framework established in Section 2.11 and assessment criteria for self-assessment discussed in Sections 3.4 and 3.6. Then, the researcher went through three cycles of coding. During the coding process, data-driven codes were created for sentences or segments that could be captured by the theoretical codes. A codebook (Section 4.5) was created to keep track of all data-driven codes developed and their definitions, to ensure consistency. Any revisions made during the coding process were also recorded and dated. An example has been provided below to illustrate how theory-driven codes and data-driven codes were developed for this study, but more details regarding the data analysis process will be explained in Chapter 5.

To further ensure reliability of the results of coding, the researcher engaged in informal discussion with colleagues regarding the codes and how the codes have been applied, but no formal inter-rater reliability took place.

Based on the theoretical framework, the reflective cycle begins with description of what happened. To develop a corresponding theoretical code, it was necessary to operationalise the abstract concept for the current case study.

Considering the fact that the logbooks were used to record students' interpreting practices, it was likely that "description of what happened" could take at least three directions: students might describe the context of a particular interpreting practice, which might include components of what Kalina (2005) refers to as "in-process requirements", such as the topic and the speaker's language (See Section 3.3); they might describe the experience in general terms; or they might describe problem(s) they have encountered. Hence, three theoretical codes were created for "describe what happened" in the theoretical framework and distinctions were made between the three types of description (See Section 5.1 for more details).

During the data analysis process, two data-driven codes were added, related to "describe what happened". In addition to the three types of description discussed above, it was found that students also described the practice materials they had used and the various practices conducted over the semester. Since the three theoretical codes in place could not capture the essence of these segments, two data-driven codes were created and added to the codebook.

4.7 Conclusion

This chapter explained the rationale for adopting a case study approach to examine the student-centred pedagogical approach which requires students to keep logbooks. The context of the case study including the participants and the scaffolding tools provided to the students were presented and examined in detail. Finally, rationale for adopting thematic analysis to analyse data collected for the case study was explained.

The next chapter will explain the hybrid approach adopted for code development and illustrate the development of theoretical codes and data-driven codes. Comparison and collation of codes resulted in categories that were

then used to develop themes. The researcher then seeks to identify patterns in the data and identify potential links between different themes to answer the research questions.

Chapter 5 Data Analysis

As explained in Chapter 4, the current case study employed a hybrid approach to develop codes. This chapter begins with a detailed explanation of how theory-driven codes were created from the theoretical framework in Section 5.1. Section 5.2 then provides explanations and illustration of the development of data-driven codes through multiple methods of coding. The processes of First Cycle coding and Second Cycle coding will be explained in Sections 5.3 and 5.4, respectively. Finally, Section 5.5 will explain how themes emerged from the data and a conclusion in Section 5.6 will provide a summary of the data analysis process.

In Section 4.6, it was mentioned that the codes used for this study were developed through a hybrid approach. In other words, codes were generated through two different approaches. The theory-driven codes or theoretical codes were created from the theoretical framework and the assessment criteria for self-assessment. The data-driven codes were created during the coding process to add to the theoretical codes.

5.1 A hybrid approach for code development: theoretical codes

Theoretical codes were developed through operationalisation of the abstract concepts in the theoretical framework. As briefly discussed in Section 4.6, the current study focused on student interpreters' interpreting practice and the theoretical framework was also applied to examine students' interpreting practice and learning process.

As explained in Section 3.6, the first stage in the reflective cycle model starts with a question that asks learners to describe what happened. Considering the fact that the logbooks were used to record students' interpreting practices, it was predicted that "description of what happened" could take at least three directions: (1) students might describe the context of a particular interpreting practice, including the occasion where the speech took place, the languages they were working on, the mode of interpreting, the

speaker(s), the type of speech, the length of the speech, and the material(s) used in the practice; (2) students might describe the experience in general terms, including how they conducted the practice or if they were working with their peers; or (3) they might describe problem(s) and difficulties encountered during the practice.

Hence, three theoretical codes were created for “describe what happened” in the theoretical framework and distinctions were made between the three types of description, which were “Describe Contextual Information”, “Describe the Practice” and “Describe Problem Encountered”. The code “Describe Contextual Information” was defined as “The student provides contextual or background information about the practice, including the mode of interpreting, the language direction, the type of speech, the length of the speech, and the material(s) used in the practice and the occasion of the interpreting practice”. The code “Describe the Practice” was defined as “The student describes what s/he did in the particular practice/exercise, including how s/he conducted the practice and if s/he have worked with a partner.” The third code “Describe Problem Encountered” was defined as “the student gives a general description about a problem or problems s/he has experienced.” (See Table 5.1)

Theoretical codes	Definitions
Describe Contextual Information	The student provides contextual or background information about the practice, including the mode of interpreting, the language direction, the type of speech, the length of the speech, and the material(s) used in the practice and the occasion of the interpreting practice.
Describe the Practice	The student describes what s/he did in the particular practice/exercise, including how s/he conducted the practice and if s/he have worked with a partner.
Describe Problem Encountered	The student gives a general description about a problem or problems s/he has experienced

Table 5.1 Theoretical codes for “Description of what happened”

In the theoretical framework, the second stage is about learner’s feeling about the experience. As discussed in Chapter 2, there has been a debate among researchers about learners’ feeling towards an experience and the relationship between learners’ feeling and their reflection. While Dewey (1910) assumes that reflection is triggered with a feeling of discomfort, Boud et al. (1985a, see Section 2.8) argue that reflection can be triggered when learners have positive feeling. Whether learners feel positively or negatively about a particular experience, their feeling may have an impact on how they perceive and evaluate their own performance, so it is necessary for the researcher to identify student interpreters’ feeling about a particular interpreting experience in this study. To identify student interpreters’ feeling about their interpreting experience, two theoretical codes were created, aiming to capture student interpreters’ expressions of their feeling towards the interpreting performance. The first one “Positive Feeling about Interpreting Performance” focused on expressions that express students’ positive feeling and satisfaction about a particular interpreting performance. The second one “Negative Feeling about Interpreting Performance” focused on students’ feeling of anxiety, frustration or stress and other negative feeling (see Table 5.2).

Theoretical codes	Definitions
Positive Feeling about Interpreting Performance	As manifested in the logbooks, the student feels positive about the particular interpreting performance
Negative Feeling about Interpreting Performance	As manifested in the logbooks, the student feels negative about the particular interpreting performance

Table 5.2 Theoretical codes for “Feelings about the interpreting performance”

Following Gibbs’ (1988) reflective cycle, the next process is “Evaluation”. For this study, in addition to applying Gibbs’ suggestion for learners to determine “what is good and bad about the experience”, the researcher created theoretical codes related to assessment based on the assessment criteria discussed in Sections 3.4 and 3.6.

The first theoretical code was “Assessment of Accuracy”, which referred to a student’s assessment of whether or not his/her interpretation correctly conveyed all the facts and information in the source text, including figures and names. Correctly conveying the information also means that there is no unwarranted addition or distortion of information.

The second theoretical code, “Assessment of Faithfulness”, referred to a student’s assessment of his/her ability to maintain the stylistic and rhetorical element of the original speech and reflect the speaker’s intention and emotion. As discussed in Section 3.6, the two separate theoretical codes were created in order to account for the subtle differences between accuracy and fidelity. Conveying a message accurately and conveying the speaker’s intention and emotion should be treated as separate criteria.

On the intratextual level, “Assessment of Completeness” referred to a student’s assessment of the completeness of his/her interpretation and whether or not information was omitted unintentionally. Basically, assessment of completeness was closely related to the issue of omission.

As pointed out in Section 3.4, in the literature on criteria for self-assessment, coherence and cohesion are often placed under the same category. However, the discussion in Section 3.6 also showed the importance of differentiating these two criteria and a distinction between the two criteria is made in the scaffolding tools provided in this case. Hence, for the purpose of this study, “Assessment of Coherence” focused on a student’s assessment of the interpretation as a text, in terms of how the text as a whole hangs together and if the interpretation makes sense to the listener. In contrast, “Assessment of Cohesion” focused on a student’s assessment of their use of grammatical devices or “textual clues” (Hatim and Mason, 1997) in their interpretation. The last theoretical code related to the intratextual aspect was “Assessment of Target Language Quality”, which was defined as a student’s assessment of whether or not his/her interpretation was linguistically acceptable and stylistically correct and whether or not appropriate terminology, grammar and register were used.

In addition to intertextual and intratextual aspects, a theoretical code was developed for assessment of the delivery. “Assessment of Delivery” was defined as a student’s assessment of their delivery, which includes all the sub-components related to delivery, such as voice quality, fluency, pace, hesitation, fillers and pauses.

For consecutive interpreting and liaison interpreting, a separate theoretical code was created to account for a student’s assessment of his/her eye contact, gaze with interlocutors, posture, appearance of confidence and gesture. While “Assessment of Delivery” focused on aural aspects, such as intonation, voice quality and fluency, “Assessment of Presentation” was defined as a student’s assessment of the non-verbal components of their performance. (See Table 5.3 for all theoretical codes created from assessment criteria.)

Theoretical codes	Definitions
Assessment of Accuracy	The student is assessing whether or not his/her interpretation has correctly conveyed all the facts and information in the source text, including figures and names and whether or not there is unwarranted addition or distortion of information.
Assessment of Faithfulness	The student is assessing his/her ability to maintain the stylistic and rhetorical element of the original speech and reflect the speaker’s intention and emotion.
Assessment of Completeness	The student is assessing the completeness of his/her interpretation and whether or not information has been omitted unintentionally.
Assessment of Coherence	The student is assessing the coherence of his/her interpretation, how the interpretation as a text hangs together and if the interpretation makes sense to the listener.
Assessment of Cohesion	The student is assessing how s/he has used grammatical devices or textual clues.
Assessment of Language Quality	The student is assessing whether or not his/her interpretation is linguistically acceptable and stylistically correct and whether or not appropriate terminology, grammar and register have been used.
Assessment of Delivery	The student is assessing his/her delivery of interpretation, focusing on the audio aspects, including fluency, backtracking, voice conviction, unfinished

	sentences.
Assessment of Presentation	The student is assessing his/her presentation (for consecutive interpreting and liaison interpreting), focusing on non-verbal aspects, including eye contact with audience, gaze with interlocutors, appearance of confidence and use of gestures.

Table 5.3 Theoretical codes for “Assessment of interpreter performance”

The next theoretical code created was related to what Dewey (1910) refers to as locating and defining the problem in his steps of reflection and what Gibbs (1988) refers to as “Analysis”. Similar concepts can be found in what Mezirow (1990a) refers to as “instrumental learning” as learners examine the nature of the problem and the strategies they have used during the process, asking questions like what is the nature of this problem and what are the causes of this problem? What went wrong during the process? What can be done to fix it? (See Section 2.9)

To create theoretical codes for “analysis”, the researcher needed to be clear about what “analysis” means for student interpreters when they encounter a problem. According to Gibbs (1988/2013), analysis is identifying the source and defining the problem. He suggests learners to think about “Why did this happen?” “How can I make sense of that?” and “How can that be explained?” (p.55) When we place these questions in the context of interpreter training, the questions can be narrowed down to aspects related to interpreting. For instance, the SLO asked students to analyse what went wrong during the interpreting process and why. In classroom settings, when we ask students to think about why they make mistakes during the interpreting process, their answers may range from completely no idea to being quite certain of the cause, but the lecturer can discuss this with students and ask them why they are certain or why they have no idea.

In the logbooks, students’ level of certainty about the cause of their problem was reflected in their expressions. However, their analysis regarding the cause of their problem may not represent the real cause and there is a possibility students’ analysis was speculative, as pointed out in Chapter 2

(Sections 2.6 to 2.10). Nevertheless, from the students' expressions in the logbooks, the researcher can at least identify if the student "feels certain" about the source of the problem or if s/he is unsure. The researcher thus created two theoretical codes for "analysis": "Speculation of Cause of Problem" and "Identification of Source of Problem".

The distinction between the two theoretical codes lay in the fact that "Speculation of Cause of Problem" showed that the student had attempted to find the cause of a problem, but had not been able to pinpoint the cause of problem and relied heavily on guessing or speculation. "Identification of Source of Problem" was applicable when a student provided specific details and has explicitly identified the root of the problem. (See Table 5.4 for the theoretical codes and their definitions.)

Theoretical codes	Definitions
Speculation of Cause of Problem	The student is trying to find the cause for the problem s/he has experienced, but has not specifically pointed out the cause. Rather, the statement leans towards speculation or guessing.
Identification of Source of Problem	The student is describing the cause for the problem s/he has experienced and has specifically pointed out the cause, such as difficulty with note-taking or difficulty with multitasking, concentration

Table 5.4 Theoretical codes for "Analysis"

After determining the theoretical codes related to "Analysis", the next processes to be considered are Dewey's (1910) "suggestion of possible solution" in the reflective steps or what Gibbs (1988) refers to as "conclusion what might you do differently" in the reflective cycle (see Section 2.10).

For Dewey (1910), the initial solutions that learners come up with may be "speculative" and "adventurous" and they would need to gather more evidence as they try out the solutions and then make a final judgement about

the feasibility of the solution. Dewey (ibid.) did not think it is such a bad idea to allow learners to play with a variety of speculations and try out different solutions. Combining Dewey’s argument for speculative solutions and the question in Gibbs’ (1988/2013) reflective cycle, the focus at this stage is for learners to think about what they have learnt from the experience and what might they have done differently. The theoretical code created for “What is to be Done Differently” was defined as “the speculative suggestions that a student comes up with after the experience and/or the lessons a student has learnt from the experience” (Table 5.5).

Theoretical codes	Definition
What is to be Done Differently	The speculative suggestion that a student come up with after the experience and/or the lessons a student has learnt from the experience.

Table 5.5 Theoretical codes for “Conclusion”

Up until this point, the focus has been placed on describing the problem, identifying the problem and analysing the problem. The next stage suggested in Gibbs’ reflective cycle, “Action plan”, will require students to think about their strategies and how these strategies can help them overcome problems or facilitate learning.

As discussed in Section 3.5, in the context of the current study, students’ strategies can be divided into learning strategies and interpreting strategies, depending on the situations or problems. In Section 3.6, the researcher has explained that for the purpose of this study, interpreting strategies will be strategies that enable students to cope with problems related to their cognitive efforts, such as the listening and comprehension effort and production. Learning strategies, on the other hand, are things students do to improve their foundational ability, such as increasing practice time and practice pre-interpreting exercise. In other words, the focus is not on interpreting strategies, but on strategies that can facilitate learning.

Two theoretical codes were created for students' "action plan": "Learning Strategy" was defined as "a strategy or a plan that is not directly connected to the interpreting process, but rather one to help students improve their foundational ability, such as increasing practice time, reading background information and carrying out pre-interpreting exercise".

Unlike the previous theoretical code, "Learning Strategy", the second theoretical code, "Development of Interpreting Strategies", focused on the student interpreter's role as an interpreter. As discussed in Section 3.5, interpreters use a variety of interpreting strategies to help them cope with various difficulties they encounter when they face the tightrope situation (Gile, 2009). An action plan related to the development or application of interpreting strategies should entail how a student interpreter plans to cope with the various difficulties s/he has encountered during the interpreting process. This theoretical code was defined as "the strategy or strategies that a student interpreter intends to use in the future to resolve the problem encountered during the interpreting process." (See Table 5.6)

As Gibbs (1988/2013) points out, a learner may need to abandon the plan and come up with a new plan (See Section 2.11). Learning strategies also include the evaluation and modification of a plan (Gu, 2012, see also Section 3.5.2). In other words, it can be expected that the action plan with detailed description may not work and the learner may later decide to come up with a new plan. The researcher also looked for signs in the logbooks for such "follow-up" actions or plans, as they could be considered as another piece of evidence that the student was moving further towards reflection.

Theoretical code	Definition
Learning Strategy	A strategy or a plan that is not directly connected to the interpreting process, but rather one to help students improve their foundational ability, such as increasing practice time, reading background information and practice pre-interpreting exercise.

Development of Interpreting Strategies	The strategy or strategies that a student interpreter intends to use in the future to resolve the problem encountered during the interpreting process.
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Table 5.6 Theoretical codes for “Action plan”

In addition to theoretical codes, this study also created codes from the data, as will be explained in the next Section. Both theoretical codes and their definitions were all listed in the codebook, to ensure that the researcher could keep track of all the codes created and helped the researcher maintain consistency when she coded the raw data. More details about the codebook will be also given in the next Section.

5.2 A hybrid approach for code development: data-driven codes

As mentioned earlier in Section 4.6, this study adopted a hybrid approach. In other words, during the coding process, theoretical codes established in Section 5.1 were applied. For sentences or segments whose essence could not be captured by the theoretical codes, data-driven codes were developed.

In Section 4.5, it was pointed out that researchers have to go through the processes of encoding and decoding of the data for thematic analysis. This process of encoding and decoding has been commonly referred to as the coding process. Through this coding process, researchers can “organize and group similarly coded data into categories or “families” because they share some characteristic” (Saldana, 2009: p. 452),

Saldana also points out that “coding is not a precise science; it is primarily an interpretive act” (Saldana, 2013: p. 4). In other words, when the researcher is reading and re-reading the data and trying to decide what how to use codes to best capture the essence of a particular sentence or segment of the journal text, her perspective and judgement will have an influence of how the data is interpreted. Moreover, the codes produced during the coding process “can sometimes *summarize, distill* (sic), or *condense* data, not simply *reduce* them.” (Saldana, 2013: p.4, original italics). Coding, thus, should not be considered as a mechanical process in which the researcher does not play a role.

Rather, the researcher needs to make numerous decisions during the iterative process as she constantly revisits the research questions, the theoretical framework, and the data to decide what is relevant to the study and what is deemed irrelevant.

Precisely because the researcher's judgment is needed during the coding process, it is important to make all the judgments explicit and clear to show readers how themes emerge from the researcher's analysis (Ryan and Bernard, 2003). One of the functions of the codebook (see Section 4.5), in addition to helping the researcher maintain consistency, is to make the judgment process explicit and clear.

5.3 First Cycle coding

For this study, the researcher went through two cycles of coding: First Cycle and Second Cycle. The First Cycle coding process, i.e. initial coding, began with the researcher reading and re-reading data (Boyatzis, 1998; Braun and Clarke, 2006; 2013). The main objective of initial coding, as explained by Flick (2009), was to “[express] data and phenomena in the form of concepts” and, for this objective, “data are first disentangled (“segmented”)”. In other words, the texts (i.e. students' logbooks) collected were arranged into segments or chunks. As long as a segment or a chunk could “stand on its own” (DeCuir-Gunby et al., 2011) to express a complete idea, it was treated as a unit. Punctuation marks like comma and periods were often indicators of a chunk, but in some cases, the chunk may be as small as a single word, a short phrase or as long as two to three sentences.

The journals were arranged in sequential order and each chunk in the texts was given a sequential number (SN) for data management purpose. As mentioned in Section 4.4, to protect students' anonymity, students' names were taken out from the journals and numbers were randomly assigned to the students. PG refers to postgraduate students and UG stands for undergraduate students. The codes assigned to the unit of meaning were placed next to the coded segments. Each code was also given a number for ease of later retrieval.

In the following example, the researcher will use an extract taken from PG03’s journal to illustrate how texts in students’ journals were arranged and segmented for analysis. The original text, as shown in PG03’s journal is shown below. In this extract, PG03 was evaluating the quality of her target language expressions:

Complete blank of Spanish subjunctive, and ‘usted’ formations. Some new vocabulary used, but mainly in the form of invented words e.g. ‘interpretadora’ for ‘interprete’-pitiful! (Entry 01, PG03)

Figure 5.1 An extract from PG03’s journal before segmentation

After segmentation, this paragraph was divided into the following 6 segments based on the ideas or concepts expressed. In the first two segments (SN 35-36), the student described issues related to her Spanish grammar. In the next two segments (SN 37-38), she talked about using invented vocabulary in her interpretation. In the original text, “pitiful” is part of the second sentence, but through chunking, “pitiful” was treated as a separate unit because with this word, the student expressed her feelings about the quality of her target language. Hence, this single word was treated as a separate unit (See Table 5.7).

Student	SN (Sequential Number)	Logbook Texts
PG03	35	Complete blank of Spanish subjunctive,
PG03	36	and ‘usted’ formations.
PG03	37	Some new vocabulary used,
PG03	38	but mainly in the form of invented words e.g. ‘interpretadora’ for ‘interprete’
PG03	39	- pitiful!

Table 5.7 An extract from PG03’s journal after segmentation

After chunking, the researcher then applied theoretical codes to applicable segments. For segments where theoretical codes were not applicable, the researcher chose two methods of coding in the First Cycle

coding. The first method was “Process Coding”. Process Coding is a method of coding that uses gerunds (“-ing” words) for all codes created. It is used to “connote action in the data” (Charmaz, 2002, cited in Saldana, 2013) and enabled the researcher to pay attention to “observable activity” and “more general conceptual action” (Saldana, 2013: p. 96). Examples of observable activities in the students’ journals include reading notes or doing shadowing whereas general conceptual action may include struggling to keep up. Using Process Coding, the researcher can focus on the learners' actions or conceptual actions in response to situations or problems they encounter.

Basically, as the researcher worked to apply Process Coding to the data, she was constantly asking herself “what the student is doing” when examining the data. However, choosing Process Coding as the coding method meant that the headings or subheadings in the students’ journals would not be coded during the First Cycle, with exception of those that provided contextual information, which were given theoretical codes. The reason that the headings and subheadings were not coded was because they did not inform the researcher of observable activity or conceptual action. Although headings and subheadings would not have “process codes”, such information was not ignored in the data analysis process because a second coding method was applied to take them into account.

The second coding method was used to help the researcher identify potential influence of the scaffolding tools. Because the scaffolding tools provided to the students were considered to be pre-established tools, the researcher chose to apply what Miles et al. (2014) refer to as “Protocol Coding” (p.78) to identify segments in the journals that may have been influenced by the scaffolding tools. Protocol Coding is a coding method based on a “preestablished [sic] [...] standardized, or prescribed system” (ibid.), which makes it fitting for the purpose of identifying the influence of the pre-established guidelines.

For this study, three scaffolding tools, i.e. How to Complete the Logbook (“HCL”), Suggestion for Logbook Outline (“SLO”) and “Peer-and

Self-assessment Grid” (“Grid”) were provided to the students with the addition of Logbook Assessment Criteria (“LAC”). Thus, there were basically four protocol codes, which are HCL, SLO, Grid and LAC. Definitions of the four protocol codes covered what had been suggested in the guidelines, as discussed in Section 4.3 and summarised in Table 5.8 below. Headings or subheadings used in students’ journals, such as “Profile”, “Intratextual” and “Generative Feedback” were coded with these protocol codes. In cases when the headings or subheadings did not match the definitions listed in the protocol codes, a code “Other” was applied.

Protocol Codes	Definitions
HCL	The application of this code indicates that the student's arrangement of the logbook displays the following similarities with the HCL, which includes dates to create chronological record, comments given by peers and teachers, clear distinction of generative problems and non-generative problems, positive and negative comments, targets for specific timeframe, progress noticed.
SLO	The application of this code indicates that the student's arrangement of the logbook displays the following similarities with the SLO, which includes Profile information (date, speaker, occasion/event, language combination/direction, speech types, and topic), type of practice (e.g. mode of interpreting, set-up, preparation), Evaluation of the performance, Reflection on the performance and reflective overview of the semester.
Grid	The application of this code indicates that the student's arrangement of the logbook displays the following similarities with the grid, which includes inter-textual aspects, intratextual aspect, behavioural aspect, user perception and knowledge
LAC	The application of this code indicates that the student's arrangement of the logbook displays the following similarities with the Logbook Assessment Criteria, which expects students to evaluate her/his performance as an interpreter and plan and implement further development. Students should review their interpreting assignments and

	evaluate their performance and preparation; they should identify their strengths and weaknesses and create a personal development plan to develop and maintain their professional knowledge and skills.
Other	The application of this code indicates that the student has used a heading, subheading and big categories of assessment criteria that have not been mentioned in any of the guidelines used in the study.

Table 5.8 Protocol Codes and their definitions

To be more specific about which components in the scaffolding tools had been adopted by the students, components mentioned in the definitions, such as “evaluation”, “target”, “progress” were added to the Protocol Code applied, to specify which component has been adopted by the students. Hence, rather than simply use “HCL”, the code may be presented as “HCL_generative problem” or “SLO_reflection”.

During the process of First Cycle coding, the texts were scrutinised in an iterative manner. As explained in Section 5.1, the theoretical codes were given priority consideration during the coding process; however, definitions of each code needed to be followed to ensure that the researcher did not try to force an existing code onto the text. When the theoretical codes were not applicable to the data, or when the definitions of the theoretical codes could not capture the essence of the text, data-driven codes were created and added.

Table 5.9 below illustrates how theoretical codes (as explained in Section 5.1) were applied and how data-driven codes were created for segments where theoretical codes were not applicable. In the extract, although the heading “Feedback” (SN88) was given a sequential number for data management purpose, it was not coded because it did not inform the researcher of the student’s activity or conceptual action. In the next segment (SN89), PG01 gave a general evaluative statement about her performance; in other words, she was assessing her overall performance. As there was no theoretical code for assessment of overall performance, a data-driven code “Assessing overall performance” was created for this segment, as shown in Table 5.9. In

the next segment (SN90), PG01 was assessing her accuracy. Since there was a theoretical code already created for assessment of accuracy, it was then applied to the segment, as shown in the shaded columns in Table 5.9.

Student	Sequential No. (SN)	Logbook Text	Code No. (CN)	Process Code	Protocol Code
PG01	88	Feedback:			Other
PG01	89	This was a clear instance of a poor in form and good in content interpretation.	73	Assessing overall performance	
PG01	90	I did get most of the information accurately, including some numbers or figures,	74	Assessment of Accuracy	

Table 5.9 Example of First Cycle coding and codes

Process Coding enabled the researcher to focus on learners’ activities or conceptual actions as expressed in the journals, but it could not inform the researcher of the learners’ attitudes or emotions, or linguistic expressions used, nor could it highlight the potential influence of the scaffolding tools (discussed in Section 4.3). The researcher thus decided to add subcodes. “A subcode is a second-order tag assigned after a primary code to detail or enrich the entry” (Miles et al., 2014: p. 80). Using subcodes can help the researcher pay attention to the nuances in the text.

For the subcodes, the coding strategy adopted to capture expressions used by the participants is referred to as “In Vivo Coding” by Saldana (2013). This strategy ensures that the created codes come from “the direct language of participants” (p.61). In other words, expressions used by the participants will be quoted as In Vivo Codes to show the participant’s attitude, emotion, and linguistic expressions. Subcodes can be added to both theoretical codes and data-driven codes.

Table 5.10 illustrates the importance of the subcodes in the process of First Cycle coding. During the coding process, a data-driven code “Learning from others’ feedback” was generated. However, such feedback can have multiple facets, including teacher’s instruction, peers’ comments, learning materials provided by the teachers, books, and other resources that are accessible on the Internet. Subcodes were then used so that the different facets of feedback could also be taken into account. For instance, the following three extracts from three different students were all about feedback provided by others:

[...] according to my classmates and teacher I was still sounded nervous [...] (PG01, SN93)

In addition to this, my lecturer and classmates have pointed out that I use to play with my hair during the speech. (PG02, SN49)

Thus, I read a book on note-taking [...] (PG10, SN230)

Both extracts have been coded with the data-driven code “Learning from others’ feedback”, but different subcodes have been added to show the differences among the types of feedback, as shown in Table 5.10. For PG01 and PG02, the comments were critiques from teacher and classmates who point out their problem. For PG10, the source of the feedback was a book. Note that the subcodes were usually direct quotes from the students’ journals as they are In Vivo codes.

Student	SN	Logbook Text	Process Code	Subcode/ In Vivo Codes
PG01	93	according to my classmates and teacher I was still sounded nervous,	Learning from others' feedback	classmates and teacher; nervous
PG02	49	In addition to this, my lecturer and classmates have pointed out that I use to play with my hair during the speech.	Learning from others' feedback	lecturer and classmates; play with hair

PG10	230	Thus, I read a book on note-taking	Learning from others' feedback	a book on note-taking
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Table 5.10 Examples of codes with subcodes

Subcodes were also useful for theoretical codes, particularly those related to students' self-assessment (Section 5.1) because the researcher could use the subcodes to identify whether the student was giving a positive, negative or mixed assessment of her performance.

5.3.1 Codebook

As the coding process continued, more data-driven codes were created and added. To keep track of all the codes, a codebook was created. As briefly mentioned in Section 4.5, a codebook is basically a record kept by the researcher to keep track of all the codes and their definitions to ensure consistency. A codebook includes “a set of codes, definitions, and examples used as a guide to help analysedata.” (Fonteyn et al., 2008: p. 138) The purposes of having a codebook were to help the researcher record her thought processes, to ensure consistency of codes applied and to make the coding process as explicit as possible.

The codebook in this study evolved with the coding process. In addition to the theoretical codes established before the coding process (as discussed in Section 5.1), data-driven codes were added, deleted and refined during the coding process, at the same time, some definitions in the codebooks were also revised.

It has been suggested by scholars that a codebook should consist of six components, including the code name, brief definition, full definition, inclusion criteria, exclusion criteria, and examples (MacQueen et al., 1998), but studies have been carried out with only three main components of a codebook, including code name, full definition and example(s) (DeCuir-Gunby et al., 2011). In the current study, the codebook developed included four main components: code name, full definition, example and memo. The first three components were used to keep track of all the codes while last one “memo”

served as the researcher’s notes to record thoughts or questions that required attention or issues that needed to be resolved. The researcher did not use inclusion criteria and exclusion criteria for the codebook, partly because such criteria were included in the definitions. The memo also served as a tool for the researcher to be aware of the subtle differences between different codes.

Table 5.11 is an extract taken from the codebook which shows the code name, the full definitions of the codes, examples and memo. “Assessment of Delivery” is shaded to indicate a theoretical code. The other two codes are data-driven codes. All the segments must be coded according to the definitions. In the extract, a memo was written for the researcher to think about the code “Evaluating notes” (See Table 5.11) as the researcher may need to differentiate students’ evaluation of their notes and their note-taking process.

Data-driven Code	Definition	Memo
Stating the aims of a practice	The student is explaining the aims/objectives of a particular practice	
Assessment of Delivery	The student is assessing his/her delivery of interpretation, focusing on the audio aspects, including fluency, backtracking, voice conviction, unfinished sentences.	
Evaluating notes	The student is evaluating the quality/effectiveness of notes taken for consecutive interpreting. The evaluation may be negative, positive, or descriptive.	Should note-taking process also be included?

Table 5.11 Extract from the codebook

5.4 Second Cycle Coding

After First Cycle coding, codes generated and applied were examined again in the Second Cycle coding. This process is often referred to as focused coding and grounded theorists would refer to this process as axial coding (Saldana, 2013). Students might have used different expressions, but once codes were created after First Cycle coding, the researcher could focus on the concepts expressed by the students, rather than their wordings, and work to refine the codes in Second Cycle coding.

The primary goal of Second Cycle Coding, as pointed out by Saldana (2009), is “to develop a sense of categorical, thematic, conceptual, and/or theoretical organization” (p. 149). At the same time, codes are also closely examined to ensure that the researcher has moved away from merely describing the data and that the codes are analytic (Gibbs, 2007).

During Second Cycle coding, the codes were carefully compared and collated (Charmaz, 2006; Gibbs, 2014) to form categories. The researcher then sought to identify recurring concepts, metaphors and analogies, transitions, similarities and differences of expressions used by the same participant and by different participants (Ryan and Bernard, 2003).

In addition, grounded theorists (Kelle, 2007; Charmaz, 2014) suggest that researchers can seek to investigate if the categories developed are related to:

(1) *phenomena* at which the actions and interactions in the domain under study are directed; (2) *causal conditions* which lead to the occurrence of these phenomena; (3) attributes of the *context* of the investigated phenomena; (4) additional intervening *conditions* by which the investigated phenomena are influenced; (5) *action and interactional strategies* the actors use to handle the conditions; and (6) the *consequences* of their actions and interactions. (Kelle, 2007: p. 202)

The aims of this study were to investigate if there were signs in the logbooks that could indicate students’ reflection and self-assessment and to

determine if there is tension between the two. The researcher also wanted to explore the influence of the scaffolding tools. To achieve these aims, before the Second Cycle coding, questions were formulated based on the theoretical framework constructed in Section 2.12 and Section 3.6. During the Second Cycle coding process, these questions became the guiding questions for the researcher to compare and group codes:

- (1) what types of practices have been mentioned or described by participants which link to “description of what happened” in the theoretical framework;
- (2) what kinds of problems have been mentioned or described by participants which are also connected to “description of what happened” in the theoretical framework, but focusing on students’ recount of problems;
- (3) what students have said about their feelings about the encountering the problem which links to “thinking about one’s feeling” in the theoretical framework;
- (4) what criteria students have mentioned when they talked about their performance which are connected to “evaluation of the experience” in the theoretical framework and the assessment criteria defined in Section 3.6;
- (5) what students have said about the causes of the problems encountered which links to “analysis to make sense of the situation” and possibly “conclusion with potential alternatives” in the theoretical framework;
- (6) whether students have talked about strategies and if they have, what strategies have been mentioned in the logbooks which link to both “conclusion with potential alternatives” and “action plan for similar situation that may happen in the future”;
- (7) whether students have talked about a follow-up plan, and if they have, what are the plans;
- (8) whether students have talked about the results of their strategies;
- (9) the influence of scaffolding tools in directing students towards solutions.

Categories which emerged from Second Cycle coding became candidates for themes in the final stage (to be discussed in Section 5.4). They may help to establish causal relationships between/among different codes; or they may also help to establish potential relationships among different components/participants (Miles et al., 2014). Basically, the categories established in Second Cycle coding served as important clues for the researcher to draw a clear picture of students' learning process, as expressed in their reflective journals.

The second purpose of Second Cycle coding was to identify the potential influence of the scaffolding tools. Protocol codes generated in First Cycle coding were thus used to see to what extent the scaffolding tools had been used in the students' logbooks.

5.5 Theme development

In the final stage, categories generated during Second Cycle coding allowed the researcher to identify important trends in the dataset, develop themes, and work to find potential connections between the guidelines (through Protocol Codes) and the students' learning process (through Process Codes). The primary purpose at this stage was to draw a clear picture to illustrate student interpreters' learning process and pinpoint evidence in the data for the researcher to answer the three research questions.

5.6 Conclusion

As the current case study adopted a hybrid approach to develop codes, this chapter has explained how theoretical codes were developed using the theoretical framework and how data-driven codes were generated from the coding process.

Codes developed through these methods were then compared and collated to become categories that the researcher could use to develop themes. Themes developed after completion of data analysis were then used to answer the research questions stated in Section 1.2. In the next chapter, the findings of the data analysis will be presented. The researcher will also attempt to

present a model to illustrate the learning process of the student interpreters in this case study.

Chapter 6 Findings and Discussion

In an attempt to answer the research questions posed in Section 1.2, the researcher reviewed literature on reflective practice and reflective journals (Chapter 2), explored studies on interpreter assessment and assessment criteria (Chapter 3) and carried out a case study to collect reflective journals/logbooks from student interpreters (Chapter 4). Chapter 5 explained the hybrid approach used for coding and theme development. This chapter presents the findings of the data analysis through First Cycle coding, Second Cycle coding and finally the themes developed. Using the themes which emerged from the data analysis process, the researcher will answer the research questions by examining students' learning processes as shown in the logbooks.

6.1 Introduction

As explained in Section 5.3, before commencing First Cycle coding, the logbooks collected from the participants were arranged in order and the texts were segmented. All the logbooks collected were arranged into a total of 7,867 segments for analysis. The 18 theoretical codes developed in Section 5.1 were applied to 2622 segments with 2031 subcodes. Protocol Codes used to identify the potential influence of the guidelines were applied to 3632 segments, including headings and subheadings. At the same time, after First Cycle coding, 144 data-driven codes were added to the code book and applied to 2105 segments.

After applying and generating codes during First Cycle coding, these codes were compared and grouped together during Second Cycle coding, as explained in Section 5.4. During the Second Cycle, the researcher sought to identify codes that inform the researcher about: (1) what types of practices have been mentioned or described by participants; (2) what kinds of problems have been mentioned or described by participants; (3) what students have said about their feelings about the situation; (4) what criteria have students mentioned when they talked about their performance; (5) what students said about the causes of the problems encountered; (6) what strategies have been mentioned in

the logbooks; (7) whether students have talked about a follow-up plan, and if they have, what are the plans; (8) whether students have talked about the results of their strategies? (9) the influence of scaffolding tools in directing students towards solutions.

Because of the way the theoretical codes were developed from the theoretical framework, the categories of the theoretical codes remained the same. The data-driven codes created to complement the theoretical codes were grouped carefully during the Second Cycle coding. Attempts were made to place grouped data-driven codes in the equivalent categories to the theoretical codes. The results after completing two cycles of coding will be presented in the following sections, but first, an overview of the logbooks collected will be presented.

6.1.1 Overview of students' logbooks

The descriptive statistics of all the logbooks collected for this study are presented in Table 6.1, which includes information about the word counts of each logbook and the number of segments for different participants. As mentioned in Section 4.5, the SLO asked students to write about “reflection on the performance” and also a “reflective overview”, which means that students are asked to present diary-form records for their practices, and also a reflective essay that focuses on reviewing what they have learnt throughout the semester (see Section 2.14). Hence, Table 6.1 makes a distinction between the word count of practice records and that of the students' overview. The number of entries of each logbook is also included in the table. When the researcher counted the number of entries in the logbooks, the main criterion was to focus on learning records, which means that students have included the date of the practice, evaluation of the performance and reflection that focuses on the practice, not what they have learnt during the semester.

As can be seen in Table 6.1, on average, participants in this case study included four to five entries of practice records in their logbooks, with the exceptions of PG13 and UG03 (italicised in Table 6.1) who have included more than 10 entries in their logbooks. However, the total word counts of these two

participants have not exceeded the average, which indicates that their entries may be shorter than average.

The average number of word count of the logbooks is 2384 words with participants submitting logbooks with a total word count that ranges between 1,093 words and 4,571 words. The word counts of PG04, PG12, UG08 and UG11 (shaded in grey in Table 6.1) are comparatively higher than the average word count of 2384 words. At the same time, three out of these four students also have higher number of segments (PG04, PG12 and UG08), well above the average 278 segments. In comparison, UG01 and UG05 (bolded in the table) have relatively lower-than-average word counts.

If we look at the word count of “reflective overview” and “individual practices” in the table, we can see that most participants (20 out of 27) have concentrated on practice records. In fact, three of the participants have actually not written any “reflective overview” in their logbooks (PG07, PG12 and PG15, marked in black columns in Table 6.1). However, these participants’ total word counts are not lower than average. This is because these 3 participants have all written very long narrative reflection for “reflection on the performance” after each practice.

Another issue that is noteworthy is the fact that five participants (PG01, PG04, UG03, UG04, UG09, see additional information in Table 6.1) have written an introduction to explain the content of their logbooks, how the logbooks have been organised, the abbreviations used and aims of the semester. Logbooks are supposed to be like the learners’ own records. The fact that students wrote introductions for their logbooks implies that they know that their logbooks will be read by someone else (i.e. the teacher).

Student	No. of logbook entries	Word count of “reflective overview”	Word count of individual practices	Additional information	Total word count	No. of segments to be coded
PG01	4	419	1030	123 (introduction)	1,572	158
PG02	4	1682	405	N/A	1,277	220
PG03	5	1162	1668		2,830	285
PG04	4	373	3986	212 (introduction)	4,571	577
PG05	5	954	750	N/A	1,704	208
PG06	5	1238	950	N/A	2188	219
PG07	4	0	2259	N/A	2,259	253
PG08	4	124	2532	N/A	2,656	265
PG09	5	0	1760	N/A	1,760	181
PG10	5	740	1843	N/A	2,583	265
PG11	5	392	2446	N/A	2,838	317
PG12	5	0	3972	N/A	3,972	648
<i>PG13</i>	<i>20</i>	<i>1204</i>	<i>1148</i>	N/A	2,352	442
PG14	5	1195	812	N/A	2,007	252
PG15	5	0	2545	N/A	2,545	245
UG01	3	206	972	N/A	1,178	154
UG02	5	1132	854	N/A	1,986	260
<i>UG03</i>	<i>11</i>	258	828	261 (introduction)	1,347	111
UG04	4	384	1928	230 (introduction)	2,771	359
UG05	5	270	823	N/A	1,093	122
UG06	6	128	1293	140 (introduction)	1,574	234
UG07	5	800	2080	N/A	2,960	244
UG08	5	1280	1786	N/A	3,066	443
UG09	6	542	1737	274 (introduction)	2,553	359
UG10	5	292	2333	N/A	2,625	212
UG11	6	1492	2063	13 (book reference)	3,571	273
UG12	5	223	2317	N/A	2,540	198
Average range	4-6	611	1745	N/A	2384	278

Table 6.1 General Statistics Regarding the Logbooks

Table 6.2 below shows the types of exercises that have been included in the students' logbooks. As explained in Chapter 4, the guidelines have encouraged students to include foundational exercises in their logbooks, so in addition to interpreting practices, participants have also included foundational exercises. As we can see from Table 6.2, while most participants have recorded both SI and CI practices in their logbooks, the number of SI practices is much lower than CI practices and some students have not included SI practices in their logbooks (shown in gray in Table 6.2). This is expected since the courses of this case study are introductory courses and participants have just begun to learn interpreting. At the same time, it should also be noted that as there are less SI practices recorded in the logbooks, it would be difficult for the present study to investigate if students use different assessment criteria for CI and for SI.

Participant	Total No. of practices	Consecutive Interpreting	Simultaneous Interpreting	Skill development exercises
PG01	4	2	2	
PG02	4	2	2	
PG03	5	2	2	1 chuchotage
PG04	4	3	1	
PG05	5	5	0	
PG06	5	3	1	1 multitasking
PG07	8	2	2	2 shadowing in the same entry 2 note-taking in the same entry
PG08	4	2	0	1 memory 1 note-taking
PG09	5	1	2	1 memory 1 sight
PG10	5	3	1	1 shadowing
PG11	5	3	1	1 liaison
PG12	5	1		3 liaison 1 sight

PG13	21	9	1	2 public speaking 4 retell 2 shadowing 2 summarizing 1 sight
PG14	5	3	0	1 sight 1 chuchotage
PG15	5	4	1	2 retell before CI
UG01	3	2	0	1 memory and note-taking
UG02	5	3	2	
UG03	N/A	3	2	6 note-taking
UG04	4	6	5	5 liaison
UG05	5	3	2	
UG06	6	4	2	
UG07	5	2	2	1 liaison
UG08	5	2	3	
UG09	6	3	3	
UG10	5	3	2	
UG11	6	2.5	1.5	2 liaison
UG12	5	3	2	
Total	155	81.5	26.5	
Percentage		53%	17%	

Table 6.2 Types of exercises included in the logbooks

After presenting the descriptive statistics of the journals, the researcher will now present and discuss the results of coding, starting with Protocol Codes that indicate the potential influence of the scaffolding tools (see Sections 4.3.2 to 4.3.6), followed by the application of theoretical codes and the development of data-driven codes.

6.2 Influence of the scaffolding tools

As discussed in Section 5.3, the researcher originally intended to use protocol codes solely to code headings and subheadings in the students' logbooks to highlight potential links between the scaffolding tools and the data. However, during the process of coding, there were clear indications that some students'

narrative comments had also been influenced by the scaffolding tools as well as the Logbook Assessment Criteria. Hence, apart from headings and subheadings, protocol codes have also been applied to code narrative comments in the students' logbooks.

As explained in Sections 4.3.2 to 4.3.6, the guidelines provided to the participants have been developed in an evolutionary way over the years by the course leader. While certain concepts are mentioned in all the three guidelines prepared by the course leader, some concepts have been dropped in the later guidelines. For instance, "How to Complete Logbook" (HCL) asks students to record all comments made by their peers and teachers (see Section 4.3.2) but "Suggestion for Logbook Outline" (SLO) does not mention this. Moreover, certain concepts, such as syntax and modulation, are only mentioned in the "Logbook Assessment Criteria" (LAC).

As students may choose to use the guidelines according to their own preferences, it is not uncommon to find a segment in the dataset with more than one protocol code. In fact, some participants have picked and mixed some of the components from the guidelines. Take PGPG15 as an example, her logbooks incorporate her own "mix-and-match" selection of the components from the guidelines, including "inter-textual" and "intra-textual", "structure" and "texture" from the self-assessment grid; "comments from peers" from HCL and "reflection" from SLO.

An issue that is worth pointing out is the fact that among the 27 participants, over half (16) have followed the suggestions of the SLO to grade their own performance with marks (504 segments). With the exception of one participant who gave an overall mark for each performance and two participants who have used scores rather than marks, the majority of these 16 participants have given marks (ranging from A to F, following SLO) to evaluate various aspects of their performance, such as meaning, coherence, decalage and delivery. Three participants (PG10, PG14 and UG09) have even taken one step further and given grades to individual criteria, such as tone, voice, and logical links.

As discussed in Section 3.2.2, grades and marks are usually used for summative assessment. For participants, when they review these grades and marks, it may help them to see if they have improved, i.e. if they have given themselves higher grades towards the end of the semester. However, when marks and grades are used by students in their logbooks, unless these marks are followed by students' descriptive or narrative evaluation of their performance, it is difficult for the researcher or the trainer to determine what exactly have caused students to give themselves lower or higher marks. If there is only an overall mark for the performance, the researcher or the trainer will have no way to know which aspects students have assessed.

In the dataset, 3,369 segments have been coded with protocol codes derived from HCL, SLO, LAC and self-assessment grid. Among them, 174 segments have been coded with more than one protocol code. The majority of the segments (2859 out of 3,369 or 84.9%) have been coded with protocol codes that are derived from the SLO, including profile, type of practice, evaluation and reflection. Also, even though not everyone use the assessment criteria suggested in SLO, all 27 participants have incorporated components from SLO in their logbooks, particularly profile, reflection and reflective overview. HCL-derived protocol codes have been applied to 337 segments, covering mainly date, generative comment/non-generative comment, and feedback from peers and teachers. In comparison, the 478 segments coded with grid-derived protocol codes are all related to assessment of interpreting performance.

As mentioned earlier, most participants in this case study have used the SLO as they arrange their logbooks. The following extract is taken from UG01's logbook. With the exception of the date at the very top of the extract, which follows HCL's suggestion to create a chronological record, UG01 has followed nearly all the suggestions in SLO to arrange her logbook, from Profile, Type of practice, Evaluation of the performance (though UG01 has not given herself grades), and Reflection of the performance. The two questions suggested in the SLO, "what goes wrong" and why does it go wrong" have

been listed. “Goals/Priorities” suggested in the SLO becomes another question to be answered.

Date: 27/10/10

1. Profile

Date: 26/10/10

Occasion/event: Women’s conference

Language combination: English-German

Speech type: descriptive

Topic: situation of working women

2. Type of practice

Mode of interpreting/Type of exercise: consecutive

Set-up (individual, group, etc.): group of four

Preparation (sources, glossaries, etc.): none

3. Evaluation of the performance

(1) Meaning:

Came across, two paragraphs: content a little more complicated (cultural specifics), shifts in meaning
minor omissions, watch tenses, mostly write them down but not always

(2) Cohesion/ coherence: okay

(3) Delivery/ Presentation

Audience happy with my performance, was communicative

(4) Target language expression

Some very nice solutions

4. Reflection on the performance

(1) What went wrong?

Don’t take notes fast enough, especially for English-German; cultural specifics which I don’t understand immediately are simplified and delivered in the wrong way

(2) Why does it go wrong:

Due to lack of concentration

(3) Goals/Priorities?

Do more cultural studies, stay focused while taking notes

The group seemed happy with my overall performance which was fluid, eloquent and communicative. There were some minor shifts in meaning

during delivery because I had fallen behind with my notes because I was either losing concentration or because the paragraph treated cultural specifics which I didn't understand immediately. The main priority therefore must be to do more cultural studies and to do some concentration exercises to stay focused throughout note-taking.

Figure 6.1 Extract from UG01's Logbook

Even though all 27 participants used some components of the SLO to arrange their logbooks, not everyone followed SLO as closely as UG01 did. In fact, 24 out of 27 students also tried to incorporate components from the other guidelines in their logbooks. For instance, 11 students used the self-assessment grid or some components taken from the self-assessment grid in their logbooks (356 segments in total have been coded with grid-related protocol codes only). Six students talked about generative and non-generative problems, the two concepts that are stressed in HCL, in their “reflection of the performance” or “reflective overview”.

What is worth noting is the fact that, according to the results of coding, components in the LAC have also been adopted in the students' logbooks (552 segments across 24 participants). Due to the fact that many concepts in the protocol codes overlap with each other, many of the segments coded with protocol codes derived from LAC have multiple protocol codes. However, four students specifically evaluated their syntax, a component that was only been mentioned in the LAC.

The initial results of the coding show that students' approaches to arranging their logbooks have been influenced by the guidelines provided, as well as by the LAC. Students have tried to incorporate the various components and concepts mentioned in the guidelines. The preliminary finding at the moment is that the scaffolding tools have influenced students' logbooks in terms of “what should be included in the logbooks” and “which aspects of one's performance should be assessed”. However, not all students follow these guidelines.

A good example from this case study is UG02. Rather than using any of the guidelines offered to her, UG02 chose to use the feedback sheet developed by Schjoldager (1996) in her logbook. Hence, rather than talking about “Meaning”, “Coherence/Cohesion” and so on, UG02 talked about “comprehensibility and delivery”, “language”, “coherence and plausibility” and “loyalty” (see Section 3.4 and Table 3.1 in Chapter 3). The protocol codes for most of the headings and subheadings used in her logbook are all placed in the category “Other”. Nevertheless, UG02 followed the suggestions in SLO to write profile information, reflection and reflective overview.

The next section will present the results on what students actually wrote in the logbooks for reflection and which aspects of their interpreting performance or practice have been assessed.

6.3 The learning experience of trainee interpreter

As discussed in Section 5.1, a total of 18 theoretical codes have been developed from the theoretical framework to be applied to the logbook texts. Among the 18 theoretical codes, 3 codes are related to description of what happened, 2 codes are related to learner’s feelings about an experience, 8 codes are related to assessment, 2 codes for analysis, 1 code for conclusion and the last 2 codes are related to a learner’s action plan.

In the following sections, the focus will be placed on application of the theoretical codes and issues that arose during the coding process. Data-driven codes created to help resolve these issues will also be explained in the same sections. In fact, during the coding process, the researcher found that many segments in the dataset could not be captured with the theoretical codes created in Section 5.1 and data-driven codes were needed. In total, 2105 segments have been coded with over 100 data-driven codes. Considering the large number of data-driven codes and the fact that theoretical codes have all been defined in previous chapter, definitions of the codes discussed will be provided as footnotes. Readers can also refer to Appendix 7 for the complete codebook.

6.3.1 Describing interpreting practices

As mentioned in the introduction to this chapter, the analysis process aims to answer at least eight questions that can lead to answers to the research questions. The first question to be answered is “what types of practices have been mentioned or described by participants”. Two theoretical codes constructed in Section 5.1 are used. The two theoretical codes are “Describe Contextual Information”⁸ and “Describe the Practice”⁹.

The first code “Describe Contextual Information” is closely linked with protocol codes which in many instances cover issues related to type of practice or mode of interpreting. However, the researcher has deliberately reserved this code for narrative segments in the students’ logbooks. In other words, if the student has simply given a topic of the speech, or used a short phrase to explain the type of practice, the segment may be coded with appropriate protocol code, but will not be coded with the theoretical code “Describe Contextual Information”.

As the code “Describe Contextual Information” is reserved for narrative segments, it is applied only to 26 segments (from 10 participants) in the dataset. In the segments coded, the contextual information provided by the participants includes the type of speeches used, the length of the speech, or the occasion where the practice took place. For instance, PG08 and UG07 talked about the length of material they used in the extracts below.

[...] the material chosen this week is about 3-5 minutes long in Chinese or English. (PG08, SN15)

This was a conference speech which I interpreted consecutively during a mini-conference class. (UG07, SN61)

The next theoretical code is “Describe the Practice”. During First Cycle coding, it was soon realised that the definition of this theoretical code is

⁸ “Describe Contextual Information”: The student provides contextual or background information about the practice, including the mode of interpreting, the language direction, the type of speech and the occasion of the interpreting practice.

⁹ “Describe the Practice”: The student describes what s/he did in the particular practice/exercise, including how s/he conducted the practice and if s/he have worked with a partner.

too broad and can be applied to students' descriptions with varying degrees of detail, i.e. from general descriptions to very detailed descriptions. For instance, in the following extract, PG08 states that the practices she carried out included shadowing and retelling.

Two methods are used this week. One is shadowing and the other one is to retell the story as much as possible. (PG08, SN16)

In comparison, PG09 is very specific about how she carried out the practice, as shown in the extract below:

My basic practising steps are as follows:
Step 1: listen for the structure and main idea, note down 5 key words
Step 2: listen again and enrich my notes
Step 3: interpret and record
Step 5: look at the original transcript and listen to my recording and assess them according to different criteria
Step 6: imitate the intonation of the original speech and record the SOURCE LANGUAGE
Step 7: listen to my own speech and take note then interpret again. (PG09, SN67-72)

Both students are describing their practices, but while PG08 uses general statements about her practice, PG09 has provided a lot of details about her practice. This is a clear sign that the theoretical code "Describe the Practice" may be too broad. A decision was made to keep the theoretical code for general description, as shown in PG08's extract, but subcodes have been added to show what type of practice. At the end of First Cycle coding, 14 segments have been coded with "Describe the Practice" and the types of practices mentioned range from foundational exercises like active listening, memorising, shadowing and note-taking to sight translation, consecutive interpreting and simultaneous interpreting.

When students have been explicitly detailed about the practice they have carried out, as shown in the extract of PG09, data-driven codes have been

created to capture the concepts expressed, such as “Describing the practice procedures”¹⁰.

At the same time, in students’ logbooks, especially in the section of “reflective overview”, there are segments where students explain the various practices and exercises they have done over the semester, particularly in their reflective overview. There are also segments where students have tried to provide specific details of the problems they have encountered during the interpretation process or during the learning process. Hence, during the coding process, data-driven codes have been added. These codes include “Describing practice materials used over the semester”¹¹ and “Describing practices done over the semester”¹².

These two data-driven codes have been applied to 30 segments across 11 students. Three examples have been selected from the dataset to show how the two data-driven codes are applied. As shown in the extracts below, the three students are describing the broader features of the various practices they have carried out over the semester, instead of how a particular practice is conducted.

Most topics were quite general and did not require a thorough preparation. (PG01, SN109)

Most of my practice during semester one was directed towards consecutive interpreting (PG04, SN12)

Furthermore, about 70% of my practice at home is English to German interpreting rather than the other way round. (PG06, SN39)

¹⁰ “Describing the practice procedures”: The student gives a very detailed description of the steps taken to carry out a practice and explains how a practice proceeds from beginning to the end.

¹¹ “Describing practice materials used over the semester”: (Usually in the reflective section/overview) The student is describing the practice materials used for various practices over the semester.

¹² “Describing practices done over the semester”: (Usually in the reflective section/overview) The student is describing what s/he has done for the semester.

Among the 11 participants, nine students are postgraduate and only two are undergraduate students. These students are usually those with higher word counts for their reflective overview.

To give a brief summary, most students in this case study have provided information about the type of practices they have done, but the level of specificity vary from student to student. While the HPI (Appendix 1) does suggest that students use different materials, the guidelines, including the LAC, do not specify the level of specificity that is required, which may be the reason for the variation in students' logbooks.

6.3.2 Describing problems encountered

The second question that the researcher aims to answer through the analysis is “What kinds of problems have been mentioned or described by participants?” This question is again related to “description of what happened” in the theoretical framework, but it focuses on problems encountered.

The theoretical code created for this is “Describe Problem Encountered”¹³. When this theoretical code was created, it was assumed that students would give general descriptions of the problem they have experienced. This assumption was applicable to 308 segments. The majority of the problems described by the students can be considered to be potential causes for poor interpreting performance. Problems mentioned by the students include inability to understand the source text, struggling to take notes or reproduce the speech from notes, difficulty in finding the right word, difficulty in getting the right register, and difficulty in speaking and listening at the same time, breathing problem, pronunciation, intonation, nervousness, long pause and abrupt stop.

While some students gave a general description of the problem they encountered, others chose to add more information by providing specific examples of the problem. Hence, two data-driven codes, “Describing an

¹³ The student gives a general description about a problem or problems s/he has experienced

instance of problem”¹⁴ and “Giving example(s) of mistakes or problems”¹⁵ have been created and added to the codebook. The two codes differ in the level of detail provided in the students’ logbooks. During the coding process, it has been found that many students have made efforts to provide specific examples to illustrate the problem they have encountered. The code “Describing an instance of problem” has been applied to 21 segments from 9 students. For instance, in the extracts below, PG03 and PG04 do not just state that they made lexical errors and used the wrong terms, they elaborate on the problems by providing specific examples of their mistakes:

[...] getting confused between whether or not I was Spanglifying a word or not, so repetition of 'cinematography' in a questioning tone took away from the performance a bit. (PG03, SN77)

and I failed to find an equivalent and suitable explanation for the French acronym OMS (Organisation mondiale de la sante) which would be best interpreted as WHO (World Health Organisation) in English. (PG04, SN147)

In comparison, over half of the participants (18 out of 27) prefer to give a list of examples to show their mistakes. Some examples are about the wrong lexical choices or expressions; others have listed the wrong numbers in their interpretation. While some of the examples are listed as additional information that accompanies students’ description of their problems, what has been worrying is the fact that four students have simply list examples of their errors or expressions used as they assess their performance. For instance, PG09’s evaluation of her performance is full of examples, as shown in the extract below. The student has listed her Chinese interpretation alongside the original English. The Chinese in brackets are what the student believed what she “should have said” followed by the researcher’s literal translation of the Chinese in parenthesis. From the subheadings “under-translation”, “over-translation” and “mis-translation”, one can see that the Chinese interpretation has not been up to standard. In fact, the revised or corrected

¹⁴ “Describing an instance of problem”: The student is describing a specific instance or an example of the problem s/he has experienced, such as terminology or failure to use symbols.

¹⁵ “Giving example(s) of mistakes or problems”: The student is giving examples of mistakes or examples of expressions used in the interpretation

versions are also not accurate. Unfortunately, the student does not talk about what happened when she made these mistakes. With so much attention to the expressions used, one has to wonder if the student has thought about why she had used a certain expression.

Accuracy of information:

(1) Under-translation: weakening meaning/ omission:

International personalities 各方[國際]參與者 (participants from all sides [participants from international community])

(2) Over-translation: exaggeration of/Addition:

Intensify dialogue 交流非常重要[交流也很重要] (communication is very important [communication is also very important])

(3) Mis-translation: distorting meaning:

diminishing social esteem 不是值得驕傲的事[降低社會敬重度?] (not something to be proud of [diminish society's respect])

Figure 6. 2 Extract from PG09's Logbook

6.3.3 Learners' feeling about the experience

The third question to be answered is “What have students said about their feelings about the situation?” The theoretical codes constructed in Section 5.1 are “Positive Feelings about Interpreting Performance”¹⁶ and “Negative Feelings about Interpreting Performance”¹⁷. These two codes have been applied to 26 segments in a dataset. Among the 26 segments, 16 were about positive feelings and 10 were about negative feelings. With such a limited number of segments, it is easy to think that students rarely talked about how they feel about an interpreting performance in their logbooks. Is this a result of the influence of the scaffolding tools which have not asked students to talk about how they feel about their performance?

When data-driven codes were created during the analysing process, it was soon revealed that students did talk about their feelings in the logbooks and

¹⁶ As manifested in the logbooks, the student feels positive about the particular interpreting performance.

¹⁷ As manifested in the logbooks, the student feels negative about the particular interpreting performance.

five data-driven codes have been created. However, specifically, only two data-driven codes are related to the interpreting experience: “Describing feeling about interpreting experience”¹⁸ and “Describing feeling experienced during the interpretation/practice process”¹⁹ and there are only 19 segments. The first one captures students’ feelings about an interpreting experience and it is often used in combination with assessment of the overall performance, which will be discussed shortly. The second code is considered to be more relevant to an interpreting practice as it captures students’ feelings during the practices. For instance, PG06 has mentioned in her logbook that she “felt overwhelmed by the multi-tasking experience” (PG06, SN45). What is noteworthy here is that when students talk about their feelings about their interpreting performance, their expressions are limited to several expressions, both for positive feelings and negative feelings. When they talk about positive feelings about their interpreting performance, the most commonly used expressions are “positive”, “satisfactory”, “pleased” and “happy”, as shown in the extracts below.

I had a very positive interpreting experience. (PG02, SN165)

This practice as a whole is satisfactory. (PG11, SN147)

I was fairly happy overall with my performance. (UG05, SN104)

I was relatively pleased with my performance. (UG07, SN79)

In comparison, when students talked about their negative feelings about an interpreting performance, the most commonly used expressions are “disappointing” and “not happy”, as shown in the extracts below. The use of “disappointment” seems to suggest that students have higher expectation of themselves and so they feel disappointed when their performance does not meet their own standards.

I was quite disappointed with this performance. (UG07, SN181)

I was not happy with this performance. (UG09, SN117)

¹⁸ The student is describing her feeling after an interpreting practice, but not about the good or the bad of the performance.

¹⁹ The student is talking about his/her feeling (both positive and negative) during the interpretation or practice process. These practices might include memory exercise, or note-taking exercise.

I was quite disappointed with my performance [...] (UG11, SN166)

In summary, although the number of segments coded for students' feelings are relatively few, the results of the analysis do demonstrate that students express their feelings in the logbooks and if researchers (Boud et al., 1985a; Gibbs, 1988) have agreed that expressing one's feelings is also important in the reflective cycle, interpreter trainers should also pay attention to this issue and explicitly encourage students to express their feelings.

6.3.4 Self-assessment of interpreting performance

The fourth question "What criteria have students mentioned when they talked about their performance?" is connected to students' self-assessment. Theoretical codes related to assessment were created in Section 5.1, based on the assessment criteria discussed in the literature on interpreter training and quality of interpreting (Sections 3.4) and defined in the theoretical framework (Section 3.6). Because there are 8 theoretical codes in total, these codes and their definitions are presented again in Table 6.2 below.

Theoretical Framework	Theoretical codes	Definitions
Assessment of interpreter performance	Assessment of Accuracy	The student is assessing whether or not his/her interpretation has correctly conveyed all the facts and information in the source text, including figures and names and whether or not there is unwarranted addition or distortion of information.
	Assessment of Faithfulness	The student is assessing his/her ability to maintain the stylistic and rhetorical element of the original speech and reflect the speaker's intention and emotion.
	Assessment of Completeness	The student is assessing the completeness of his/her interpretation and whether or not information has been omitted unintentionally.
	Assessment of Coherence	The student is assessing the coherence of his/her interpretation, how the interpretation as a text hangs together and if the interpretation makes sense to the listener.
	Assessment of Cohesion	The student is assessing how s/he has used grammatical devices or textual clues to ensure that listeners can follow the structure.
	Assessment of Language Quality	The student is assessing whether or not his/her interpretation is linguistically acceptable and

		stylistically correct and whether or not appropriate terminology, grammar and register have been used.
	Assessment of Delivery	The student is assessing his/her delivery of interpretation, focusing on the audio aspects, including fluency, backtracking, voice conviction, unfinished sentences.
	Assessment of Presentation	The student is assessing his/her presentation (for consecutive interpreting and liaison interpreting), focusing on non-verbal aspects, including eye contact with audience, gaze with interlocutors, appearance of confidence and use of gestures.

Table 6.2 Theoretical codes for “Assessment of interpreting performance”

The 8 theoretical codes related to assessment of interpreter performance (see Table 6.4) have been applied to 1655 segments, including 715 segments on delivery, 314 on language quality, 190 on accuracy, 152 on completeness, 117 on coherence, 108 on cohesion, 49 on faithfulness, and 9 on presentation. These segments include both 757 segments for positive assessment, 792 segments for negative assessment and 13 segments that express mixed opinions.

Judging from the number of segments coded, there are roughly equal numbers of segments coded for positive performance and negative performance, which is different from the findings of previous studies on student interpreters’ self-assessment, which claim that student interpreters usually pay more attention to negative aspects of their performance (Bartłomiejczyk, 2007, see Section 3.4.).

Delivery and language quality received relatively more attention than the other aspects. Faithfulness received the least attention from the students. “Assessment of Delivery” accounts for over 40% of all the segments coded. The majority of segments coded with “Assessment of Delivery” are comments about unfinished sentences, fillers (umms, ahhs, ers), hesitation pauses, and poor intonation. When a student has managed to complete most of the sentences and reduce fillers and hesitation pauses, the performance is considered to be fluent by the student.

For “Assessment of Accuracy”, some students have simply used the expressions “accurate”, “accurately” or “inaccurate” to assess their performance. However, the majority of segments coded with “Assessment of Accuracy” focus on conveying the meaning or main ideas, minimising distortions and getting the numbers and names.

While students have focused on the positive aspect when they assess the accuracy of their interpretation, they tend to talk about the negative aspect when they assess the completeness of their interpretation. In other words, they tend to talk about “omissions”, rather than “complete” or “completeness”. This findings corresponds to what Bartłomiejczyk (2007) found in her study.

Compared with all the other theoretical codes, “Assessment of Faithfulness” received much less attention in the students’ logbooks. When students did talk about “conveying the speaker’s intention and emotion”, they tended to use the exact wording given in the guidelines. For instance,

I managed to convey the speaker’s intention through accurate interpretation (PG04, SN46)

Strength: Intention basically conveyed. (PG12, SN33)

Intention conveyed successfully. (UG09, SN270)

When students did mention “conveying speaker’s intention” in their logbooks, they did not discuss what they believed to be the speaker’s intention. This may be an indication that students have difficulty in guessing or determining what the speaker’s intention is.

In a similar fashion to the segments coded for “Assessment of Faithfulness”, when students assessed their language quality, they also tended to use expressions or wording taken from the guidelines, such as “grammatically correct”, “idiomatic expression” and “interference from the source language”, “appropriate register”, “specialist terminology”. In addition to grammar, expression, source text interference, register and terminology, students also evaluated their lexical choice and syntax.

In Section 3.6, when trying to define the assessment criteria, it was mentioned that it is particularly challenging to define coherence and cohesion as the two concepts have been used interchangeably. In the literature on interpreter training, coherent usually means “consistency of sense” (Bühler, 1986) and “logical coherence” (Ahn, 2005) of the target text whereas cohesion is seen as the various grammatical devices used. The question that has been raised in Section 3.6 is can students differentiate the two concepts?

In the dataset, there are 117 segments on “Assessment of Coherence” and 107 segments on “Assessment of Cohesion”. Examining the segments coded, it can be said that the concepts of coherence and cohesion are also ill-defined for the students and the two terms have been used interchangeably in the logbooks, despite the fact that the self-assessment grid has differentiated the two concepts. Most participants used the heading from the SLO “Coherence/Cohesion” in their logbook, which means that they did not necessarily need to differentiate coherence from cohesion in their logbooks. PG04’s logbook, however, used the self-assessment grid for assessment. As the self-assessment grid does differentiate coherence and cohesion (but no elaboration is provided), PG04’s logbook enables the researcher to explore this student’s understanding of the two concepts.

From the following extracts taken from 3 different places in PG04’s logbook, one can see that the student uses the two terms interchangeably, often in connection with structure and links. Based on the extracts, the coherence of a speech depends on the links used, the completeness of the sentences, register and intonation. At the same time, cohesion may be disrupted if there are lexical errors. The student does not talk about sense consistency or grammatical devices.

Speech was coherent overall, owing to logical links and completed sentences. (PG04, SN54-55)

Lexical errors in the form of interference from the source text disrupted the cohesion of the speech. Good links in general. (PG04, SN60-61)

Although the overall structure of the speech was coherent, owing to the use of logical links, fully finished sentences, consistent register, and natural intonation, there were a few lexical errors, which disrupted the cohesion of the text.
(PG04, SN139-145)

These extracts show that PG04's understanding of coherence and cohesion is different from the researcher's definitions or the definitions discussed in the literature (Section 3.6) and from the definitions provided in the guidelines (Section 4.3). The fuzziness of the concepts may be the reasons why many students assess their coherence by simply stating that the interpretation was coherent or incoherent, as shown in the extracts below.

Coherent and well-structured. (PG03, SN148)

This lead to speeches that were neither cohesive nor coherent [...](PG06, SN47)

The coherence of target language was also very weak. (PG07, SN163)

Mostly coherent and making sense; (PG11, SN256)

As for cohesion, the majority of participants (20 out of 27) talked about "links", "linking words", "connectors", "conjunctions", and "cohesive words" when they assess the cohesion of their performance. This implies that most participants' understanding of cohesion as the use of grammatical devices matches the definition discussed in the literature.

Another issue that should be pointed out here is that some students have tried to evaluate more than one aspect at once. For instance, instead of evaluating accuracy and completeness separately, some students have tried to assess both at the same time. For instance, in the students' logbooks, one finds sentences like these following extracts:

[...] although there were several omissions and distorting in meaning. (PG09, SN33-34)

Accuracy: Basically conveyed the meaning right, but not in accurate target language (PG11, SN116-117)

In such cases, the sentences will be divided into separate segments so that different codes may be applied. However, UG07 presents a difficult task to the researcher when she writes:

MEANING: On this occasion around 60-70% of the meaning was conveyed accurately. (UG07, SN165)

It is possible for a reader to say that UG07 is assessing the completeness of her interpreting, since she talked about the percentage of meaning conveyed. At the same time, it is also plausible to say that UG07 is assessing the accuracy of her interpreting, which is about 60% to 70%. Hence, this segment has two theoretical codes as both “Assessment of Completeness” and “Assessment of Accuracy” have been applied to this segment. In the dataset, there are only two more segments like this when two codes were applied to the same segments because there were two possibilities of interpreting the concepts expressed.

The last theoretical code to be discussed is “Assessment of Presentation”. As this code is applied only to segments related to presentation skills in consecutive interpreting, it is only applied to 9 segments and in the majority of these issue is about having eye contact with the audience.

During the coding process, it was found necessary to add additional data-driven codes as students have assessed other aspects of their interpreting or used criteria that have not been included in the theoretical codes. The first one is about students’ assessment of their overall performance. Students’ “reflection of the performance” usually start with expressions about their overall performance and the data-driven code “Assessing overall performance”²⁰ is created to capture these segments. In total, this code was applied to 27 segments.

Another data-driven code is created for segments related to students’ assessment of other aspects of interpreting, particularly foundational exercises.

²⁰ performance.

As the guidelines have suggested that students can include their practices of foundational exercises, such as shadowing and active listening in the logbooks, the researcher found that when students described that they had practiced foundational exercises (see section 6.3.1), they also assessed their performance.

Foundational exercises assessed in the students' logbooks include mostly exercises that do not involve language transfer, such as summarising, shadowing, memory training and note-taking exercises. When students recorded foundational exercises in their logbooks, some of them chose to make modifications of the assessment criteria suggested in the guideline, while others used the same assessment criteria to evaluate their performance, especially the four assessment criteria suggested in SLO.

To code segments related to foundational exercises, the researcher has chosen not to use the theoretical codes, but created a data-driven code "Assessing foundational skills"²¹ to highlight the fact that the performance being assessed is not interpreting and this code was applied to 15 segments.

As discussed in Section 3.3, conference interpreters placed great emphasis on listeners' view of their interpreting performance (Shlesinger et al., 1997; Kurz, 2001), as demonstrated by the abundant studies on users' perspective (Ng, 1992; Kurz, 1993/2002; Koczyński, 1994; Moser, 1995; Kurz, 2001; Kurz, 2003b).

Unlike their fellow interpreters, listeners mostly cannot understand the source language and have to rely on the interpreters to receive the message. Hence, users' opinions about an interpreter's performance may be different from assessment from fellow interpreters. While interpreters focus on accuracy, faithfulness and completeness, the audience may focus more on the production of the interpretation, or intratextual aspects (Shlesinger et al., 1997),

²¹ The student is assessing his/her performance for foundational skills, including memory, shadowing(whether or not s/he has managed to shadow the complete message.), active listening and retelling. Note-taking is not included as separate codes have been created.

such as grammar, overall fluency, overuse of fillers (umms, ahhs) (Cecot, 2001).

Eight participants in this case study appear to understand the importance of their users and express concerns about their audience's view of their performance. For instance, in her Reflective overview, UG02 points out:

I think it is very important that interpreters acquire good behavioural skills in the course of their training because, for a listener, every odd noise coming out of the booth might distract them from listening to an interpreter. If a listener cannot understand or bear to listen to an interpreter, the interpreter's other qualities are irrelevant. (UG02, SN210-211)

If an interpreter's choice of language is inadequate, the listener gets irritated and the interpreter's other qualities become again less relevant. (UG02, SN221)

For these participants, although they might not have real audience when they are practising, they still try to picture themselves as the audience and use audience's perspective to assess their own performance. Hence, "Thinking about the audience's response"²², the code that indicates the student interpreter have mentioned their view of listeners' response, becomes an additional assessment criteria for the participants.

The last data-driven code to be discussed is related to students' assessment of *décalage*, "Assessing *décalage*"²³. This code is created mainly because students talked about the appropriateness of their *décalage* during simultaneous interpreting, but the theoretical codes for assessment of interpreter performance do not cover the issue of *décalage*.

6.3.5 Analysing the cause of the problem

The discussions thus far have described what students wrote in the logbooks about the practice, the problem(s) they encountered, their feelings and their

²² The student is speculating/anticipating/worrying what the audience might think about his/her interpretation

²³ The student is assessing the appropriateness of his/her *décalage*, i.e. how far or how close s/he is behind the speaker.

assessment of their performance. Following the sequence of the theoretical framework, the next question to be answered is “what did students say about the causes of the problems encountered?” In Section 5.1, two theoretical codes “Speculation of Cause of Problem”²⁴ and “Identification of Source of Problem”²⁵ have been created for “Analysis”. The main difference between the two codes depends largely on students’ level of certainty about the cause of the problem, as shown in their logbooks.

The results of First Cycle coding reveal that 37 segments have been coded with “Speculation of Cause of Problem”. The speculated causes include anxiety, nerves, concentration problem, lack of preparation and poor décalage. However, reading the segments coded with “Speculation of Cause of Problem”, it can be seen that students were not sure about what had been the reason for their problems. For instance, PG02 states in her logbook that her hesitation “maybe due to note taking or just gaps”, which clearly shows that the student was not exactly sure why she hesitated during her interpretation.

Hesitation shows weaknesses, maybe due to note taking or just gaps in the speech. (PG02, SN64-65)

When students are unsure of the causes of their problems, the approach taken is to list multiple reasons for the poor performance. For instance, in the two extracts below, PG07 and PG09 both speculate that their poor performance was the result of more than one factor.

I thought maybe the reasons of it were following too near of the original speaker, speaking too loud and many unfamiliar words in the speech. (PG07, SN45)

These problems might be explained as a result of the following factors: poor note-taking skills, memory, stress, psychological condition. (PG09, SN37)

²⁴ The student is trying to find the cause for the problem s/he has experienced, but has not specifically pointed out the cause. Rather, the statement leans towards speculation or guessing.

²⁵ The student is describing the cause for the problem s/he has experienced and has specifically pointed out the cause, such as difficulty with note-taking or difficulty with multitasking, concentration.

In comparison, in the 149 segments coded with “Identification of Source of Problem”, students tend to be more specific about what led to the less-than-satisfactory performance. For instance, in the extract below, PG03 states that she encountered difficulty in re-expressing the message into English and she gives two reasons for this difficulty:

While the words seemed to fit together well enough in French, putting them into English was hard to do. Visualising the idea of the speech over the words was hard to do for this one. Partly because of an impenetrable mental block, on my part, of all things football, partly because the speaker spoke quite quickly and it was even harder to get a grasp of the idea with the speed he was going at. (PG03, SN175-178)

Another difference between students’ “Speculation of Cause of Problem” and “Identification of Source of Problem” lies in the fact that students who managed to identify the source of their problems often see a domino effect when one factor influences the next and finally leads to poor performance. For instance, PG04 states in her extract that lack of cultural and topic-specific knowledge has made it difficult for her to find suitable lexical choices in the interpreting process and thus led to lexical errors:

These lexical errors were the result of problems experienced with the processing/ analysing stage of interpreting, at which point I was unable to find suitable equivalents in the target language owing to a lack of both cultural and topic-specific knowledge. (PG04, SN148-150)

A worrying phenomenon found in the logbooks is some students’ tendency to ‘randomly’ offer a reason as explanation, which was followed by a quick “solution”. For instance, in the following extract selected from UG01’s logbook, she wrote

(1)What went wrong?

Don’t take notes fast enough, especially for English-German; cultural specifics which I don’t understand immediately are simplified and delivered in the wrong way

(2) Why does it go wrong?

Due to lack of concentration
(UG01, SN64-71)

UG01's logbook format has followed the SLO, so the questions "what went wrong" and "why does it go wrong" were posed in her logbooks. In her description of what went wrong, she has not talked about the concentration issue. However, her answer to "why does it go wrong" is "lack of concentration". As UG01 has not explained why she thought concentration was the main problem, it is difficult to tell if she has really analysed the problem and try to pinpoint the cause or she has just given the answer randomly.

Additional data-driven codes that are connected to analysing the cause of problem included "Explaining one's first language"²⁶, "Describing no prior experience"²⁷, and "Knowing one's existing problem"²⁸. Segments coded with these data-driven codes showed that some students have provided information about their background, including their first language and whether or not they are native speakers. It is interesting to see that some students talked about their first language, then the information is often offered as a reason to explain why they cannot perform well, i.e. because they have difficulty comprehending a foreign language or because they have difficult evaluating the quality of target language expressions, since it is not their native language, as shown in the extract below:

Here it needs to be mentioned that English is not the mother tongue and therefore this part was twice as difficult. (UG08, SN21)

At the same time, nearly half of the participants in this case study made it clear that they had not tried consecutive or simultaneous interpreting before. When they talk about a practice, they state that this is the first time s/he has tried consecutive interpreting or simultaneous interpreting. Again, having no prior experience is given as one of the reasons why they have not performed

²⁶ "Explaining one's first language": The student is explaining to the reader what his/her first language is.

²⁷ "Describing no prior experience": The student is explaining to the readers that s/he has no prior experience in interpreting simultaneously or consecutively.

²⁸ "Knowing one's existing problem": The student is pointing out his/her problem that s/he was aware of before the practice.

well, i.e. they feel stressed and find it difficult to cope with the challenging task.

6.3.6 Finding solutions

If students have analysed the causes of a problem, what strategies have been mentioned in the logbooks for them to solve the problem? This question is related to two stages of Gibbs' (1988/2013) reflective cycle: "conclusion" and "action plan". For "conclusion" in the theoretical framework, the theoretical code "What is to be Done Differently"²⁹ has been created in Section 5.1. This code is used when students give tentative or speculative suggestion about changes that can help them perform better. However, the coding process made the researcher realise that this code is closely linked to the two theoretical codes related to "analysis". For instance, after a practice, UG07 states that she could probably perform better if she prepares the topic and the vocabulary:

I should have prepared the topic slightly better so that I had the appropriate vocabulary at hand. (UG07, SN183)

UG07's statement can also be interpreted as her speculation of the cause of the problem, i.e. lack of preparation, but the code "What is to be Done Differently" is applied because the student has specifically given herself suggestion of what she can do differently in the future instead of talking about the cause of the problem.

This code is also used when a student talks about what she has learnt from the experience. For instance, in her logbook, PG13 states that she was not very patient in going through all the steps needed to learn note-taking. Then, in her reflection, she writes:

As a beginner, I have to be patient and lay a solid foundation for the profession. There is not a single step I can afford to neglect and each of the steps requires a large amount of input. (PG13, SN64-66)

²⁹ The speculative suggestions that a student comes up with after the experience and/or the lessons a student has learnt from the experience

6.3.7 Formulating action plans

If students have identified the causes and learnt from the experience, the next question is “Have students talked about a follow-up plan, and if they have, what are the plans?”

In Section 5.1, the last set of theoretical codes created for “action plan” included “Learning Strategy”³⁰ and “Development of Interpreting Strategies”³¹. The code “Learning Strategy” has been applied to 304 segments whereas the code “Development of Interpreting Strategies” has been applied to only 16 segments.

This means that students did talk about learning strategies in their logbooks. The learning strategies mentioned mostly focus on improving their foundational skills or pre-interpreting skills, including active listening, memorising, note-taking, accumulating useful expressions in the target language through reading and preparing glossary for specialist terminology. Practice more is also one of the most commonly stated learning strategies among the participants.

As discussed in Section 3.4, the study carried out by Bartłomiejczyk (2007) found that student interpreters were not able to report the strategies they used during the interpreting process. The relatively lower number of segments coded for “Development of Interpreting Strategies” may be an indicator that students in this case study have also not been using interpreting strategies (discussed in Section 3.5) when they practised interpreting. However, the 16 segments are found in the logbooks of 11 students, which means that at least one third of the participants are aware of interpreting strategies they can use during their practices.

³⁰ “Learning Strategy”: A strategy or a plan that is not directly connected to the interpreting process, but rather one to help students improve their foundational ability, such as increasing practice time, reading background information and practice pre-interpreting exercise.

³¹ “Development of Interpreting Strategies”: The strategy or strategies that a student interpreter intends to use in the future to resolve the problem encountered during the interpreting process.

Interpreting strategies mentioned by the students can be broadly divided into comprehension strategies, production strategies and strategies for consecutive interpreting. To enhance comprehension, students considered using visualisation, anticipation and preparation. For production, students talked about changing sentence structure, settling for simple expressions, always finishing the sentences, paraphrasing, varying intonation and speed, approximation of figures. For consecutive interpreting, the strategies to be used included maintaining eye contact with the audience and asking for clarification. As these strategies overlap with those discussed in Section 3.5, such as anticipation, simplifying the sentence and restructuring the sentence, it is clear that these students are aware of these strategies and express the intent to use them.

The discussion on students' strategy above shows that at least some of them are aware of learning strategies and interpreting strategies. The learning strategies are presented as a learning action plan, so the next question is "Have students talked about the results of their strategies?" In Section 4.3.6, it was stated that the LAC expects students to identify an appropriate development programme and evaluate the programme regularly against set criteria and update and revise the development programme (Logbook Assessment Criteria, 2010)

To meet the two criteria, students not only need to talk about their learning strategies as a "development programme", but also need to show that they have regularly monitored and evaluated these learning strategies. The following data-driven codes, applied to 51 segments, show students' attempt to meet the criteria: "Describing a learning strategy tried"³², "Describing a learning strategy that worked"³³, "Describing a learning strategy that did not work"³⁴ and "Describing inconsistent result of a learning strategy"³⁵.

³² "Describing a learning strategy tried": The student attempts to do something about the problem experienced during the practice when s/he was still practicing/interpreting [not afterwards]

³³ "Describing a learning strategy that worked": The student is telling the reader that a certain strategy has worked or helped to improve his/her performance.

³⁴ "Describing a learning strategy that did not work": The student talks about a particular strategy that did not work.

The segments coded with these data-driven codes are different from those segments coded with the theoretical code “Learning Strategy”, in that the students have already tried out a learning strategy, at least according to what is manifested in their logbooks, rather than just thinking about a learning strategy. However, the learning strategies discussed in these segments are similar to those discussed earlier, such as strategies used to improve memorising, improve note-taking and improve pronunciation.

Based on the results of First Cycle coding, the researcher has found that students appeared to have been trying to follow suggestions in the scaffolding tools by talking about what they had done over the semester, providing examples and details to illustrate their problems, identifying problems with recurring regularity, identifying areas that still needed to be improved, talking about their achievements and evaluating learning strategies that they had tried over the semester.

6.3.8 Reflection on the entire learning process

In the reflective overview written by the students, it was discovered that they talked about what needed to be improved and what they have done well. The first one, “Identifying area for improvement”³⁶ has been applied to 223 segments. This code is applicable when students did not use suggested assessment criteria (in which case the theoretical codes will be applied) to assess their interpreting performance and tried to evaluate their performance from another perspective. By identifying or pointing out aspects that need to be improved, these students are assessing their performance in an indirect way. For instance,

[...] lack of confidence and nervousness do make a poor impression and affect my delivery; (PG01, SN128)

However, my major problem is my pace. (PG11, SN307)

³⁵ “Describing inconsistent result of a learning strategy”: The student tried a specific learning strategy, but the strategy sometimes worked; sometimes did not work.

³⁶ “Identifying area for improvement”: The student points out a problematic area that needs to be improved.

In a similar fashion, students have also tried to give themselves credit by pointing out aspects in their performance that are considered good, although these aspects are not directly linked to the criteria suggested in the scaffolding tools. The code created for these segments is “Finding positive aspect”³⁷. For instance:

Despite being nervous, I managed to concentrate on the text...
(PG05, SN115)

I could easily follow the speech and also understand the meaning of it. (PG07, SN38)

PG05’s statement can be interpreted as a pat on her back. From the student’s point of view, she has managed well despite her nervousness, so she wrote to recognise her achievement. PG07’s statement is a way to point out her strength, which is one of the aspects that the guidelines have been asking students to identify. These students’ efforts to point out their positive aspects is an indicator of the influence of the scaffolding tools, which stressed the importance for students to also note down their strengths, progress and achievement.

Moreover, the guidelines provided by the course leader (Section 4.3) suggested that students should try to identify patterns or issues that they have neglected in the past. The results of thematic coding showed that students have tried to follow this suggestion by talking about a persistent problem or areas where they believed they have had consistent good performance. These codes are applied mainly to segments found in students’ reflective overviews and less to segments students’ “reflection on the performance”. For instance, as shown in the extracts below, the three students have observed their own problems that occur regularly:

However, I tend to end the speech with hesitation... (PG02,
SN19)

³⁷ “Finding positive aspect”: The student works to identify positive aspects of his/her performance, but these aspects are not about accuracy, completeness, coherence, delivery or other aspects already covered in the codes related to assessment.

While interpreting, I tend to neglect the emotion aspect. (PG14, SN45)

My facial expressions and nervous movements very often count against me as well. (UG02, SN215)

As can be seen from these examples, they all point to a tendency or a habitual issue that should be highlighted and this is different from highlighting an isolated problem that happened only once or twice. This code is applied to 108 segments in the dataset across 20 participants.

At the same time, 5 participants (PG01, PG02, UG05, UG09, UG11) have observed areas where they have consistently good performance. In these cases, the code “Describing aspects with consistent good performance”³⁸ has been applied. For instance, UG09 writes in her reflective overview that she has consistently good performance for her consecutive interpreting:

[...] in general my performance in consecutive interpreting has been of a good standard. In general meaning is relayed accurately and conveying the speaker's intention. (UG09, SN337-339)

6.3.9 Change of perception

The present study defines reflection as a cyclical thought process that learners go through to solve problems and to gain new insights from an experience (see Section 2.12). Discussions in the previous sections have enabled the researcher to identify signs that show students have engaged in some of the activities suggested in the reflective cycle, at least from what has been manifested in the students' logbooks. However, the researcher also needs to identify whether students have gained new insights through the process. The analysis process thus looks for evidence of new insight or change of perception in the data.

³⁸ “Describing aspects with consistent good performance”: (Usually in reflective overview), the student is describing aspects that have been considered good throughout the semester.

Data-driven codes related to students' change of perception include "Describing change of perception"³⁹ and "Describing change of feelings for interpreting"⁴⁰. Among all the participants in this case study, only 5 participants (PG13, PG15, UG05, UG06 and UG07) have segments that are coded with these two codes. PG13, for instance, described how her understanding of note-taking has been proved wrong:

...my first impression about which is completely wrong. It hit me for the first time that notes are the result of analytical listening and facilitate reproduction by providing the speech structure and relieving the interpreter's memory of some difficult details. (PG13, SN68-72)

UG07, on the other hand, has changed her feelings towards the task of interpreting:

I enjoy interpreting much more now as well because I find it easier than I used to. (UG07, SN244)

6. 3.10 Stating the aims

The findings presented and discussed in previous sections have shown that there are signs in students' logbooks that can be used to indicate some students are moving towards the later stages of Gibbs' (1988) reflective cycle. Starting from this section, the present author will present and discuss themes that are not directly connected to the reflective cycle, but are noteworthy for interpreter trainers.

The guidelines have not suggested or required students to state set learning goals for the semester or explain why they write the logbooks. However, in the dataset, six students, including five undergraduate students, have talked about their "aims for the semester"⁴¹ or the "aims for writing the

³⁹ "Describing change of perception": The student's perception of interpreting has changed over time (due to various reasons).

⁴⁰"Describing change of feeling for interpreting": The student feels that her feeling towards interpreting or the task of interpreting has changed, due to improvement, or due to better understanding.

⁴¹ "Stating the aims of the semester": The student is explaining the aims of his/her practices for the semester.

logbooks”⁴² in either the introduction section that they have added in their logbooks or in the reflective overview. For instance, in the following extract selected from PG06, the student writes about what she intends to improve:

What I want to improve:
Meaning: Improve comprehension, understand everything mentioned. No omissions or additions. Convey the speaker's emotion and intention of the speech.
Coherence: Use a variety of connectors and make it neat and clear.
Delivery: Keep the pace fluent and cohesive. Avoid outburst of information and excessive gaps (simultaneous) and sound confident and pleasant. Stop "emm's".
Expression: Form idiomatic sentences and use and reflect vocabulary and specialist terminology. Use an appropriate style and register. (UG06, SN5-16)

Figure 6. 3 Extract from PG06’s Logbook

At first glance, it is possible to think that UG06 probably has done some interpreting exercises before as she has identified specific areas that she intends to improve. However, when we compare UG06’s statements with the SLO, it becomes clear that UG06 is basically using the questions in “Evaluation of the performance” in the SLO to set her aims.

Since the guidelines have not asked students to state their aims, these students’ choice to state their aims implies two things. First, it is possible that they are attempting to explain the aims to the reader/teacher. At the same time, it is also possible that some students have had some interpreting experiences and thus they are aware of their existing problems and want to improve these problems.

6. 3.11 Additional support

One of the aims of this study is to determine the influence of the scaffolding tools on students’ reflection and self-assessment; hence, the focus of the thematic analysis process has also been on identifying signs that indicate potential influence of teachers’ guidelines. However, for the students, the

⁴² “Stating the aims of the logbook”: The student is explaining the aims/ purpose of why s/he wrote the logbook

guidelines are not the only scaffolding supporting their learning. As pointed out in HCL, comments from peers and teachers are also very important.

In addition to comments from their peers and teachers, some participants have also used instructional materials and books to help them identify problems that they were originally unaware of or help them improve their performance. Codes related to such additional support include “Learning from others’ feedback”⁴³ and “Receiving positive feedback from others”⁴⁴. As explained in Section 5.3, subcodes have been added to the codes to indicate which problems were identified through feedback from others and what aspects are considered to be good by others.

Nearly half of the participants in this case study mentioned the support they have received from others. For instance, in the following extract from PG15’s reflective journal, we can see that she has recorded a critique from her lecturer, which includes both problematic areas to be improved and positive aspects of her performance. At the same time, she also noted down a positive comment given by her peers.

<p>Feedback from lecturer: some unidiomatic expressions; caused difficulty in understanding stable voice good manners in booth good rhythm and tempo but inappropriate chunking, caused listeners difficulty to understand, user unfriendly</p> <p>Comments from peers: looks professionally</p>
--

Figure 6.4 Extract from PG15’s Logbook

As shown in the extract, comments given by lecturers and peers, whether it is positive feedback or a critique, can be helpful for participants.

⁴³ “Learning from others’ feedback”: The student talks about that other people, including teachers and peers have told/taught them, usually regarding the problematic areas.

⁴⁴ “Receiving positive feedback from others”: The student received positive feedback from the teacher or his/her peers regarding his/her interpreting performance

The finding indicates that the suggestion in the HCL for students to record all comments from their peers and teachers does have its point and should perhaps be stressed in other guidelines as well.

6.4 Summary of findings and discussion

In the previous sections, the researcher used the results of the thematic analysis to answer the eight questions listed in the introduction to Section 6.1 and identified evidence in the logbooks that could serve as indicators of reflection and self-assessment.

Based on the results of Protocol Coding, this study was able to determine that students' logbooks have been influenced by the teachers' guidelines, as the various components from the guidelines have been observed to be incorporated in students' logbooks.

Through First Cycle and Second Cycle coding, this study was able to identify in the logbooks entries where students described problems they had encountered. Although students provided different levels of details in their description, it was possible to identify various types of problems that students were concerned about.

The analysis also demonstrated that student interpreters did use the logbooks to express their feelings about interpreting experiences and problems encountered, despite the fact that the guidelines have not suggested to them that they should express their feelings.

From the results of the analysis, this study was able to determine that the assessment criteria provided in the guidelines have influenced students' self-assessment, as the majority of students used the same criteria. The results also enabled the researcher to determine which particular aspects received the most attention from students. In addition, data-driven codes were generated and grouped together which helped this study to identify additional assessment criteria that have not been included in the guidelines.

The results of analysis showed that some students had been able to analyse their problems critically and some students had not only prepared action plans also talked about the results of the action plan. However, as the researcher looked for evidence in students' logbooks for signs of the later stages of Gibbs' cycle, areas were identified that need more attention from trainers, including students' tendency to offer a solution or talk about a strategy without giving details about the said solution or strategy. Moreover, most of the students in this study did not talk about interpreting strategy, which may be an indicator that they were not aware of interpreting strategies or that they were still struggling to learn the basic skills of interpreting and thus they had not yet thought about interpreting strategies.

The influence of the scaffolding tools on students' reflection became more apparent when the students' "reflective overviews" were analysed. Students seem to follow the suggestions to talk about their strengths and weaknesses, identifying recurring problems and progress. More importantly, some students' logbooks showed signs of the students gaining new insights from the learning process. Base on these finding, this chapter will now answer the research questions.

6.4.1 Writing logbooks to facilitate reflection

The first aim of the present study is to investigate how writing reflective journals facilitates students' reflection and self-assessment. Based on the findings summarised in the previous section, this study can conclude that in this case study, students demonstrated in their logbooks that they had engaged in reflective thinking, although to varying degrees. The majority of students described the problems they experienced during the interpreting process, which included problems in comprehension, production, note-taking, and linguistic correctness. What needs to be highlighted here is the fact that some students only used examples to list their problems or mistakes. Using such an approach, a student would be less likely to try and find out why s/he has made the mistakes.

Secondly, the findings showed that students in this case study focused more on the earlier stages of Gibbs' (1988/2013) reflective cycle, including describing problems, expressing feelings and assessment of performance. Comparatively, there is less evidence in the data that demonstrates students have tried to critically analyse their problems, set justifiable objectives or try out strategies. Issues that particularly need to be addressed are students' problems with the analysis process, particularly the thought processes by which they identify the cause(s) of a certain problem and how they decide what actions/strategies to take.

The findings showed that although students were not explicit about the thought process for how they identify cause of problem or decide on a strategy, we can see from what was written in the logbooks that students are nevertheless aware of different strategies that they can use for improvement.

Finally, the fact that students have been able to gain new insights is a clear sign that writing logbooks has helped at least some of the students to become more reflective.

From these findings, this study can conclude that while students can be encouraged to engage in reflective thinking when they are asked to keep logbooks, the act of writing logbooks can only help them to a certain extent. Students can be taught to think about the problems they have encountered and to analyse why certain problems occur, but as shown from the logbooks, there is a possibility that students remain descriptive when they think about these issues and focus on recounting what has happened rather than why something has happened. Trainers will need to think about ways to encourage students to think more critically about their problems and teach them how to dissect a problem and identify potential solutions.

6.4.2 Writing logbooks to facilitate self-assessment

The second aim of this study is to determine the potential relationship between self-assessment and reflection. The discussion in Section 6.3.3 on students' self-assessment showed that self-assessment is an important part of students'

logbook content and many of the segments are related to assessment. Based on the findings, this study can conclude that students in this case study, in most cases, understood what they were looking for when they evaluated their own performance.

However, the findings have also highlighted the fact that many concepts used as assessment criteria, such as conference, cohesion and conveying speaker's intention, need to be defined more clearly. Interpreting studies need to focus on transforming these concepts into constructs. As shown in Section 6.3.3, when students did not fully understand a concept behind an assessment criterion provided in the guidelines, their strategy is to repeat the word when they put it down in writing in their logbooks.

As to Boud's (1999) claim that there could be tension between self-assessment and reflection, for this study, the problem does not lie in the potential tension between self-assessment and reflection, but in the fact that students not only have to assess their performance with clear and well-defined assessment criteria, but they also need to review their interpreting experience critically.

6.4.3 Scaffolding tools to support reflection and self-assessment

Finally, as stated earlier, this study concludes based on findings of the case study, that scaffolding tools provided by teachers can help learners to engage in reflective thinking and help them assess their performance. In this study, the requirements in LAC and the suggestions in SLO appear to have played an important role in guiding students to think about their learning experience, particularly about the problems encountered and why certain problems occurred. The assessment criteria, presented in the various guidelines, were found to have been used widely by student interpreters, although there were only a few participants whose logbooks showed signs of moving toward the later stages of Gibbs' (1988/2013) reflective cycle. Nevertheless, in conjunction with the review of literature on reflection, scaffolding and learning strategies, this study can conclude that the scaffolding tools used by the course leader of this case study are moving towards the right direction.

Moreover, the findings seem to suggest that instruction of the SLO for students to write a reflective overview has helped some of the participants to move beyond the reflective cycle of individual practice and examine their learning experiences over the semester. The criteria in LAC for updating and revising their development programme also encourage some participants to carry out their action plans and test their strategies.

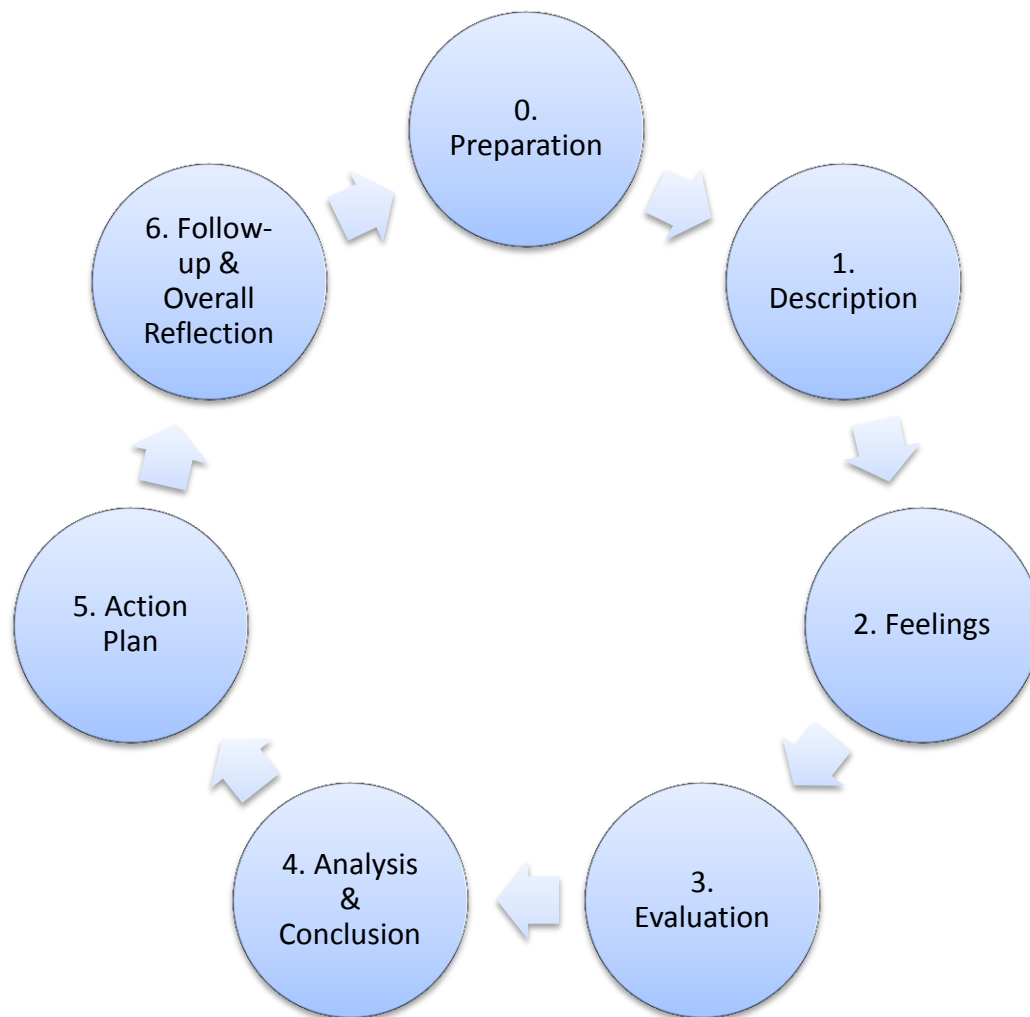
In addition, the findings also suggest that instruction of the HCL for students to record all comments received from peers and teachers have helped some of the participants as they received additional support to identify their problems.

6.4.4 A conceptual model for pedagogical purpose

After presenting the findings to answer the research questions in previous sections, the task in the present section is to use the findings and propose a conceptual model that can be used to explain the reflective process to students.

This conceptual model is an expansion of Gibbs' (1988) reflective cycle. While Gibbs' (1988) cycle is designed for learners in general, the conceptual model proposed here focus on student interpreters and thus suggestions and prompts are provided to help student interpreters go through the process of reflection and write reflective journals with the assistance of teachers' instruction and scaffolding tools. The expanded reflective cycle is illustrated in Figure 6.5 below.

Before presenting the model, it should be stressed once again that although the model is presented in a linear way for better explanation. Students need to understand that in real life, learning will not be linear and it will not be as organised. As repeatedly stressed in this thesis (see Sections 2.10 and 2.12), experiential learning can be messy and learners can get stuck at any stage. What is more important for student interpreters is their effort to break the bottleneck and move on to the next stage.



**Figure 6.5 Reflective Learning Cycle for Student Interpreters
(Adapted from Gibbs' (1988) model of the reflective cycle**

As shown in Figure 6.5, the proposed model added an additional stage, “Preparation”, before “Description” to Gibbs’ (1988) original reflective cycle. This is to stress the importance of preparation for interpreters. Interpreting studies have shown that preparation plays a vital role for professional interpreters to ensure quality (Section 3.5). Hence, students need to think about what they have done to prepare for the interpreting assignment. Questions that students can consider are listed in Table 6.3 below.

Stage	Advice for student interpreters
0. Preparation	<ul style="list-style-type: none"> • Describe your preparation before the practice. For instance, have you done any brainstorming for the topic? How do you compile your glossary? • If you have not done any preparation for this practice, be honest with yourself, but think about lessons learnt in later phases.

Table 6.3 Suggestions and prompts for “Preparation”

For description, as the question posed by Gibbs (1988) is more general, specific suggestions have been provided in Table 6.4 to help student interpreters consider various aspects of their interpreting practice. For instance, in addition to describing how the practice has been carried out, students are advised to describe the problems they have encountered during the interpreting process.

Stage	Advice for student interpreters
1. Description Describe what happened with the practice?	<ul style="list-style-type: none"> • Describe your practice (time, topic, type of practice, language direction, and so on) and how you carried out the practice. • Describe the problems you have encountered during this practice, particularly during the interpreting process. • Think about specific example(s), but try not to dwell on the mistakes and try to avoid listing examples only.

Table 6.4 Suggestions and prompts for “Description”

The next sets of suggestions and prompts designed for “Feelings” (Table 6.5 below) basically encourage student interpreters to talk about how they feel. Students can use this as a way to express their frustration, but at the same time, they are also advised to think about what they have achieved.

Stage	Advice for student interpreters
<p>2. Feelings</p> <p>What were you thinking and feeling during the interpretation process?</p>	<ul style="list-style-type: none"> • Think about your feelings during and after the practice. • How do you feel about your interpreting performance? Again, try not to dwell on negative feelings. Think about what you have accomplished.

Table 6.5 Suggestions and prompts for “Feelings”

The next stage, “Evaluation” (Table 6.6), is considered an essential stage in the cycle, but it would be ideal for teachers to spend some time and discuss the various assessment criteria used to evaluate interpreting performance with students. Overlapping or confusing concepts, such as speaker’s intention, coherence and cohesion should be clarified to help student interpreters evaluate their performance. Students are also advised to remember that interpreters should be able to help the parties involved communicate with each other and so they should check if they have accomplished this goal.

Stage	Advice for student interpreters
<p>3. Evaluation</p> <p>What was good and bad about the interpretation?</p>	<ul style="list-style-type: none"> • If recording is available, listen to your recording and try to assess your performance objectively. • Think about both positive and negative aspects of your performance. Identify the assessment criteria (consult the scaffolding tools or your teacher) that can be useful to assess your performance, such as accuracy, faithfulness, completeness, coherence, cohesion, language quality, delivery and presentation). • What did your teacher(s) or classmates say about your performance?

	<ul style="list-style-type: none"> Remember the job of the interpreter is to facilitate communication. Have you accomplished this goal?
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Table 6.6 Suggestions and prompts for “Evaluation”

The next stage actually combined two stages in Gibbs’ (1988) model “Analysis” and “Conclusion” into one. The main question at this stage is for students to think about what they have learnt from the experience, from preparation to analysis of problems encountered and the use of interpreting strategies. (Table 6.7)

Stage	Advice for student interpreters
<p>4. Analysis & Conclusion</p> <p>What have you learnt from this experience?</p>	<ul style="list-style-type: none"> What have you learnt from the preparation process? (Even if you have not prepared for the practice, you can still think about the lessons learnt from the lack of preparation) Try and analyse what has caused the problem(s) and identify the source of the problem(s). If you believe that you have performed well, think about why. Try to identify if you have used any of the interpreting strategies that your teacher(s) have taught about in class, such as anticipation and summarising.

Table 6.7 Suggestions and prompts for “Analysis and Conclusion”

After going through the process of analysis, students are then advised to think about their next steps, i.e. action plan for improvement. The suggestions and prompts provided in Table 6.8 stress the importance of setting feasible targets and ensuring that the plans match the problems encountered. Students should try to avoid setting targets that are too general or too broad and they should always ask themselves “how” they plan to meet the goal.

Stage	Advice for student interpreters
<p>5. Action Plan</p> <p>If the problems happened again, what would you do?</p>	<ul style="list-style-type: none"> • Think about what you can do to improve and how exactly you plan to improve. • Try to set feasible target and ask yourself how you plan to meet the target. • Ask yourself these questions: <ol style="list-style-type: none"> 1. What is the focus of this plan? 2. Are you trying to improve your language skill; or 3. Are you working to improve your interpretation skills? • Does your plan match the problems you have identified in earlier stages?

Table 6.8 Suggestions and prompts for “Action plan”

The final stage, “Follow-up and Reflective overview” was added by the researcher of this study. As discussed in Sections 2.6 and 2.10, reflective practice should not be limited to “reflective thinking” and learners should take actions after reflection and check to see if these actions taken have helped to solve problems. The aim of “Follow-up” is for students to keep track of the actions taken and the results (Table 6.9).

The findings of this case study have suggested that it can be beneficial for students to reflect on the experience after several weeks and some students did notice the change in their perception about interpreting after carrying out reflective overview. Hence, in the conceptual model, “Reflective overview” was added.

Stage	Advice for student interpreters
<p>6. Follow-up and Reflective Overview</p>	<ul style="list-style-type: none"> • Once you have had a chance to carry out your action plan, check to see if you have made any progress. • After several practices, review the practices you have done and identify issues that have occurred

	<p>repeatedly.</p> <ul style="list-style-type: none"> • Think about your perception about interpreting and your experience. Have you observed any differences?
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Table 6.9 Suggestions and prompts for “Follow-up & Reflective overview”

Table 6.10 below puts all the stages and suggestions in one table. The researcher in the current study is not trying to replace the scaffolding tools with this conceptual model. Rather, the goal is for trainers and students to use this model to start discussions about reflective practice for interpreters. In other words, interpreter trainers can use the model to talk to students about the reflective process and the questions they need to think about. Also, when students practise interpreting and keep reflective journals by following the suggestions of scaffolding tools, they can consult this model. It is the sincere hope of the author that this model will be helpful to student interpreters.

Stage	Advice for student interpreters
<p>0. Preparation</p>	<ul style="list-style-type: none"> • Describe your preparation before the practice. For instance, have you done any brainstorming for the topic? How do you compile your glossary? • If you have not done any preparation for this practice, be honest with yourself, but think about lessons learnt in later phases.
<p>1. Description</p> <p>Describe what happened with the practice?</p>	<ul style="list-style-type: none"> • Describe your practice (time, topic, type of practice, language direction, and so on) and how you carried out the practice. • Describe the problems you have encountered during this practice, particularly during the interpreting process. • Think about specific example(s), but try not to dwell on the mistakes and try to avoid listing examples only.
<p>2. Feelings</p> <p>What were you thinking and feeling during the</p>	<ul style="list-style-type: none"> • Think about your feelings during and after the practice. • How do you feel about your interpreting performance? Again, try not to dwell on negative feelings. Think

interpretation process?	about what you have accomplished.
<p>3. Evaluation</p> <p>What was good and bad about the interpretation?</p>	<ul style="list-style-type: none"> • If recording is available, listen to your recording and try to assess your performance objectively. • Think about both positive and negative aspects of your performance. <p>Identify the assessment criteria (consult the scaffolding tools or your teacher) that can be useful to assess your performance, such as accuracy, faithfulness, completeness, coherence, cohesion, language quality, delivery and presentation).</p> <ul style="list-style-type: none"> • What did your teacher(s) or classmates say about your performance? • Remember the job of the interpreter is to facilitate communication. Have you accomplished this goal?
<p>4. Analysis & Conclusion</p> <p>What have you learnt from this experience?</p>	<ul style="list-style-type: none"> • What have you learnt from the preparation process? (Even if you have not prepared for the practice, you can still think about the lessons learnt from the lack of preparation) • Try and analyse what has caused the problem(s) and identify the source of the problem(s). • If you believe that you have performed well, think about why. • Try to identify if you have used any of the interpreting strategies that your teacher(s) have taught about in class, such as anticipation and summarising.
<p>5. Action Plan</p> <p>If the problems happened again, what would you do?</p>	<ul style="list-style-type: none"> • Think about what you can do to improve and how exactly you plan to improve. • Try to set feasible target and ask yourself how you plan to meet the target. • Ask yourself these questions: <ol style="list-style-type: none"> 1. What is the focus of this plan? 2. Are you trying to improve your language skill; or 3. Are you working to improve your interpretation skills? • Does your plan match the problems you have

	identified in earlier stages?
6. Follow-up and Reflective Overview	<ul style="list-style-type: none"> • Once you have had a chance to carry out your action plan, check to see if you have made any progress. • After several practices, review the practices you have done and identify issues that have occurred repeatedly. • Think about your perception about interpreting and your experience. Have you observed any differences?

Table 6.10 Conceptual Model of Reflective Cycle with Suggestions and Prompts for Student Interpreters

6.5 Conclusion

The current study originates from the researcher’s intention to investigate how writing reflective journals facilitates student interpreters’ reflection and self-assessment. The researcher also intended to understand the potential relationship between self-assessment and reflection and the influence of specific scaffolding tools on students’ reflection and self-assessment.

To answer the research questions, the researcher reviewed educational theories, theories of experiential learning, and discussions on reflection and defined the concepts of reflection to be used for the current study. After exploring models of reflection, it was determined that Gibbs’ reflective cycle was a suitable theoretical framework that the researcher could use as basis to identify evidence of reflection in reflective journals. The researcher then reviewed empirical studies on reflective journals as well as reflective practice in interpreter training.

To identify assessment criteria used in interpreter training, this study reviewed literature on interpreting pedagogy, examined fundamental concepts in educational assessment and discussed the challenges to the interpreting community in defining assessment criteria. Studies on quality of interpreting and interpreters’ discussions of self-assessment criteria provided the foundation for this study to define assessment criteria and added to the theoretical

framework. These criteria were then used to help the researcher identify evidence of self-assessment in students' reflective journals.

This study then adopted a case study approach and collected logbooks from students taking introductory courses in a British university. Thematic analysis was used to analyse the logbooks.

Based on the findings resulted from the thematic analysis, this study concludes that writing logbooks does help learners engage in reflective thinking and self-assessment. However, the findings also verify what has been repeatedly stated in the literature of reflective journals that students can become stuck in describing the problems. The scaffolding tools provided, according to the result of this case study, appear to have significant influence as students were found to follow the guidelines to determine what to write in their logbooks and these tools have seem to have helped some participants to move beyond reflecting on individual learning experience and to think about the learning experience from a long-term perspective.

6.6 Limitations of the study

The first limitation of this study is the limited number of simultaneous interpreting exercises included in the reflective journals. Most of the practices recorded in the reflective journals involved consecutive interpreting, along with foundational skills, so there were not enough data from the logbooks for the researcher to see if different assessment criteria were used when the students were practicing simultaneous interpreting. As the two modes of interpreting require different efforts from the student interpreters (Gile, 2009), it is possible that students may focus on different aspects when they are doing simultaneous interpreting. In the future, a further study could be carried out to focus purely on students' self-assessment and reflection for simultaneous interpreting.

As explained in Chapter 4, the current study is a qualitative case study that focuses on students' logbooks. Because of the research design, the other factors, such as the lecturers' instruction in class and teaching materials used, were not been taken into account. It would thus be difficult to generalise the

findings generated from thematic analysis of the 27 logbooks collected for this case study. However, even though the results of this case study cannot be generalised, the findings about students' reflection and self-assessment through writing the logbooks, the discussion on defining assessment criteria as well as the findings about the influence of the scaffolding tools can all help inform interpreter trainers when they want to provide their own guidelines and scaffolding tools to facilitate students' self-assessment and/or reflection.

The detailed discussions about the strengths and weaknesses of carrying out a case study in Chapter 4 and the explanations of the data analysis process can also act as pointers to future researchers to conduct further research on reflection and self-assessment. However, even though the researcher has endeavoured to ensure that the coding process is transparent and clear, no formal measure has been carried out to ensure inter-rater reliability. This is another limitation of the current study.

This study focused only on the written logbooks and no interviews were conducted. Thus, this study did not explore participants' views about many relevant issues, such as the scaffolding tools, the requirement of keeping the reflective journals and the fact that logbooks are used for formal assessment. This study focused only on what was manifested in the logbooks; however, in the future, if a similar study is to be carried out, the researcher will seek to explore students' views about the scaffolding tools and the assignments of writing logbooks.

Finally, in the next section, some suggestions will be made to improve the guidelines so that student interpreters in the future can have clearer idea about how to assess their performance with objective criteria and how to be reflective.

What is sought in considering reflective reports is evidence that the learner can give an account of a particular experience, be aware of any emotional response the activity engendered and describe the outcomes of reflecting on the experience, such as

new awareness [...], new questions [...], or new understanding [...] (Boud and Knights, 1996: p. 31)

These authors also suggest that instead of giving grades or marks, teachers can evaluate the journals on the basis of “satisfactory/unsatisfactory” and using the general criteria, teachers can check if the students are just describing the event without making any attempt to think about and learn from the experience (ibid.). These suggestions could be useful for teachers in all disciplines, including interpreter trainers, if they are considering using reflective journals in their courses.

6.7 Suggestions for improving the guidelines

This case study has enabled the researcher to see that guidelines provided to student interpreters can influence the assessment criteria students use for assessment of their performance and the attention they pay to reflection. However, the findings of the case study also highlight some issues related to the suggestions in the scaffolding tools that deserve more attention from interpreter trainers. Hence, an attempt has been made to suggest a number of modifications to the scaffolding tools, so that these can provide better support for students as they learn to become interpreters.

First of all, as mentioned in Section 6.1, if reflective journals are used for the purpose of self-assessment, it would be recommended that students avoid using grades or scores for their interpreting performance. Grades and scores are suitable for summative assessment. Although they may be useful for students to have a quick glance and see they have made any progress, it does not help student interpreters to focus on their problems. The reflective journals are considered as tools for formative assessment, so using grades or scores will not encourage students to examine their experience critically.

References on studies on quality of interpreting can be provided to students and they should be encouraged to read literature on assessment criteria to help them gain better understanding of what concepts lie behind all the assessment criteria. In the past decade, researchers have started to pay more

attention to issues of interpreter assessment. Interpreter trainers can direct students to consult studies by Sawyer (2004) and Cai (2005a; Cai, 2005b) for an overview of assessment criteria (see Section 3.4) and students can also read articles that discuss specific aspects of interpreting performance, such as the studies on omission (Napier, 2004; Korpál, 2012), fluency and hesitation (Cecot, 2001; Mac ías, 2006; Rennert, 2010).

For this case study, students could choose to write their logbooks in any way they liked, and the majority of students “mixed and matched” different components from the guidelines to arrange their logbooks. However, some participants concentrated on self-assessment or listed examples of their mistakes and failed to engage in reflection as suggested in the guidelines. This diversity of the format and arrangement of logbooks can potentially make it more difficult for trainers to evaluate their content. Hence, it is highly recommended that trainers stipulate the format and arrangement of logbooks. For example, students who followed the SLO’s suggestions would include a reflective overview in their logbooks and the findings have shown the reflective overview was indeed important to help students engage in reflective thinking.

6.8 Concluding remarks

The journey to explore student interpreters’ learning through reflection and self-assessment has been a challenging yet rewarding one. This study yields some empirical evidence showing that interpreter trainers’ attempts to ask students to write reflective journals to help them become more aware of the learning process have not been in vain. At the same time, there are areas in interpreter pedagogy and assessment that are in need of further studies. Further investigations are needed to explore student interpreters’ views about writing reflective journals and to understand interpreter trainers’ views on using reflective journals for assessment purpose. Researchers in the field of interpreter training also need to conduct more empirical studies to understand the challenges students face when they are asked to assess their performance. For the author of the present study, a new journey is just about to begin.

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Appendix 1

How to practise interpreting

Practise **often** - 5 days per week

Be aware of what type of practice is best for you - **2 x 30 minutes** in one day, am. then pm. may be better than 1x 60 minutes etc.

Practice **does not have to be interpreting to be useful.**

Material used should be **appropriate** for the stage of the course and for interpretation **purposes**. By this I mean that debates in national parliaments are not suitable for the first week of a course (too difficult / fast) and news broadcasts are not suitable for interpretation at all (they bear little relation to what is interpreted by working interpreters in respect of variety of content/ speed/ grammatical structure of language etc.). Likewise if you want to concentrate on good intonation during delivery then a slower speech will be more useful than a very fast one.

In all things **start with the simple and work upwards**. A natural progression for texts and speeches used in practice might be as follows:

Personal narratives (something that happened to me) *

General narratives (eg. newspaper accounts of criminal events)

Political narrative (eg. the events surrounding scandal/ outbreak of war)

General speeches (simple political speech)

More abstract political speeches

Practise in groups of 2-4 for consecutive, 3-6 for simultaneous (minimum 3 = 1 speaking, 1 interpreting, one listening). For consecutive practice all students will listen to a given interpretation, for simultaneous half of a given group will listen, half interpret. In multi-lingual groups not all the listeners need have the language combination being interpreted but at least one listener should. **The listener may listen only to the interpreter or to the interpreter and original simultaneously, both are valid and useful exercises**, depending on which element of the interpretation they wish to concentrate their attention.

Practising in this way the listener is training his/her ability to analyse interpretation performance (that of the other student), this is easier to do through objectively and thoroughly listening to someone other than yourself. It is relevant because most students make similar mistakes and this type of evaluation is an essential skill if you

are one day to supervise your own work competently. Meanwhile the student interpreter **benefits from the opportunity to interpret to a real audience.**

Appendix 2

How to complete the logbook

Keep a note-pad or exercise book in which you **note all comments** made by you, your peers or tutors about specific performances as and when they are made. **Note the date of each session** when you start and you will immediately create a chronological record of which **problems crop up again and again and which ones were more of a one-off**, which ones you have corrected for good and which ones you thought had gone away but which have returned. This will help you to see at a glance and then **concentrate on what is really important to your development** without wasting time on things that are less useful to you personally.

Record comments under the headings above, focusing on one sub-skill at a time. Make sure to **record positive comments** as well.

Distinguish between “generative” and “non generative” feedback. What does this mean? Generative is a phrase used most often in ELT teaching and describes recurring events. Patterns or, for the interpreter, **issues of technique.** **A single problem that crops up many times** and which therefore once corrected will have a larger impact on the quality of the interpretation is more interesting than a single one-off mistake. For example if we agree to stop saying “err” while working, this is generative because this one idea can lead to the correction of dozens of individual instances of the “err” noise. Other generative issues will be, correct sentence intonation, speaking skills, reformulation techniques from one language to another (for example, a strategy for German’s “involved” sentences, or sentences beginning “Si” in French) and so on.

Non-generative feedback means one-offs, so for example corrections of specific content. “1993 not 1994” for example or “you said ‘Directive’ instead of ‘Regulation’”. These comments may be justified but they are less efficient in terms of improving your interpreting in general. They are non-generative and therefore should be accorded less attention than generative issues. (Beware though, as often such apparently lone mistakes are the result of some technique flaw, in which case you must identify the flaw and log it with the other technique issues under “generative”).

This will be a **useful guide to your self-study**, in fact you may want to record the targets you set yourself over a period of time based on recorded feedback (eg for the next three weeks, I am going to focus on voice projection). Ensure that you **work through speeches again** working on the problem areas, this is much more useful than collecting speeches. And of course, **record progress made.**

It will also be helpful when it comes to revision time for exams to remind you of your personal “do’s and don’ts”.

Appendix 3

SUGGESTION FOR LOGBOOK OUTLINE

1. Profile

Date
Speaker
Occasion/event
Language combination/direction
Speech type
Topic
Etc.

2. Type of practice

Mode of interpreting or other type of exercise (memory, note-taking...)
Set-up (individual, group or classroom practice, using double booths...)
Preparation/anticipation (sources used, glossaries enclosed, brainstorming...)

3. Evaluation of the performance

This may be presented as a table. Student interpreters have found it useful in the past to grade the performance in each of the categories listed below, for example from A *very good* to F *very poor*.

Strengths (including good solutions and successful strategies) and weaknesses should be recorded in the table at least under the four following headings – and as many sub-headings as you deem appropriate:

- **MEANING:** Are there distortions, omissions, unwarranted additions? Is the output accurate and complete? Does it convey the speaker's intention and/or emotion?
- **COHERENCE/COHESION:** Does it make sense? Is it plausible? Are beginning and ending neat and logical? Is it concise or wordy? Are all utterances finished/rounded off? Is chunking appropriately signalled by intonation and pauses? Are the chunks linked using appropriate logical connectors?
- **DELIVERY/PRESENTATION:** Is it audible and clear? Is articulation good and intonation natural? Are there unwarranted outbursts or excessive fillers? Is the pace fluent and regular? Is the voice pleasant and confident?
- **TARGET LANGUAGE EXPRESSION:** Is it grammatically correct and idiomatic? Is there interference from the source language? Are linking words used appropriately? Does the performance reflect

knowledge of appropriate vocabulary and specialist terminology?
Are register and style appropriate?

You may also want to record in the table corrections or solutions to the problems you have identified.

4. Reflection on the performance

This should be written up as a narrative and contain your reflection on what you have observed about your performance, having gone through the recording stage as above.

At this stage, you should identify 1) what goes wrong (particularly if it is a recurring problem) but also and essentially 2) why it goes wrong, using the range of commonly used concepts pertaining to the interpreting process and criteria used for performance evaluation.

For example, does the problem occur at the *Active listening/Comprehension* or *Re-expression/Presentation* end of the process? Is it due to difficulties with *Analysing, Note-taking, Chunking* or *Memorising*?

Finally, based on the above, you should indicate what your goals/priorities are with respect to your practice over a given period of time.

5. Reflective overview for semester 1

Having recorded assessment and reflection as per the above process for a number of individual practice sessions, bring it all together towards the end of the semester under a concluding section highlighting the development programme which you identified for yourself and progress you have made.

IP/Oct09

Appendix 4

Peer-and Self-assessment Grid by Hartley et al. (2003)

Version 2

Inter-textual (ST vs TT)	Content		Accuracy	Accurate (fact, figures, etc)		
			Faithfulness to source speech.			
		Completeness (no substantial omissions)				
	Rhetorical force		Interference			
			Intention (conveys speaker's speech act)			
	Decalage		Emotion (conveys speaker's attitude)			
			<input type="checkbox"/> Too far behind			
			<input type="checkbox"/> Too close			
	Intra-textual (TT judged as a whole)	Language		Texture	Coherence (making sense, no contradictions)	
					Concision (not too wordy)	
Cohesion (synonyms, pronouns, repetitions, linking words)						
Idiomatic expression						
Grammatical correctness						
Vocabulary/ Terminology						
Structure					No unfinished utterances	

				Chunking signalled by intonation and pauses	
				Logical links between chunks	
			Repairs	Error correction	
				Reformulation	
Intra-textual (TT judged as a whole)	Delivery	Voice	Articulation	<input type="checkbox"/> Clear <input type="checkbox"/> Unclear <input type="checkbox"/> Confident <input type="checkbox"/> Hesitant	
			Intonation (Flat / Lively; Natural / Unnatural)		
			Accent	<input type="checkbox"/> Native <input type="checkbox"/> Non-native, but comprehensible <input type="checkbox"/> Non-native, and difficult to understand	
			Quality	<input type="checkbox"/> Pleasant <input type="checkbox"/> Unpleasant Other:	
			Pace (fast/slow)		
			Fluency (Hesitant, regular, irregular, false start, etc.)		
		Context	Register		
			Style		
Behavioural Skills	Microphone use	<input type="checkbox"/> Good distance & direction <input type="checkbox"/> Too close <input type="checkbox"/> Too far <input type="checkbox"/> Wrong direction			
	Booth manners	<input type="checkbox"/> Noise management <input type="checkbox"/> Anxiety management <input type="checkbox"/> Other:			
	Grit	Staying power			
Recovery					
User friendliness user perception	Clarity	Important points / Secondary points Conviction/(confidence inspiring) Convincing / Unconvincing			
	Clear / Ambiguous				

	Relevance / Salience / Priority		
Supporting Knowledge	Skills	Problem-solving	
		Reasoning	
		Analysis	
	Knowledge	General	Current affairs
			World knowledge
			Cultural comprehension
	Specific (Subject matter)		
Miscellaneous (not covered by categories above)			

Appendix 5

Logbook Assessment Criteria

Conference interpreting – Assessment criteria for Logbook completed in Semester 1 by LINT4 and PGDip/MSc students

The logbook task is designed to allow interpreting students to develop their performance as student interpreters. There are two components to the task: in the logbook, the student should 1) evaluate her/his performance as an interpreter and 2) plan and implement further development. Students review their interpreting assignments and evaluate their performance and preparation; they must be able to identify their strengths and weaknesses and create a personal development plan to develop and maintain their professional knowledge and skills.

The assessment criteria are closely based on the *National Occupational Standards in Interpreting* produced by CILT/The National Centre for Languages.

TO ACHIEVE 80%, STUDENTS SHOULD:

- use the full range of commonly used concepts and criteria to review preparation for and delivery of assignments
- evaluate in detail the language used during assignments in terms of all relevant categories (syntax, lexical choice, pronunciation and intonation/modulation and register)
- comprehensively review how fluently and accurately the meaning of the SL message is processed into the TL
- produce an entirely accurate and justifiable analysis of the strengths and weaknesses of their performance
- set goals and priorities to improve preparation and performance, which are entirely consistent with all of the above
- identify an appropriate development programme and regularly monitor and evaluate it against a set of explicit criteria
- update/revise the development programme as appropriate on an ongoing basis

TO ACHIEVE 70%, STUDENTS SHOULD:

- use an extensive range of commonly used concepts and criteria to review preparation for and delivery of assignments
- evaluate the language used during assignments in terms of most relevant categories (syntax, lexical choice, pronunciation and intonation/modulation and register)
- review how fluently and accurately the meaning of the SL message is processed into the TL
- produce a generally accurate and justifiable analysis of the strengths and weaknesses of their performance
- set goals and priorities to improve preparation and performance, which are mostly consistent with the above
- identify an appropriate development programme and regularly monitor and evaluate progress in their performance
- regularly update/revise the development programme

TO ACHIEVE 60%, STUDENTS SHOULD:

- use a fairly wide range of commonly used concepts and criteria to review preparation for and delivery of assignments
- evaluate the language used during assignments in terms of some relevant categories (syntax, lexical choice, pronunciation and intonation/modulation and register)
- review to what extent the meaning of the SL message is processed into the TL
- produce a fairly accurate and justifiable analysis of the strengths and weaknesses of their performance
- set goals and priorities to improve preparation and performance, which are fairly consistent with some of the above
- identify the main components of a development programme and monitor/evaluate progress in their performance
- update/revise the development programme from time to time

TO ACHIEVE 50%, STUDENTS SHOULD:

- use some of the commonly used concepts and criteria to review preparation for and delivery of assignments
- comment on the language used during assignments
- attempt a review of the extent to which the meaning of the SL message is processed into the TL
- produce a partially accurate and justifiable analysis of the strengths and weaknesses of their performance
- set goals and priorities to improve preparation and performance, which are partially consistent with some of the above
- identify some components of a development programme and monitor/evaluate progress in their performance
- show evidence of some update/revision of the development programme

TO ACHIEVE 40%, STUDENTS SHOULD:

- show some awareness of concepts and criteria used to review preparation for and delivery of assignments
- comment minimally on the language used during assignments
- show some awareness of the need to process the meaning of the SL into the TL
- attempt an analysis of the strengths and weaknesses of their performance
- show some awareness of the goals and priorities to set in order to improve preparation and performance
- identify a few aspects to focus on for development and report on progress made
- show awareness of the need to update/revise the development programme on the basis of progress made

Appendix 6 Participant Consent Form

Consent Form

Consent to Participate in a Research Study

Title of Study: The Use of Logbooks in Training of Conference Interpreters

Investigator: Zi-ying Lee

Department: Department of Languages and Intercultural Studies

School: School of Management and Languages

E-mail: jll7@hw.ac.uk

General things that you should know about the research study

You are being asked to take part in a research study by allowing the investigator to use your logbooks in the document analysis for the study. To join the study is voluntary. You might refuse to join, or you may withdraw your consent to be in the study for any reason.

This research study is designed to obtain new knowledge in using logbooks in training of conference interpreting. This new knowledge may help students in the future.

The Purpose of this study

The purpose of this research study is to understand how students use the logbook as a tool to engage in a dialogue with oneself and to understand if students have benefited from writing logbooks. The study intends to investigate whether or not the learning outcome aligns with the teaching objectives.

What will happen if you take part in the study?

Your logbooks will be used in the document analysis for this study.

Will your score be affected because you take part in the study?

No. Your score is given before the analysis. Also, your teacher(s) will not see the result of the analysis.

How will your privacy be protected?

Every effort will be taken to ensure that your identity as a participant in this study will not be revealed to anyone. You will not be identified in any report or publication of this study or its results. Your name will not appear on any transcript or discussion of individual logbook.

What if you have questions about this study?

You have the right to ask any questions you may have about this research study. If you have any questions or concerns, you should contact the researcher listed on the top of this form.

Participant's Agreement:

I have read the information provided above and I voluntarily agree to participate in this research study by allowing the investigator to analyze my logbook.

Signature of the Participant

Date

Appendix 7

Codebook

No.	Nature of Code Development	Codes	Definitions	Example	Memo
1	Data-driven	Anticipating potential problem	The student made effort to anticipate the potential problems that may occur during the practice, including vocabulary, background knowledge.	Anticipated problems/challenges: sensitive questions may come up and thus there may be tension between the interlocutors.	
2	Data-driven	Assessing decalage	The student is assessing the appropriateness of his/her decalage, i.e. how far or how close s/he is behind the speaker.	Decalage: Too far behind the speaker sometimes;	
3	Data-driven	Assessing foundational skills	The student is assessing his/her performance for foundational skills, including memory, shadowing(whether or not s/he has managed to shadow the complete message.), active listening and retelling. Note-taking is not included as separate codes have been created.	Can catch almost every word and repeat it in accuracy.	Why is it that some students used so much time/efforts for basic skills exercises?
4	Data-driven	Assessing interpreting strategy used	The student is assessing an interpreting strategy s/he used during the interpretation process and how effectiveness was the strategy.	[...] good use or paraphrasing in the target language.	
5	Data-driven	Assessing overall performance	The student is giving a general statement/judgement regarding the overall performance.	All in all it was not a satisfying performance	
6	Data-driven	Assessing posture	The student is assessing her posture inside the booth, not her posture in front of the audience.	Booth manners: other: posture straight back	Only 1 for PG09
7	Data-driven	Assessing structure	The student is assessing how well s/he manages to convey the structure of the original speech in his/her interpretation	Structure is well delivered,	Only 2 for PG02, possibly related to coherence
8	Theoretical	Assessment of Accuracy	The student is assessing whether or not his/her interpretation has correctly conveyed all the facts and information in the source text.	Accurate: The figures I interpreted were more accurate than the facts.	

			including figures and names and whether or not there is unwarranted addition or distortion of information.		
9	Theoretical	Assessment of Coherence	The student is assessing the coherence of his/her interpretation, how the interpretation as a text hangs together and if the interpretation makes sense to the listener.	The coherence of target language was also very weak	Does the student really understand the meaning of coherence? ?
10	Theoretical	Assessment of Cohesion	The student is assessing how s/he has used grammatical devices or textual clues to ensure that listeners can follow the structure.	For both practise, the links in main points are appropriate and logical.	
11	Theoretical	Assessment of Completeness	The student is assessing the completeness of his/her interpretation and whether or not information has been omitted unintentionally.	although there were several omissions and	
12	Theoretical	Assessment of Delivery	The student is assessing his/her delivery of interpretation, focusing on the audio aspects, including fluency, backtracking, voice conviction, unfinished sentences.	The pace of delivery is not stable, sometimes fast and sometimes slow.	Unfinished utterances are included in "Coherence", but isn't unfinished utterance an issue of delivery?
13	Theoretical	Assessment of Faithfulness	The student is assessing whether or not his/her interpretation is linguistically acceptable and stylistically correct and whether or not appropriate terminology, grammar and register have been used.		
14	Theoretical	Assessment of Language Quality	The student is assessing whether or not his/her interpretation is linguistically acceptable and stylistically correct and whether or not appropriate terminology, grammar and register have been used.	Incorrect use of syntactic structures	It seems that language quality assessment usually comes much later in the logbook. In comparison, delivery is

					often the first aspect to be examined.
15	Theoretical	Assessment of Presentation	The student is assessing his/her presentation (for consecutive interpreting and liaison interpreting), focusing on non-verbal aspects, including eye contact with audience, gaze with interlocutors, appearance of confidence and use of gestures.	Not enough eye contact	
16	Data-driven	Being aware of one's ability	The student is thinking about his/her ability and s/he is capable of.	[...] speaking Spanish is far from a problem for me, and visualising the images in messages is quite easy for me,	
17	Data-driven	Beliving in oneself	The student believes that s/he can interpret	I feel that I can do consecutive interpreting	Only 1 for UG06
18	Data-driven	Comparing different contents	The student is comparing different content in the same practice and different difficulties presented by these content.	[...] paragraphs with facts easier to remember than paragraphs with abstract content	Only 2 for UG01 and PG04
19	Data-driven	Comparing different experiences	The student is comparing the differences between different practices, including the level of difficulty, the efforts, the difficulties or problems encountered.	I noticed that self-study sessions were much better than class sessions,	
20	Data-driven	Comparing different languages	The student is comparing different languages, including grammar, sentence structure and different features between languages.	However, Chinese people prefer to put the adverbial clause at the beginning of a sentence.	Only 3 for PG10 and PG14
21	Data-driven	Comparing issues related to different language directions	The student compares his/her experiences and difficulty experienced related to different language directions.	[...] found simultaneous into Spanish easier than English	
22	Data-driven	Comparing this particular experience with past experience(s)	The student is comparing this experience with past experience(s) and highlighting the differences	Other strengths are the same as the previous CONSECUTIVE INTERPRETING practise.	

23	Data-driven	Complaining about lack of time	The student is complaining about the fact s/he does not have enough time to practice	regular practice often got interrupted at this stage by assignments from others courses	Only 2 for PG13
24	Data-driven	Demonstrating knowledge about interpreting	The student is demonstrating his/her knowledge about interpreting	What matters most in consecutive interpreting is understanding, analysis and re-expression.	Only 1 for PG15
25	Theoretical	Describe Contextual Information	The student provides contextual or background information about the practice, including the mode of interpreting, the language direction, the type of speech and the occasion of the interpreting practice (in narrative comments only). Contextual information provided in headings and subheadings are coded with protocol codes.	I did this consecutively, and with little preparation outside of the terms given on the speech's details page of the website.	
26	Theoretical	Describe Problem Encountered	The student gives a general description about a problem or problems s/he has experienced.	While I understood the words, a lot of what I wished to say got stuck in trying to word it correctly,	
27	Theoretical	Describe the Practice	The student describes what s/he did in the particular practice/exercise, including how s/he conducted the practice and if s/he has worked with a partner.	I practiced sight translation.	To differentiate varying degree of specificity, this code is reserved for "general description". If students give very detailed description regarding the steps of practice, see "Describing the practice procedures"

28	Data-driven	Describing a learning strategy that did not work	The student talks about a particular strategy that did not work.	I tried to visualise the story, but it did not work for me.	
29	Data-driven	Describing a learning strategy that worked	The student is telling the reader that a certain strategy has worked or helped to improve his/her performance.	Although this kind of thorough preparation was time consuming, it was effective in correcting word choices for a particular register.	see also “Describing a learning strategy that did not work”
30	Data-driven	Describing a learning strategy tried	The student attempts to do something about the problem experienced during the practice when s/he was still practicing/interpreting [not afterwards]	I am now reading German speeches out loud in order to reacquaint myself with the language and register used in such texts.	
31	Data-driven	Describing a learning strategy tried	The student describes a learning he/she tried during a practice to improve his/her performance		
32	Data-driven	Describing adjustments to the grid	The student is describing how s/he made adjustments from the self-assessment grid	In order to make full use of the sheets I looked over it and then created two headings on a separate sheet: “positives” and “negatives” (example can be found in logbook Entry 6) so that I could clearly see what I needed to improve and make sure that the number of positives increased each session.	Only UG11
33	Data-driven	Describing an instance of positive performance	The student is describing a specific instance or an example of how s/he coped with a problem or performed well.	Five paralleled paragraphs starting by “共同” has been adopted to illustrate Asia-Europe cooperation. Under that context, I am able to add ordinal	Only 1 for PG10

				numbers before “共同”.	
34	Data-driven	Describing an instance of problem	The student is describing a specific instance or an example of the problem s/he has experienced, such as terminology or failure to use symbols.	[...] apart from slight interference from the source language when I said “tractors” which I had in my notes instead of factors	Compare with “Giving example(s) of mistakes or problems”
35	Data-driven	Describing an interpreting strategy tried	The student tried out a specific interpreting strategy, such as varying the speed of delivery, varying decalage, articulation and so on to try and improve her performance.	I tried to put on side of earphone on for active listening, and the other one for monitoring my own speech, but it did not work so well,	
36	Data-driven	Describing aspects with consistent good performance	(Usually in reflective overview), the student is describing aspects that have been considered good throughout the semester.	I have noticed that I don't tend to sigh or fidget during my speeches, and in these five speeches at least, I have never said “emm”.	
37	Data-driven	Describing benefits of self-evaluation	The student is describing the benefits of self-evaluation	However, it enables you to hear if everything you have said is coherent and logical.	Only UG11
38	Data-driven	Describing benefits of the practice	The student is describing the benefits of a single exercise.	In addition this practice was very good because it gave me an opportunity to practise giving a speech in front of an audience which has helped to boost my confidence at speaking in public.	Only UG07

39	Data-driven	Describing change of notes	The student describes how his/her notes change/improve.	Furthermore, the notes are much clearer through the separation of main ideas	
40	Data-driven	Describing change of perception	The student describes how his/her perception of interpreting has changed over time (due to various reasons).	It hit me for the first time that notes are the result of analytical listening	PG13, PG15
41	Data-driven	Describing difficulty experienced with note-taking	The student is describing his/her experience with note-taking and focusing on problems encountered in the learning process.	Another reason why I noted down much was that I did not process information while listening.	PG10
42	Data-driven	Describing difficulty in training short-term memory	The student is describing his/her experience with training short memory	Another reason why I noted down much was that I did not process information while listening.	Only PG03
43	Data-driven	Describing efforts made for improvement	The student is describing the efforts s/he made for improvement.	So to help ease myself back into it I watched French and Spanish news to accustom myself to listening to them much more regularly again.	PG10, UG07, UG10
44	Data-driven	Describing exercises that are useful	The student is specific about which exercise is useful for improving performance.	The mini-conferences have been particularly useful for that.	PG03, UG07, only 2 segments
45	Data-driven	Describing expectation	The student expects to see the results/improvement after taking the steps that aim to improve the performance.	If I manage to separate points with lines drawn across it means that I can use intonation to make it clear when the speech is moving to a new point.	UG10, UG11
46	Data-driven	Describing feelings about exercises	The student is describing his/her feelings about an exercise.	I enjoyed using some of the exercises we were given in the generic sessions to practise active listening, even in English, since this	3 segments, PG05, PG13, UG07

				was what I found the most difficult at first.	
47	Data-driven	Describing feelings about interpreting	The student is talking about his/her feelings about the task of interpreting in general, not referring to any specific exercise/practice.	I find the skill of interpreting considerably challenging	
48	Data-driven	Describing feelings about interpreting experience	The student is describing her feelings after an interpreting practice, but not about the good or the bad of the performance.	I do not feel disappointed or discouraged.	See theoretical codes. PG08, PG13, UG11
49	Data-driven	Describing feelings about progress	The student is describing his/her feelings about making progress.	Overall, I am quite pleased with my progress in interpreting this semester.	Only UG04
50	Data-driven	Describing feelings about the class	The student is describing his/her feelings about the interpreting class.	I found the classes very useful this semester as all the lecturers really encouraged students to work hard and practise their interpreting.	UG11
51	Data-driven	Describing feelings after receiving others' feedback	The student is describing his/her feelings of receiving feedback from teachers, tutors or peers, focusing on critique.	I was glad to receive positive criticism and be able to take something away from the session to work on.	3 segments, UG07, UG11, UG12
52	Data-driven	Describing feelings during the process of reviewing the logbook	The student is describing his/her feelings when s/he reviews the logbook entries.	I felt a few strange emotions stir up inside me.	PG03, PG13
53	Data-driven	Describing feelings experienced during the interpretation /practice process	The student is talking about his/her feelings (both positive and negative) during the interpretation or practice process. These practices might include memory exercise, or note-taking exercise	At the beginning I was so overwhelmed by the multi-tasking experience	
54	Data-driven	Describing follow-up	The student is describing the actions taken “after” a specific	I practice this by rephrasing	Only PG06 and UG06

		action	interpreting exercise.	speeches in the same language as concisely as possible and will then move on to do the same with the language transfer.	
55	Data-driven	Describing future plans	(Usually in reflective overview) The student is talking about what s/he plans to do in the future for more improvement.	I decide to review all the preparation I have done in previous practise, and collect them together to form a personal lexicon of terminology.	
56	Data-driven	Describing improvement	The student is talking about how s/he feels that his/her performance has improved (usually in comparison with past performance).	Note-taking has been improved a lot over this semester.	
57	Data-driven	Describing inconsistent result of a learning strategy	The student tried a specific learning strategy, but the strategy sometimes worked; sometimes did not work.	[...] unfortunately, from time to time, this also distorted the message more or less significantly or did not even make sense at all.	PG05, PG06, UG02
58	Data-driven	Describing lack of practice	The student states that s/he has not had enough practice with interpreting	I have not had adequate serious practice in simultaneous interpreting.	Only PG13
59	Data-driven	Describing language used for the practice	The student explains that the practice (foundational skills) uses only source language.	This practise only involves source text.	Only PG08
60	Data-driven	Describing no prior experience	The student is explaining to the readers that s/he has no prior experience in interpreting simultaneously or consecutively.	I had never attempted simultaneous before this semester so the whole process was completely unknown to me.	
61	Data-driven	Describing persistent/habitual problem	The student is talking about a specific problem that continues to exist or a habitual tendency that has been noticed by the student.	I have also noticed that there is a trend where the quality of my renditions declines greatly if the speaker has	

				spoken more quickly than normal.	
62	Data-driven	Describing practice materials used over the semester	(Usually in the reflective section/overview) The student is describing the practice materials used for various practices over the semester.	Most topics were quite general and did not require a thorough preparation.	
63	Data-driven	Describing practices over the semester	(Usually in the reflective section/overview) The student is describing what s/he has done for the semester.	Most of my practice during semester one was directed towards consecutive interpreting	
64	Data-driven	Describing preparation	The student provides description of what s/he has done beforehand for the practice, such as parallel reading and preparation of glossary.	As preparation for the speech, I re-familiarised myself with the Dreyfus affair, so that I would recognise any names and dates, should they come up.	
65	Data-driven	Describing problem experienced during interpretation /practice process	The student is giving detailed description about a problem or problems s/he has experienced during the interpretation process. For instance, instead of saying I have problem with understanding the speech, s/he is describing how during the interpretation process, s/he could not understand or capture the message.	All proper vocabulary and grammar structures popped out of my head	
66	Data-driven	Describing problems afterwards	The student explains that s/he only discovered the problem after listening to recording.	I usually discover these problems after listening to my recordings.	Only UG02
67	Data-driven	Describing the benefits of the logbook	The student is describing the benefits of writing the logbook.	However, by keeping this logbook, I was able to identify and focus on one problem area at a time	Who are you trying to show that you have reviewed the logbook? Only PG01
68	Data-driven	Describing the practice procedures	The student gives a very detailed description of the steps taken to carry out a practice and explains how a practice proceeds from	My basic practising steps are as follows: Step 1: listen for the structure and	

			beginning to the end.	main idea, note down 5 key words	
69	Data-driven	Describing understanding of what it means to be an interpreter	The student has gained more understanding about what it means to be an interpreter, and the types of jobs or speeches s/he is going to encounter.	Powerful psychological condition is a prerequisite for surviving the daunting task of interpreting practice.	PG03, PG08, UG07
70	Data-driven	Describing what is expected of the interpreter	The student is explaining what is expected from him/her as an interpreter	Unfortunately, as an interpreter, it is my job to ensure my audience can get the whole picture of the speech.	Only PG09
71	Data-driven	Describing what should have been done as hindsight	The student is talking about his/her hindsight about what should have been said/done during the interpreting.	I should have covered this type of training.	3 segments for PG14, PG15
72	Data-driven	Determining personal take of the material/topic	The student states how familiar/how difficult/easy/useful/ not so useful s/he find the topic/material used for practice to be	There were little to no instances of specific terminology that would've been beyond me, nor were there any complicated numbers or figures to record.	
73	Data-driven	Developing note-taking-related strategy	The student talks about his/her strategies to improve note-taking.	The notes taking in target language is very useful	
74	Data-driven	Development of Interpreting Strategies	The strategy or strategies that a student interpreter intends to use in the future to resolve the problem encountered during the interpreting process.		
75	Data-driven	Empty objectives	The student is setting objectives for future practices without giving specific details about how to improve an identified area of problem. Basically, upon reading the statement, the question that a reader will likely ask would be, "but how?"	I should work to match my brain with my mouth.	
76	Data-driven	Evaluating analysis	The student is evaluating his/her ability to analyse the content of the speech/text used	(2) Analysis: A Very good.	Only UG09

			for the practice		
77	Data-driven	Evaluating comprehension	The student is judging if s/he understands the speech	Comprehension was fine.	
78	Data-driven	Evaluating knowledge level	The student is evaluating his/her level of background knowledge needed to perform well for the interpreting task	World knowledge - needs work.	
79	Data-driven	Evaluating memory	The student is evaluating his/her short-term memory (for note-taking)	(4) Memorising: B Good.	Only UG09
80	Data-driven	Evaluating notes	The student is evaluating the quality/effectiveness of notes taken for consecutive interpreting. The evaluation may be negative, positive, or descriptive.	I'm left with a pile of indecipherable notes and strange doodles which leave me wondering 'is that a tree? Or a symbol for fire?'	Some students seem to concentrate a lot on note-taking. Why?
81	Data-driven	Evaluating note-taking process	Instead of discussing the actual notes taken, the student is evaluating the efforts in taking notes, i.e. the use of memory, writing fast/slow	It is hard to take notes in English, it cost a lot of time, especially in some long words.	
82	Data-driven	Evaluating the materials used	The student is evaluating the materials s/he used for the practice and the nature of the speech/material.	The speech is a hybrid text containing persuasive arguments and large pieces of description (numbers, dates, proper names, etc.).	
83	Data-driven	Explaining language direction	The student is explaining to the readers that s/he usually interprets from foreign language into his/her first language.	I am mostly interpreting into my own language.	Only 2 for PG03 and UG02
84	Data-driven	Explaining one's first language	The student is explaining to the reader what his/her first language is.	Given that English is not my first language (Spanish is),	Only 3 for PG01 and UG08
85	Data-driven	Explaining the arrangement of the logbook	The student is explaining how s/he arranges the logbook, including the abbreviations used.	I found it useful to differentiate between the different types of interpretation: consecutive and simultaneous.	

86	Data-driven	Explaining the content of the logbook	The student is explaining the content of the logbook, i.e. what is included in the logbook.	This logbook presents only a cross-section of the interpreting practice that I have done during the first semester.	Assuring the reader/teacher (that s/he has done the job required??) Who is the target reader?
87	Data-driven	Expressing change of feelings for interpreting	The student feels that her feelings towards interpreting or the task of interpreting has changed, due to improvement, or due to better understanding.	Based on these five practice sessions which I have analysed, I can say that I feel more comfortable interpreting than I did before.	It seems that students who focus on basic exercises tend to use class materials; materials already used in other occasions; (PG09)
88	Data-driven	Expressing hope for improvement	The student is expressing his/her hope to see improvement in the future	I hope this kind of practise will not only strength my listening skills,	
89	Data-driven	Expressing opinions about group practice	The student believes that practice with classmates is more beneficial than self practice	Not only do I think it is efficient and practical but it is more enjoyable.	Only UG11
90	Data-driven	Expressing opinions about the grid	The student is expressing his/her opinion about the self-assessment grid	I also found the evaluation sheets very useful for self-study so that I could mark down where my weaknesses where and what I was actually quite good at.	Only UG11
91	Data-driven	Expressing opinions for self-evaluation	The student is expressing his/her opinion about the task of evaluating his/her interpreting performance	I have found that doing practise sessions, listening back to the recording and evaluating the performance has really helped me to make progress.	Only UG11

92	Data-driven	Expressing uncertainty	The student is expressing his/her feelings of uncertainty (regarding if progress has been made; problems have been solved, or if something will work)	Nonetheless, at this stage I am unable to confirm whether these errors have actually been properly resolved, as they keep occurring occasionally.	Only PG01
93	Data-driven	Facing bottleneck	The student describes his/her feelings that s/he has reached a bottleneck where there is very little improvement/progress no matter how hard s/he tried.	I have now reached a stage where progress is hardly noticeable and I feel I am a bit stuck,	Only PG06
94	Data-driven	Feeling confused	The student is showing her confusion about why s/he encountered a particular problem. S/he has no clue at all.	Can't think of an explanation for the fact that the first sentence was always identical	Only UG01
95	Data-driven	Feeling glad that s/he does not need to improve into foreign language	The student is glad that s/he does not need to interpret into non-native language	Fortunately, I am doing strand B	Only PG03
96	Data-driven	Finding positive aspect	The student works to identify positive aspects of his/her performance, but these aspects are not about accuracy, completeness, coherence, delivery or other aspects already covered in the codes related to assessment.	I didn't let my lack of confidence at the beginning affect the rest of the speech.	What sorts of positive aspects? Do I need to include it?
97	Data-driven	Finding reasons for good performance	The student is explaining to himself/herself why s/he has done a good job.	This is because I have studied similar speech both in Chinese and English, and familiar with the situation and occasion.	
98	Data-driven	Focusing on individual issue	(Usually in reflective overview) The student talked about how s/he focused on one issue at a time	I could concentrate on individual issues and gradually improve my interpreting skills.	only PG06

99	Data-driven	Giving example(s) of mistakes or problems	The student is giving examples of mistakes or examples of expressions used in the interpretation. (usually a list, rather than specific description)	Cohesion (synonyms, pronouns, repetitions, linking words): On one hand, on the other hand, Advantage disadvantage, Deng/all of us/we, and also in order to so as to.	Compare "Describing an instance of a problem"
100	Data-driven	Giving general statement for the logbook as a text	The student writes statements that are mainly for making the text (the logbook) hang together, and no actual concern/problem/analysis/strategy is discussed.	From my evaluation of and reflection on this speech, which was one of my first in terms of language-specific classes,	
101	Data-driven	Giving prep talk	The student is trying to encourage himself/herself or motivate himself/herself to overcome the problem	Consecutive is a toughie for you, but it was ok.	
102	Data-driven	Giving reasons for choosing the material	The student explains why s/he chose a particular material for the practice.	This speech formed part of my preparation for a class speech on the Common Agricultural Policy.	
103	Protocol	Grid	The application of this code indicates that the student's arrangement of the logbook displays the following similarities with the grid, which includes inter-textual aspects, intratextual aspect, behavioural aspect, user perception and knowledge		Potential need to apply theoretical code
104	Protocol	HCL	The application of this code indicates that the student's arrangement of the logbook displays the following similarities with the HCL, which includes dates to create chronological record, comments given by peers and teachers, clear distinction of generative problems and non-generative problems, positive and negative comments, targets for specific timeframe, progress noticed.		

105	Theoretical	Identification of Source of Problem	The student is describing the cause for the problem s/he has experienced and has specifically pointed out the cause, such as difficulty with note-taking or difficulty with multitasking, concentration	[...] lack of preparation, as well as being the first person put on the spot to perform the exercise, affected me in the form of nerves.	
106	Data-driven	Identifying area for improvement	The student points out a problematic area that needs to be improved.	I still need to work on the terminology, because I need to use a more formal register.	
107	Data-driven	Issuing note of caution	(Usually in the reflective/overview) The student has described what is good about his/her performance, then move on to telling himself/herself not to be too complacent, and highlight what needs to be improved.	[...] however, you're good at waffling, so really good cohesion and coherence mean nothing much when you can blag your way through something -	
108	Data-driven	Knowing one's existing problem	The student is pointing out his/her problem that s/he was aware of before the practice	Certain traces of my accent remain	
109	Data-driven	Learning about the influence of confidence	From the experience, the student has become aware that confidence or lack of confidence does affect his/her performance.	This time I was aware that confidence makes me feel more relaxed	
110	Data-driven	Learning from others' feedback for improvement	The student talks about how s/he has read books; learnt from teachers or peers to improve his/her performance	[...] my speaking is good; I have strong accent	
111	Data-driven	Learning from others' feedback	The student talks about what other people, including teachers and peers have told/taught him/her, usually critique and about problematic areas.	Then we were given the advice that when there is an overabundance of information given by the speaker we can try to summarise in order to get most of what is said, which helps in getting more of the content right.	
112	Theoretical	Learning Strategy	A strategy or a plan that is not directly connected to the interpreting process, but rather one to help students improve	In addition to focussing on improved research techniques	

			their foundational ability, such as increasing practice time, reading background information and practice pre-interpreting exercise.	through preparation and anticipation prior to the practice,	
113	Data-driven	Making plans for improvement	The student is talking about his/her plan to improve his/her performance, including specific actions and steps to be taken (usually in the following sentences).	In addition, the improvement I can make is to prepare a glossary bank in categories, which will enable me to note in target language and save time in delivery.	
114	Theoretical	Negative Feelings about Interpreting Performance	As manifested in the logbooks, the student feels negative about the particular interpreting performance		
115	Data-driven	Offering proof of evidence	The student is offering to show evidence to support her assessment.	The only evidence I can provide to support is the recording itself	only PG01
116	Data-driven	Offering solutions	The student's response to the problem encountered gives the reader the impression that s/he has not thought it through carefully. The solution provided seems to be intuitive or quick and easy. Whereas Learning Strategy will need to be more in a step-by-step manner, offering solutions are in the form of quick response.	Try to imitate the speaker's delivery, focusing on his or her pace and tone.	May merge with "What is to be Done Differently"
117	Protocol	Others	The application of this code indicates that the student has used a heading, subheading and big categories of assessment criteria that have not been mentioned in any of the three guidelines.		
118	Data-driven	Overcoming fear	The student is talking about overcoming his/her fear for failure.	After overcoming the initial fear of failure and not being able to interpret everything,	Only PG06
119	Data-driven	Overcoming fear	The student believes that s/he has managed to overcome fear	After overcoming the initial fear of failure and not being able to interpret everything,	only PG06

120	Data-driven	Pinpointing factors that influence interpreting performance	The student is pinpointing various factors that have influenced his/her performance.	I can understand some speeches much better than others, which might be due to my background knowledge, which is, of course, limited in the areas I am not so interested in.	UG02, UG05, UG06
121	Theoretical	Positive Feelings about Interpreting Performance	As manifested in the logbooks, the student feels positive about the particular interpreting performance	Real consecutive interpreting practice began and frustrated me again.	
122	Data-driven	Providing the comment sheet	The student offers the comment sheet	I have included my comment sheet from the class as you can see there are a few "N/ A" for some of the areas.	Only UG11
123	Data-driven	Receiving positive feedback from others	The student received positive feedback from the teacher or his/her peers regarding his/her interpreting performance	According to my lecturer and classmates I sound very calm and fluent:	
124	Data-driven	Referring to past experience	The student talks about his/her past experience that has influenced his/her ability, e.g. staying abroad.	As I have spent a lot of time in Spain,	
125	Data-driven	Reviewing the logbook	The student is talking about the reviewing the logbook and/or the interpreting practices recorded in it.	Revising the individual comments I did for each session	
126	Data-driven	Setting objectives that are not justified	The student is telling himself/herself that s/he needs to improve certain areas, but the mentioned areas have not been identified as problematic in the same entry.	Even though they do not seem to pose a serious problem for me, I should work on connectors even further	Only PG01
127	Data-driven	Showing awareness of the importance of preparation	The student understands the importance of preparation and how preparation helps his/her interpreting performance.	Being well prepared made it easier to memorise the main arguments	
128	Data-driven	Showing awareness of what still needs to be done	The student shows his/her awareness of there are still a lot that need to be done to improve.	I think I have come close to achieving some of my goals but I have lots of issues	2 segments for UG06, UG10

				which need to be addressed which I will tackle head on.	
129	Protocol	SLO	The application of this code indicates that the student's arrangement of the logbook displays the following similarities with the SLO, which includes Profile information (date, speaker, occasion/event, language combination/direction, speech types, and topic), type of practice (e.g. mode of interpreting, set-up, preparation), Evaluation of the performance, Reflection on the performance and reflective overview of the semester.		Potential need to apply theoretical code
130	Theoretical	Speculation of Cause of Problem	The student is trying to find the cause for the problem s/he has experienced, but has not specifically pointed out the cause. Rather, the statement leans towards speculation or guessing.	However, perhaps due to speaking while reading notes,	
131	Data-driven	Stating the aims for future practice	The student is talking about the aims for future practice (mostly for after the semester)	The problems I experience with active listening and comprehension will be my main focus for improving my interpreting skills, in both modes, over the weeks and months to come.	PG04, UG06
132	Data-driven	Stating the aims of a practice	The student is explaining the aims/objectives of a particular practice	I aimed to concentrate on dual-tasking during speech three.	
133	Data-driven	Stating the aims of the logbook	The student is explaining the aims/ purpose of why s/he wrote the logbook	In order to analyze the issues mentioned above, a logbook was created to keep a record of all the practice sessions.	5 segments (PG01, PG02, UG06, UG08, UG09)

134	Data-driven	Stating the aims of the semester	The student is explaining the aims of his/her practices for the semester.	I hope to improve my memory in order to be able remember the smaller details, which I have no time to take down in my notes.	UG03, UG06, UG09
135	Data-driven	Surprising oneself	The student was surprised by his/her own performance/ability.	because the memory works a lot better than expected	Only UG01
136	Data-driven	Talking to oneself	It is obvious from the sentences that the student is talking to himself/herself, either to comfort, encourage oneself to keep going or to warn oneself not to be complacent.	Do not try to write down information as much as you can.	
137	Data-driven	Thanking the teachers	The student thanks the teacher for giving him/her advice	I would like to thank all my teachers sincerely for their valuable advice and instruction	Only PG13
138	Data-driven	Thinking about the audience's response	The student is speculating/anticipating/worrying what the audience might think about his/her interpretation	I think it is very important that interpreters acquire good behavioural skills in the course of their training because, for a listener, every odd noise coming out of the booth might distract them from listening to an interpreter.	
139	Data-driven	Trying to make the logbook easy to read	The student states how s/he is trying to make the logbook clear and easy to read	I have tried to be as clear and systematic as possible	Only PG01
140	Data-driven	Understanding the nature of speeches	The student understands the types of speeches commonly used for conference interpreting.	In conference interpreting, I think for most of the time, it is formal or semi-formal.	Only 1 segment (PG08)
141	Data-driven	Understanding there are still room for improvement	The student is aware that s/he still needs to improve to become a qualified interpreter.	not in the sense that I have become a qualified interpreter already	Only 1 segment (PG13)

142	Data-driven	Understanding what is required to become an interpreter	The student shows his/her understanding what is required to be an interpreter.	I think it is very important that interpreters acquire good behavioural skills in the course of their training	2 segments for UG02, UG11
143	Theoretical	What is to be Done Differently	The speculative suggestion that a student come up with after the experience and/or the lessons a student has learnt from the experience.	Another point is that I should concentrate more on ideas expressed rather than noting down the exact words.	May merge with "Offering solutions"